Surveillance Impact Report

Electronic Toll Readers - FasTrak
San Francisco International Airport

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 FasTrak Electronic Toll Readers, (hereinafter referred to as "surveillance technology").

PURPOSE OF THE TECHNOLOGY

The Department's mission is to provide an exceptional airport in service to our communities.

The surveillance technology supports the Department's mission and provides important operational value in the following ways:

In line with its mission, the Department uses FasTrak Electronic Toll Readers to efficiently deliver world-class customer service while maximizing revenue opportunities. Use of Toll Readers provides the ability to accept an alternate payment method that efficiently processes parking fees. Parking efficiency minimizes traffic on SFO's roadways.

The Department shall use the surveillance technology only for the following authorized purposes:

Authorized Use(s):

- Process parking transactions
- Investigation of parking transaction disputes

Any use cases not stated in the Authorized Use Case section are expressly prohibited.

Surveillance technology may be deployed in the following locations, based on use case:

Toll readers are located at all public parking garages at SFO.

Description of Technology
This is a product description of the technology:

Participating vehicles (i.e., vehicles that have elected the electronic toll payment system), contain a transponder approximately the size of a deck of cards, which is placed on the inside of the car's windshield behind the rearview mirror. Transponders are battery-operated, radio frequency identification (RFID) units that transmit radio signals. The transponder is a two-way radio with a microprocessor, operating in the 900-MHz band. Basic account information, such as an identification number is stored in this RFID transponder.

Electronic toll readers are positioned above each FasTrak entry and exit lane. These toll readers emit radio frequencies that communicate with the transponder. The detection zone of a toll reader is typically 6 to 10 feet (2 to 3 meters) wide and about 10 feet long. These two devices, the transponder and the toll reader, interact to complete the parking transaction.

The transponder information is transferred from the toll reader to the toll reader provider's central database. If the account is in good standing, the parking fee amount is billed to the Bay Area Toll Authority (BATA) who in turn deducts from the customer's prepaid account. If the entry and exit lanes have gates, the gates open. The electronic system records each parking transaction, including the time, date, location, and parking charge for each vehicle.

This is a description of how the technology works:

To function, Electronic Toll Readers FasTrak transponders are activated by toll readers in designated FasTrak lanes. Individual account information is stored in the transponders. The toll readers identify the individual transponders and validate active accounts. Upon exit, the parking fee amount is calculated and billed to the Bay Area Toll Authority (BATA) who in turn charges the FasTrak customer. Transponders are only read in designated FasTrak entry and exit lanes. During operational hours, the toll reader collects the transponder tag number, as well as the time, date, and location of tag. Customers can avoid having their transponder tag number collected by placing the transponder tag in the mylar bag in which the tag was first obtained by the customer.

Third-Party Vendor Access to Data

All data collected or processed by the surveillance technology will be handled or stored by an outside provider or third-party vendor on an ongoing basis. Specifically, data will be handled by FasTrak, New South Parking, and Scheidt & Bachmann 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:

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

	Benefit	Description
☐	Education	
☐	Community Development	
☐	Health	
☐	Environment	
☐	Criminal Justice	
☐	Jobs	
☐	Housing	
X	Other:	Public Safety – More efficient payment systems for customers reduce traffic congestion and bottlenecks, decreasing the likelihood of collisions and improving customer safety. Other – Convenience; limits parking congestion through more efficient payment processes.

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:

The Airport strives to mitigate all potential civil rights impacts through responsible technology and data use policies and procedures, and intends to use electronic toll readers and their associated data exclusively for the aforementioned authorized use cases. All other uses, including surveillance of San Francisco residents or groups, are expressly prohibited.

