



Surveillance
Annual Report
July 2021



Executive Summary

2021 Surveillance Annual Report

Pursuant to the District's surveillance ordinance, staff must bring an annual report to the Board regarding the use of approved surveillance technologies and request approval for continued use of those technologies. This report is intended to allow the Board of Directors an opportunity to determine whether the benefits to the community of the surveillance technologies implemented outweigh the costs, and that civil liberties and civil rights are safeguarded.

The Bay Area Rapid Transit District's Annual Surveillance Report covers time period from June 30, 2020 through June 30, 2021 and includes all surveillance technology previously approved by the Board. It is important to note that BART has taken a community based and collaborative approach with regards to policy development and implementation of surveillance technology. All the surveillance technology deployed at BART has the sole goal of improving public safety and security, or otherwise enhancing public trust and the communities experience at BART. This is reflected in the entire process of surveillance technology proposal through policy development and implementation of technology. Each technology must go through several steps before being presented to the BART Board of Directors for approval and implementation.

There are several guiding principles with respect to the use of District approved surveillance technology. First and foremost is the inherent principle that the decision to use surveillance technology should balance security and privacy interests, and shall not be used to harass, intimidate, or discriminate against any individual or group and further, the technology shall not be used for immigration enforcement actions.

Additionally, the program must have robust controls in place to prevent the release or misuse of the data collected.

A key success in BART's implementation of its Surveillance Program has been community collaboration. In each area of surveillance technology packages that were presented and approved by BART's Board of Directors; transparency and outreach to the both the community and privacy groups was vital in understanding the concerns

expressed by the community as to how the technology would be used and the data protected. BART continues to meet with key community partners, such as Oakland Privacy and Secure Justice to understand the privacy concerns and ensure protective measures are put in place to prevent release or misuse of data collected by the technologies. Additionally, throughout 2021 BART has met with California State Senate staff for Senator Wiener office on Senate Bill (SB 210) to understand privacy concerns associated with Automatic License Plate Reader (ALPR) Technology and use.

Per the San Francisco Bay Area Rapid Transit District's Code of Ordinances, this **Surveillance Annual Report** is a written report concerning the specific surveillance technology in active use by the District. Per Ord. No. 2018-1, this report includes all the following for the 7 Board approved surveillance technologies:

- a) A reasonably specific description of **how the surveillance technology was used**;
- b) Whether and **how often data acquired through the use of the surveillance technology was shared** with outside entities, the name of any recipient entity, the type(s) of data disclosed, under what legal standard(s) the information was disclosed, and the justification for the disclosure(s);
- c) A **summary of community complaints** or concerns received by the BART District related to the surveillance technology;
- d) The **results of any internal audits**, any information about violations of the Surveillance Use Policy, and any actions taken in response;
- e) Information, including **crime statistics**, if the equipment is used to deter or detect criminal activity, that help the community assess whether the surveillance technology has been effective at achieving its identified purposes;
- f) Statistics and information about **public records act requests** related to surveillance technology; and
- g) Total **annual costs** for the new surveillance technology, including personnel and other ongoing cost.

Table of Contents

2021 Surveillance Annual Report

<u>Executive Summary</u>	2
<u>Table of Contents</u>	4
<u>Approved Surveillance Use Policies</u>	5
<u>1. BART Closed Circuit Television</u>	6
<u>2. BART CCTV Public Video Monitors</u>	11
<u>3. BART Public Emergency Phone Towers</u>	13
<u>4. BART Mobile Applications & Related Modifications to BART.gov</u>	16
<u>5. BART Automated License Plate Recognition (ALPR)</u>	18
<u>6. BART Research Data Collection</u>	23
<u>7. BART Trip Verification Technology</u>	26

Approved Surveillance Use Policies

At the time of this report, the following Surveillance Technologies have been approved by the Board:

