



Surveillance Impact Report

Parking Enforcement ALPR Technology
Municipal Transportation Agency

As required by San Francisco Administrative Code, Section 19B, departments must submit a Surveillance Impact Report for each surveillance technology to the Committee on Information Technology ("COIT") and the Board of Supervisors.

The Surveillance Impact Report details the benefits, costs, and potential impacts associated with the Department's use of Parking Enforcement ALPR Technology.

DESCRIPTION OF THE TECHNOLOGY

The Department's mission is to connect San Francisco through a safe, equitable, and sustainable transportation system.

In line with its mission, the Department uses Parking Enforcement ALPR Technology to The SFMTA uses ALPR technology to efficiently identify vehicles parked on city streets in violation of time-limited parking restrictions, and promote timely turnover of parking spaces. This use supports the SFMTA's mission because it helps ensure the sustainability of and more equitable access to the City's limited parking resources, which are part of its larger transportation system.

Municipal Transportation Agency shall use Parking Enforcement ALPR Technology only for the following authorized purposes:

Authorized Use(s):

Identify vehicles parked on city streets in violation of time-limited parking restrictions.

Identify vehicles parked on city streets that have five or more unpaid parking citations.

Identify vehicles parked on city streets that are listed on SFPD's hotlist of stolen vehicles.

Hotlists contains license plate numbers and state of vehicles reported stolen.

Hotlist is transmitted via Secure FTP

Hotlist is updated/overwritten daily. The SFMTA does not generate hotlists.

Future use – Pilot program to identify vehicles parked at metered spaces after paid parking session expires.

Future use – Determine occupancy and turnover rates at public parking spaces throughout the city.

Department technology is located Citywide on streets and off-street parking lots.

Technology Details

The following a is product description of Parking Enforcement ALPR Technology

The system consists of the Genetec Auto Vu Sharp IP-based automatic license plate recognition cameras with onboard processing and the AutoVu Standard Software package. The cameras include Sharp V, AutoVu cameras mounted on the roof of the enforcement vehicle and wheel focused camera on the side of the vehicle. The roof top mounted cameras read the license plates and the side mounted cameras photograph the wheel/tire to compare on the second pass for time-limited enforcement. The system utilizes the Genetec Patroller software 6.5 to create the user interface and in-vehicle mapping. The system utilizes cellular communication to transmit reads to the backend software. The backend software consists of the Genetec Security Center software to manage access to all uploaded plate reads, hotlists, and user-level access credentials.

A. How It Works

To function, Parking Enforcement ALPR Technology is a camera that captures color images of license plates within its field of view. Mobile cameras are mounted on moving objects, such as parking enforcement vehicles. Software extracts the license plate numbers from the images and stores the images, plate numbers, and dates, times, and locations of the image captures in a searchable database. An ALPR system consists of the cameras, the software that reads and converts images of license plates into data, and the searchable database that stores the data.

All data collected or processed by Parking Enforcement ALPR Technology will be handled or stored by an outside provider or third-party vendor on an ongoing basis. Specifically, data will be handled by Genetec to ensure the Department may continue to use the technology.

IMPACT ASSESSMENT

The impact assessment addresses the conditions for surveillance technology approval, as outlined by the Standards of Approval in San Francisco Administrative Code, Section 19B:

- 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 Department’s use of [Technology name] has the following benefits for the residents of the City and County of San Francisco:

- Education
- Community Development Informs planning, policy development, and pricing for public parking spaces (e.g., for specific commercial districts).
- Health
- Environment Improves street conditions by ensuring timely turnover of parking spaces for use by city residents and visitors.
- Criminal Justice Identifies vehicles reported to SFPD as stolen so they may be returned to their owners.

- Jobs
- Housing
- Other

Helps ensure timely turnover of parking spaces, giving city residents and visitors more equitable access to limited parking resources.

Additional benefits include:

N/A.

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:

Dignity Loss: Administrative safeguards make this impact (e.g., embarrassment and emotional distress) negligible because the ALPR cameras take photos of vehicle tires and rears (including rear license plates) of parked vehicles, which are typically unattended; they do not capture images of vehicle occupants. Occasionally, images may include pedestrians, but these images are generally not available to the public and are purged from the ALPR system within seven days unless associated with a citation.

Discrimination: ALPR is used to enforce time-limited parking regulations and identify scofflaw (i.e., five or more unpaid parking violations) and stolen vehicles. Time-limited parking enforcement - administrative safeguards make this impact (i.e., unfair or unethical differential treatment of individuals or denial of civil rights) negligible because ALPR technology is deployed equally in areas throughout the City where restrictions apply, and such restrictions are typically requested by the majority of residents in the corresponding communities. Scofflaw and stolen vehicles – administrative safeguards make this impact negligible because ALPR technology is deployed for this purpose throughout the SFMTA’s jurisdiction.

Economic Loss: Technical safeguards make this impact (e.g., identify theft/misidentification) negligible or non-existent because the ALPR system has no access to information identifying individuals, including vehicle owners or drivers; PCOs use separate technology to issue parking citations.

Loss of Autonomy: Technical safeguards make this impact (e.g., loss of control over decisions on how personal information is used or processed) negligible or non-existent because the ALPR system has no access to information identifying individuals, including vehicle owners or drivers; PCOs use separate technology to issue parking citations.

The SFMTA’s planned use of time, date, and geo-location data over time to determine parking occupancy and turnover rates may reveal information about personal travel patterns. However, administrative and technical safeguards make this impact negligible because the SFMTA does not share personal information it collects and will replace license plate numbers with a unique identifier that cannot be traced to a vehicle or person.