The limitations of the technology and the safeguards established by the department mitigate the privacy and civil rights concerns associated with it. First, the read range and fixed nature of the toll readers eliminates the risk that they can be used to track an individual's location on an ongoing basis. Data is only collectable from a range of three meters, meaning persons and vehicles cannot be tracked outside of the toll booth or garage area. Further, only information loaded to the toll transponder by the customer will be available for reading by the toll reader. The likelihood that information from other electronic tags inside the vehicle will be picked up is slim to none. Toll readers are adjusted to a unique frequency designed to pick up only the frequency associated with the provider's transponders.

A breach of the toll reader system is also not likely to compromise personal information, as all data collected by the toll readers is seamlessly transmitted to an Airport database. No data is retained on the toll reader itself. Personal information collected by the toll reader and transmitted to the database cannot be accessed without access to the department database. Authorized personnel who conduct regular technical maintenance ensure toll readers remain dialed into the appropriate frequency and transmitting to the appropriate databases. Server network perimeters are protected with firewalls and internal and external audits of perimeter and software code security are conducted. To further avoid

breach and misuse of personal information collected by toll readers, storage of PII on databases is encrypted and protected by software, hardware and physical security measures to prevent unauthorized access. Moreover, physical access to internal servers with data is restricted to authorized technical personnel via photo passcode authentication, and other security protocols.

Third parties with whom the Airport shares PII are also required to implement adequate security measures to maintain the confidentiality of such information. Additionally, as part of the FasTrak dispute process, encrypted emails are utilized to transmit PII to authorized third parties.

To ensure that airport staff are equipped with the skills and awareness necessary to access and utilize toll readers responsibly, privacy and security training is required for employees with access to PII, upon hire or assignment to projects involving toll readers. In addition, regular periodic refresher training is required for those employees. Training is designed to educate employees on responsible data management practices and to inform them of policies expectations on use, as well as on prohibited actions.

While parking booths and FasTrak lanes present unique safety challenges, the Airport has also taken measures to mitigate potential physical harm to customers and staff. The potential for physical harm, such as being struck by a vehicle, is greatest when staff are required to cross or close a lane. Risk of physical harm may be greater in mixed-payment situations (i.e., cash and electronic collection) as some lanes stop while other lanes maintain a constant speed. A solution to mitigate this risk is to position all FasTrak lanes to the left of the facility (i.e., toward the middle of the roadway), and to prohibit employees from crossing these lanes. Additional safety precautions include requiring all staff to wear safety vests when inside and/or outside the booths, the issuance of a stop paddle to each employee, and the strategic installment of crosswalks. These safeguards have been implemented to mitigate the risk of physical harm.

C. Fiscal Analysis of Costs and Benefits

The Department's use of the surveillance technology yields the following business and operations benefits:

	Benefit	Description
X	Financial Savings	Low maintenance and operating costs in addition to minimal training of personnel on the use of the technology.
X	Time Savings	Parking fee collections are much more efficient.
X	Staff Safety	Staff no longer need to sit in parking booths that are near fast moving vehicles.
X	Data Quality	Provides a uniform methodology for SFO parking fee collection, and more effectively quantifies parking demand, which supports future SFO planning.
☐	Other	

The fiscal cost, such as initial purchase, personnel and other ongoing costs, include:

Number of Budgeted FTE (new & existing) & Classification	5; 1842 Management Assistant, 7318 Electronic Maintenance Technician (Support)	
	Annual Cost [If Toolkit 3.9 = yes, include all onetime costs, Toolkit answers 3.10-3.15]	***One-Time Cost*** [If Toolkit 3.2 = yes, include all one-time costs, Toolkit answers 3.3-3.8]
Total Salary & Fringe	*$600,000*	$0
Software	*$0*	$50,000
Hardware/Equipment	*$0*	$800,000
Professional Services	*$20,000*	$0
Training	*$0*	$0
Other	*$0*	$0
Total Cost	$1,470,000	

The Department funds its use and maintenance of the surveillance technology through Airport Operating Funds.

COMPARISON TO OTHER JURISDICTIONS

No other CCSF Department employs the FasTrak Toll Reader technology for parking fees.