1. BART Closed Circuit Television

Department: Maintenance & Engineering ID

Number: ME-BCCTV-SUP-01

Board Approved: October 2018

2. BART CCTV Public Video Monitors

Department: Maintenance & Engineering ID

Number: ME-BCCTVPVM-SUP-01 Board

Approved: October 2018

3. BART Public Emergency Phone Towers

Department: Maintenance & Engineering ID

Number: ME-BPEPT-SUP-01

Board Approved: October 2018

4. BART Mobile Applications & Related Modifications to BART.gov

Department: Office of the Chief Information Officer ID

Number: OCIO-BMAARMTB-SUP-01

Board Approved: October 2018

5. BART Automated License Plate Recognition (ALPR)

Department: BART Police Department ID

Number: BPD-ALPR-SUP-02

Board Approved: April 2019

6. BART Research Data Collection and Usage

Department: Marketing & Research ID

Number: OEA-BMRDDCU-SUP-06

Board Approved: March 2019

7. BART Trip Verification Technology

Department: Planning & Development ID

Number: PD-TVD-SUP-01

Board Approved: October 2019

BART Closed Circuit Television

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The use of cameras based on closed-circuit television (CCTV) technology to increase the confidence of the community in public transportation and improve the protection of patrons, employees, railcars, and critical infrastructure. The authorized use includes constant facility surveillance, 24 hours a day, 7 days per week within all San Francisco Bay Area Rapid Transit District properties. The cameras are not used in areas where there is a reasonable expectation of privacy, such as restrooms. CCTV data provides critical situational awareness for Transportation and Operations Control Center staff for managing busy stations and special events. Information provided by CCTV systems also reduce delays in revenue service by allowing BART personnel to avoid train-holds in situations that can be resolved remotely by CCTV. CCTV data is also used for accident/incident investigations, mechanical failure investigations, and CPUC compliance checks.

Surveillance technology within the BART system has proven to be a vital resource for police criminal investigations. In order to meet the burden of proof, “beyond a reasonable doubt,” every District Attorney’s office the BART Police Department interacts with has routinely based their decision to file a criminal complaint based on the availability of quality surveillance video. CCTV footage has provided vital pieces of direct evidence in investigations of violent crimes and has led to the identification and capture of multiple perpetrators. BART Police detectives use surveillance videos on a daily basis to solve a variety of crimes against property and crimes against persons.

Data Sharing

The BART CCTV system is deployed on a secure network that is segmented and isolated from other network traffic. Access to the CCTV network for BART employees is limited to a need to know, right to know basis and no direct access is provided to any persons or organizations outside of BART, other than providing copies of video evidence as required by subpoena, judicial order, other legal obligation, or to assist with criminal investigations by law enforcement agencies in compliance with the District’s Safe Transit Policy. The following tables provide a summary of the recipients of CCTV video recordings during FY21;

Outside Law Enforcement Agencies Receiving BART CCTV Data		
Alameda County Sheriff’s Office	El Cerrito PD	San Bruno PD
Alameda County Public Defender’s Office	East Bay Regional Parks PD	San Francisco PD
Contra Costa County Sheriff’s Office	Fremont PD	San Francisco Public Defender’s Office
Contra Costa County Public Defender’s Office	Hayward PD	San Leandro PD
San Mateo County Sheriff’s Office	Human Services Agency	San Francisco Dept of Accountability
Alameda County PD	Oakland PD	Alameda County DA
Antioch PD	Oakland Housing Authority PD	San Mateo County DA
Berkeley PD	Orinda PD	San Francisco County DA
Broadmoor PD	Pittsburg PD	US Postal Inspector
Colma PD	Pleasanton PD	FBI
Concord PD	Richmond PD	Daly City Public Defender’s Office
California Highway Patrol	Daly City PD	Dublin PD

Complaints

BART customer service received 0 complaints from on CCTV coverage and or use in the BART system. This is down from 15 complaints last year.

Sources of CCTV Request	
BART PD Investigations	3467
Internal BART Request (Not Law Enforcement)	135
Court Subpoenas	41
California Public Request Act	73
Outside Law Enforcement Requests	86
Total CCTV Requests	3729

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the CCTV system discovered during this period. A random audit of CCTV video requests was conducted for policy compliance. The audit examined 60 randomly selected cases which were handled by the video recovery unit to determine if the video was provided in compliance with the CCTV Surveillance Policy. The video requests included law enforcement investigations and non-criminal requests. All records examined were found to be in compliance with the policy.

Crime Statistics

Video surveillance is essential for the effective operation of a public transit system. CCTV data provides critical situational awareness for the Operations Control Center for managing busy stations and special events. Information provided by CCTV systems also reduce delays in revenue service by allowing BART personnel to avoid train-holds in situations that can be resolved remotely by CCTV. CCTV data is also used for accident/incident investigations, mechanical failure investigations, and CPUC compliance checks.