Loss of Liberty: Administrative safeguards make this impact (i.e., improper exposure to arrest or detainment due to incomplete or inaccurate data) negligible because PCOs validate data before taking any action. Before issuing citations for exceeding time-limited parking restrictions, PCOs visually compare images to confirm whether vehicles moved the minimum distance required to

avoid citations; a similar validation process occurs when PCOs manually chalk vehicles. Before taking action on scofflaw or stolen vehicles, PCOs radio SFMTA Parking Enforcement Dispatch to verify vehicles have five or more outstanding parking citations or are reported stolen, as applicable.

Physical Harm: Technical safeguards make this impact (e.g., physical harm or death) negligible or non-existent because the ALPR system has no access to information identifying individuals, including vehicle owners or drivers) negligible or non-existent; PCOs use separate technology to issue parking citations.

The SFMTA’s planned use of time, date, and geo-location data over time to determine parking occupancy and turnover rates may reveal information about personal travel patterns and routine locations. However, administrative and technical safeguards make this impact negligible because the SFMTA does not share personal information it collects and will replace license plate numbers with a unique identifier that cannot be traced to a vehicle or person.

Loss of Trust: Technical safeguards make this impact (e.g., breach of implicit or explicit expectations or agreements about the processing of data, or failure to meet subjects’ expectation of privacy for information collected) negligible or non-existent because license plate numbers are used only to identify vehicles for purposes of determining parking violations, scofflaws, and whether they are stolen.

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C. Fiscal Analysis of Costs and Benefits

The Department’s use of Parking Enforcement ALPR Technology yields the following business and operations benefits:

Benefit	Description	Quantity/Units
<input checked="" type="checkbox"/> Financial savings	Minimizes physical chalking by PCOs; chalking can cause repetitive motion injuries, which result in workers compensation claims filed against the city.	
<input checked="" type="checkbox"/> Time savings	Helps parking control officers cover larger geographic areas and improves effectiveness and efficiency in performing their duties.	
<input checked="" type="checkbox"/> Staff safety	Minimizes repetitive motion injuries from physical chalking by automating the process for PCOs to mark vehicles.	
<input checked="" type="checkbox"/> Improved data quality	Improves and simplifies information provided to PCOs, which makes parking enforcement more accurate and efficient. Provides higher volumes of data about parking utilization and turnover rates than currently available, which informs planning, policy development, and pricing for public parking spaces.	

Other

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

FTE (new & existing)	33		
Classification	8214		
	Annual Cost	Years	One-Time Cost
Total Salary & Fringe	\$3,623,288	0	\$0
Software	\$0	0	\$13,500
Hardware/Equipment	\$0	0	\$420,000
Professional Services	\$0	0	\$0
Training	\$0	0	\$0
Other	\$0	0	\$26,500
Total Cost [Auto-calculate]	\$460,000		

2.1 Please disclose any current or potential sources of funding (e.g. potential sources = prospective grant recipients, etc.). ^{SIR, ASR}

SFMTA Operating budget

The Department funds its use and maintenance of the surveillance technology through SFMTA Operating budget.

COMPARISON TO OTHER JURISDICTIONS

Parking Enforcement ALPR 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.

An ALPR is a camera that captures color images of license plates within its field of view. Mobile cameras are mounted on moving objects, such as parking enforcement vehicles.

Software extracts the license plate numbers from the images and stores the images, plate numbers, and dates, times, and locations of the image captures in a searchable database.

An ALPR system consists of the cameras, the software that reads and converts images of license plates into data, and the searchable database that stores the data.

The system consists of the Genetec Auto Vu Sharp IP-based automatic license plate recognition cameras with onboard processing and the AutoVu Standard Software package. The cameras include Sharp V, AutoVu cameras mounted on the roof of the enforcement vehicle and wheel focused camera on the side of the vehicle. The roof top mounted cameras read the license plates and the side mounted cameras photograph the wheel/tire to compare on the second pass for time-limited enforcement. The system utilizes the Genetec Patroller software 6.5 to create the user interface and in-vehicle mapping. The system utilizes cellular communication to transmit reads to the backend software. The backend software consists of the Genetec Security Center software to manage access to all uploaded plate reads, hotlists, and user-level access credentials.

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

The SFMTA uses ALPR technology to efficiently identify vehicles parked on city streets in violation of time-limited parking restrictions, and promote timely turnover of parking spaces. This use supports the SFMTA's mission because it helps ensure the sustainability of and more equitable access to the City's limited parking resources, which are part of its larger transportation system.

N/A

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

Citywide on streets and off-street parking lots.

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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Discrimination: ALPR is used to enforce time-limited parking regulations and identify scofflaw (i.e., five or more unpaid parking violations) and stolen vehicles. Time-limited parking enforcement - administrative

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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.

Number of FTE (new & existing)	33
Classification	8214
Total Salary & Fringe	\$0
Software	\$13,500
Hardware/Equipment	\$420,000
Professional Services	\$0
Training	\$0
Other	\$26,500
Total Cost [Auto-calculate]	\$460,000

SFMTA Operating budget

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.

Handled by third-party vendor, ongoing: true

Vendor name:

Special data handling required: false

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.

APPENDIX B: Mapped Crime Statistics

The general location(s) it may be deployed and crime statistics for any location(s):

Citywide on streets and off-street parking lots.