Aside from the operational uses, one of the primary public safety benefits of a robust CCTV system is the deterrent effect that is provided by the presence of cameras monitoring public spaces. CCTV footage also provides critical information for civil cases and accident investigations. The presence of the CCTV cameras pre-dates the Surveillance Ordinance by several decades. BART stations have always been commissioned with CCTV cameras already in place. There are numerous incidents every year at BART where CCTV evidence provides critical information to solve a crime or identify suspects and positively support public safety in the system.

During the period of this report, BART Police detectives produced over 286 wanted persons bulletins using CCTV images to attempt to identify persons involved in criminal activity. Of the 3,729 requests for police video, 3,508 of the requests were for criminal investigations or court subpoenas. A matrix showing the breakdown of video requests is provided above, under Data Sharing section for this technology.

Use of the CCTV surveillance technology within the BART system has proven to be a vital resource for police criminal investigations. In order to meet the burden of proof, “beyond a reasonable doubt,” every District Attorney’s office the BART Police Department interacts with has routinely based their decision to file a criminal complaint based on the availability of quality surveillance video. Additionally, this year several City and County Public Defender Offices also requested CCTV video footage.

CCTV footage has provided vital pieces of direct evidence in investigations of violent crimes and has led to the identification and capture of multiple perpetrators. BART Police detectives use surveillance videos daily to solve a variety of crimes against crimes against persons and property.

Establishing a causal relationship between the occurrence of crime and the presence, or absence, of CCTV is beyond the scope of this report, but CCTV is an essential part of the safety and security strategy that customers and employees expect the District to provide as part of running a Tier-I mass transit system.

Crime statistics are published monthly and are available at;

<https://www.bart.gov/about/police/reports>

<https://www.crimemapping.com/map/agency/454>

Public Records Act Requests

There were 66 public records act requests for video footage, there were no public records requests located which were associated with the CCTV technology itself.

Costs

3,467 requests for video evidence were processed by the BART Police Video Recovery Unit in FY21. Processing the volume of video requests requires 4 FTE's assigned to the unit. There were 1,416 requests for train car video evidence.

Overall, the maintenance and operational cost for the 4,541 CCTV cameras operational on train cars (including video recovery from the cameras) in FY21 was approximately \$268,692.

BART has 3,911 CCTV cameras deployed in facilities across the BART system (not including train cars). The cost to maintain the including supporting network and data-center infrastructure, in FY21 was approximately \$2,475,000. The cost includes maintenance of CCTV equipment in non-public areas of the BART system that are not covered by the Surveillance Ordinance.

The primary purpose of the CCTV system in stations is for public safety and for operational needs outside of law enforcement such as facility and infrastructure maintenance. The maintenance costs associated with CCTV systems would continue regardless of whether the system was utilized by law enforcement.

BART CCTV Public Video Monitors

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The CCTV Public Video Monitors were deployed above two entry fare gate arrays at Civic Center BART Station in 1019 through 2020. The locations of the monitors were set up as a test to determine if they would be an effective deterrence to fare evasion and crime reduction in these areas by alerting the public that a CCTV system is operating in these areas. The CCTV Public Monitors were a passive display only device, with no recording capabilities. Any person in proximity to the display may view the images on the screen which are live streamed from selected CCTV cameras in the area.

Feedback from frontline employees was that the monitors were not effective, and the monitors were removed August 2020. They will not be included in future annual surveillance reports.

Data Sharing

Not Applicable.

Complaints

There were no complaints received for the CCTV Public Video Monitors.

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the CCTV Public Video Monitors however they were deemed not effective and removed.

Crime Statistics

The CCTV Public Monitors were installed at Civic Center Station as part of the District's efforts to reduce fare evasion. The feedback from frontline employees was that the monitors were not effective, and the test is therefore being discontinued.

Public Records Act Requests

There were no public records act requests for the CCTV Public Video Monitors.

Costs

Not applicable.

BART Public Emergency Phone Towers

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The primary use for the Public Emergency Phone Towers is to provide a direct connection to the BART Police Integrated Security Response Center for BART passengers and employees to report emergencies or unsafe conditions. Under the approved project, the Public Emergency Phone Towers were deployed at the Coliseum BART station as a testbed. A full deployment throughout the District would require 204 units on 69 station platforms, although no further installations are planned at this time. The design specifications call for three units per platform evenly distributed for maximum effectiveness. These towers are equipped with emergency phones, blue strobe lights, and surveillance cameras. Where installed, the Public Emergency Phone Towers are available 24 hours a day, 7 days per week. The Public Emergency Phone Towers provide a quick and simple way for BART passengers and employees to alert BART Police that emergency assistance is needed while also providing additional platform CCTV surveillance.

Data Sharing

The Public Emergency Phone Towers include CCTV cameras which are part of the larger CCTV surveillance system. Use of the CCTV camera footage from the Public Emergency Phone Towers is controlled by the CCTV Surveillance Policy. See data sharing for Item 1 – BART Closed Circuit Television for details of data sharing for CCTV data. No data is shared from the Public Emergency Phone Towers other than CCTV footage recorded by the included cameras.

Complaints

There were no complaints received for the Public Emergency Phone Towers.

Surveillance Policy Compliance

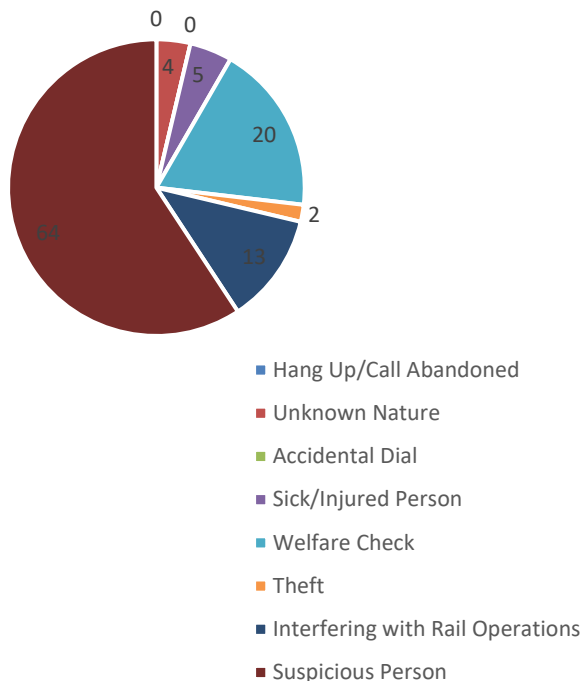
There were no violations of the Surveillance Use Policy for the Public Emergency Phone Towers discovered during this period. A random audit of CCTV video requests was conducted for policy compliance which covers the same CCTV system used by the Public Emergency Phone Towers. See Surveillance Policy Compliance for Item 1 – BART Closed Circuit Television for details of the audit.

Crime Statistics

The following chart reflects the usage of the Public Emergency Phone Towers at the Coliseum Station.

Coliseum Platform Emergency Call Towers

Total Call by Type for the Period 9 June 2020-9 June 2021



Hang Up/Call Abandoned	0
Unknown Nature	4
Accidental Dial	0
Sick/Injured Person	5
Welfare Check	20
Theft	2
Suspicious Person	64

Additional crime statistics are published monthly and are available at;

<https://www.bart.gov/about/police/reports>

<https://www.crimemapping.com/map/agency/454>

Public Records Act Requests

There were no public records act requests located for the Public Emergency Phone Towers.

Costs

Beyond the installation costs for the Board approved project, ongoing maintenance will require 4-hours of labor every 30-days totaling approximately \$3,600 per year.

BART Mobile Applications & Related Modifications to BART.gov

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The primary use for this technology is to provide consistent transit information, transit incentives and maps to BART riders through BART.gov and BART Mobile apps, collectively referred to as “BART Applications.” These BART Applications are also used to handle financial transactions, provide proof of payment, and aide the BART Police Department in payment and carpool enforcement. Authorized use includes Navigation, Trip Planning, Fares, Parking, Bike Storage Transactions, Transaction Enforcement, Transit System Analysis & Demand Management, Providing & Redeeming Incentives, Transit Information & Communication, and Surveys.

Data Sharing

The following Authorized BART Service Providers provide elements of support, and infrastructure related to the ongoing operation of the BART Mobile Applications & Related Modifications to BART.gov:

Authorized BART Service Providers		
Acquia	HaCon	Salesforce
Auth0	Moovel	TransSight, LLC
Amazon Web Services	PayPal/Braintree	Data Ticket

Complaints

BART Customer Service registered a total of 34 communications on BART Mobile Applications & Related Modifications to BART.gov. Of the communications received, 15 were complaints reporting the application was showing incomplete or incorrect data or the application was reported as not working properly. 12 questions were received on how to receive refunds, and 7 were requests for assistance using different aspects of the application.

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the BART Mobile Applications & Related Modifications to BART.gov discovered during this period. Although no audit were conducted during this reporting period, it should be noted that BART has mechanisms of continuous monitoring for administrative access, activity logging, firewalling, intrusion detection, and intrusion prevention which may be used for future audits.

Crime Statistics

Implementation of parking features on the mobile application supports more enforcement of BART's parking rules such as checking for a valid parking permit and simplifying the validation process.

Public Records Act Requests

There was one Public Records Act request for BART Mobile Application. Texas A&M University requested information on the BART Smart Phone App for their *Transit on Mobile* Research Project. They were interested in learning about the benefit of the App to society in terms of increasing ridership amid public health events. They requested the following information:

- Routine-level monthly ridership data from 1/1/2016-06/30/2020
- Major service or fare changes from 1/1/2016 -06/30/2020

Costs

Beyond the installation costs of \$1.76M for the Board approved project, the actual ongoing maintenance and operational expenses related to this surveillance technology were \$303,219 for this year not including labor.

BART Automated License Plate Recognition (ALPR)

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The goal of installing Automated License Plate Recognition (ALPR) technology is to improve the safety and protection of BART patrons, employees, and their vehicles while in BART owned and or operated parking areas and garages. The Use Policy and Impact Reports were drafted in early January 2019 and updated in October 2019. The Impact and Use Reports were produced as collaborative effort with key privacy groups such as Oakland Privacy and Secure Justice. The collaborative nature of this effort allowed for a transparent and robust policy that met all elements of BART's Surveillance Ordinance and California Civil Code Sections 1798.90.51 and 1798.90.53.

Over a four-month period from January to April 2019 BART Police met with Privacy Groups to understand privacy concerns and put in place protective measures to prevent misuse of data aired by the ALPR. The ALPR project was approved by the BART Board of Directors for a pilot program on 25 April 2019 for a single installation at Macarthur Parking Garage. This location was chosen because of the high numbers of parking related crimes in the parking garage as well as having existing electronic and structural infrastructure that was already in place in the garage. Since the existing wiring and mounting infrastructure was in place at Macarthur Parking Garage, it made sense to install the cameras at this garage with the goal to see if it made a positive impact in reducing crime in the parking garage prior to making a larger capital investment for installing additional cameras.

Additionally, ALPR has been approved to assist with the efficient enforcement of parking program compliance through the automated enforcement of BART's parking rules. Using ALPR for parking enforcement improves compliance with parking rules, provides documentation support for complaint resolution, and can increase customer satisfaction by providing improved data on space availability. The proposed use of ALPR for parking enforcement has not yet been implemented but is likely to go to the Board of Directors for their Approval in August 2021.

Data Sharing

Following the BART ALPR project approval, the next steps included establishing and ensuring the security of the data collected by the BART Police ALPR system. The Board approved project transmits the data to a secure location at the Northern California Regional Intelligence Center (NCRIC) where physical access is limited to authorized individuals and involves significant physical access protections and digital firewalls.

A Memorandum of Understanding and Agreement (MOU) was signed between the BART Police Department and the NCRIC on October 23, 2019. It should be noted that while signatories of the MOU were between the two agencies, privacy groups such as Oakland Privacy and Secure Justice were also involved in the development of this document to ensure transparency and community collaboration to the greatest extent possible. The MOU development process took from May - September 2019. Key components of the MOU mandated that all ALPR data be secure and must have encryption requirements from the data source capture through transmission to the NCRIC data center for storage. The data would be stored in the NCRIC facilities in the Federal Building in San Francisco. NCRIC offices have 24/7 staffed security, multiple locked doors requiring both electronic keys and knowledge-based PINs. It also requires that only active NCRIC employees who possess a valid security clearance of SECRET or better are allowed physical access. Lastly NCRIC requires all activity is logged for audit and tracking purposes. Audits are available for an agency to view the actions of their officers.

The MOU specifically limits the retention of ALPR data collected from the BART ALPR cameras to 30-days, except where required by a subpoena, court order, or ongoing investigation. Additionally, the MOU specifically prohibits sharing of ALPR data collected from the BART owned cameras with federal immigration officials or immigration agencies either directly or indirectly. Authorized access to ALPR data in the NCRIC database is restricted to authorized public safety entities who possess a need to know and right to know the shared data except where explicitly denied by BART.

Computer Domains with NCRIC ALPR Data Access		
Atherton PD	Fremont PD	Seaside PD
BART PD	NCRIC	Hillsborough PD
Benicia PD	Berkeley PD	Solano County Sheriff
Brisbane PD	Palo Alto PD	South San Francisco PD
California Highway Patrol	Alameda County Sheriff	Tracy PD
Marin PD	San Mateo Sheriff	Vacaville PD
Ceres PD	Dixon PD	Vallejo PD
Chico PD	San Francisco PD	Plumas County Sheriff
Daly City PD	Santa Clara Sheriff	Menlo Park PD
Oakland PD	Merced County	CA Department of Motor Vehicles
San Leandro PD	Colma PD	Gilroy PD
Federal Bureau of Investigation	US Department of Interior	Newark PD
Milpitas PD	Monterey PD	Redwood city PD
Office of the Inspector General	Santa Clara DA	Antioch PD
Campbell PD	San Rafael PD	Los Altos PD
Union City PD	El Cerrito PD	San Bruno PD
Sana Cruz County Sheriff	Burlingame PD	CA Dept of Insurance
Napa PD	Marin County Sheriff	Mendocino County Sheriff
IRS Criminal Investigations	Marina PD	Pacifica PD
San Joaquin County Sheriff	Sonoma County Sheriff	CA Department of Corrections
Contra Costa County DA	Livermore PD	Mountain View PD
Alameda PD	Yolo County	CA Department of Justice
East Bay Parks PD	East Palo Alto PD	National Parks Service
Orange County Intelligence Assessment Center	US Dept of Agriculture	Belmont PD
California State University Monterey	Hayward PD	Hercules PD
Los Gatos PD	Place County Sheriff	Pleasanton PD
Riverside County Sheriff		

Complaints

BART has not received any complaints with ALPR technology installed at Macarthur Parking Garage. BART regularly receives complaints from passengers who have been victimized by property crimes in the District's parking lots. ALPR technology is one of the tools that they District may use to deter criminal activity in the parking areas as well as solve crimes for victims of property crimes in BART parking lots and garages.

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the ALPR technology. A review of the NCRIC ALPR audit log revealed that the BART Police Investigation Unit Department requested ALPR Data on 14 occasions from July 2020 to June 2021. All 14 requests were for a specific police case requesting information on stolen, wanted, or suspect vehicles.

Crime Statistics

The ALPR cameras were commissioned for service in February 2020. Comparing the period of February through June for property crimes occurring in the Macarthur Parking Garage between 2020 and 2021, there were 7 incidents in 2020 and 28 incidents in 2021. There currently is insufficient data to establish a statistical link between the deployment of ALPR technology and property crime rates at this location, mainly because our parking levels have not returned to pre COVID occupancy levels. However, ALPR was used on multiple occasions to investigate property crime.

The COVID-19 pandemic also impacted ridership and parking in 2020 and into 2021, making a comparison between the time periods difficult. Additionally, the COVID-19 pandemic has impacted training and the BART Police Department has not yet had the opportunity to fully train employees on how to use the ALPR data generated by this project for investigative purposes.

BART crime statistics are updated monthly and made available at the following URL's;

<https://www.bart.gov/about/police/reports>

<https://www.crimemapping.com/map/agency/454>

Public Records Act Requests

BART has not received any public records requests for 2020 for data collected by the ALPR system. One public records request was received in 2019 for information about which agencies BART shares ALPR data.

Costs

The total cost for reinstalling the ALPR cameras at the Macarthur Parking Garage was \$2,050.00. The cameras were installed and commissioned in February 2020. One of the cameras stopped working in July 2020. BART asked the installation company, PIPs Neology to honor its one-year warranty who honored the commitment and sent a technician and fixed the camera at no cost to BART. There is no cost for the services provided by the MOU with the NCRIC. BART is working on developing a future procurement for additional ALPR cameras to be used for both law enforcement and parking enforcement purposes, the program is looking to lease the cameras and the cost set aside for the ALPR lease program is \$ 580,000.

BART Research Data Collection

2021 Surveillance Annual Report

Surveillance Technology Use

Description:

BART conducts research for a variety of research and learning purposes, such as to:

- Provide market information and metrics to help inform District decisions related to strategic planning, budget priorities, station access policy, marketing strategy, and other areas.
- Gather insight into latent demand, usage of TNCs and other emerging travel modes, and understand impact on public transit usage.
- Understand effectiveness of marketing initiatives by analyzing riders' aggregate travel behavior changes over time.
- Identify reasons for change in ridership patterns.

Methodologies using electronic and/or mobile data collection may be used to facilitate the following:

- Faster and less expensive data collection by eliminating the need to manually enter survey results.
- Expanded research capabilities using real time and location-based mobile technologies.
- "In the moment" ratings of BART facilities to improve rating accuracy, and image data that helps explain the reasons for ratings.
- The use of research panels to detect changes in travel patterns over time.
- Analysis of Bay Area residents' travel behavior, e.g., trip purposes, travel modes, travel mode shifts, vehicle occupancies, changes in car ownership habits, as well as demographics (for both riders and non-riders) in soliciting respondent consent for BART research projects.

BART discloses the types of data that will be collected, the nature of potential uses of such data by BART and, as applicable, third party partners in research, and describe the mitigations taken to protect respondent privacy.

Data Sharing

BART research data is not shared with any third party unless such disclosure is required by law or court order, or if shared under an agreement that ensures that the requirements of the Surveillance Use Policy (SUP), approved by the Board in 2018, are met. For example, BART may transfer select data to consulting firms or governmental organizations to use for travel modeling or environmental impact assessment, provided that data handling and security requirements are met.

In such cases, where data at the individual record level are required for analysis, the third party will be required to be under contract with BART or bound by a Non-Disclosure Agreement (NDA) with BART. Such contracts and NDAs require adherence to provisions of this SUP and associated Surveillance Impact Report.

The District shared data with one Authorized BART Service Provider for purposes of statistical analysis, transit modeling and transit system capacity analysis as in previous years.

Authorized BART Service Providers
Fehr and Peers

Complaints

There were no complaints received for the Data Collection and Usage for Research and Learning surveillance technology.

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the Data Collection and Usage for Research and Learning surveillance technology discovered during this period. No audit was conducted during this initial reporting period.

Crime Statistics

Not applicable. This solution is not a Crime Prevention tool.

Public Records Act Requests

There were no public records act requests for the Data Collection and Usage for Research and Learning surveillance technology.

Costs

The annual software license fee is approximately \$30,000.

BART Trip Verification Technology

2021 Surveillance Annual Report

Surveillance Technology Use

Description: The Trip Verification Software (TVS) was developed to be used by BART staff and authorized service providers to provide the transit-riding public with new features and benefits. Handheld Trip Verification Devices (TVDs) were designed to be used to scan Clipper cards to grant access to unique BART and selected transportation partners with the goal of increasing transit ridership. The initial deployment of the technology was to be used to incentivize travelers to take public transit to the San Francisco International Airport (SFO). The engineering work for the Trip Verification Device / Software on the Android phone was complete as of November 2019, and planned for deployment Feb/March 2020, but the deployment date was cancelled, and the application was never given to SFO to use due to fiscal impact of COVID-19.

Data Sharing

This was a pilot program between BART, the San Francisco International Airport (SFO), San Francisco County Transportation Authority (SFCTA), and SAMTRANS was never executed, and the project was cancelled due to COVID impact on BART funding.

Complaints

None received on Trip Verification Technology. 17 complaints were sent in on Clipper Cards Program. The Clipper Card program is managed by Metropolitan Transit Commission (MTC) and BART utilizes this cooperative program.

Surveillance Policy Compliance

There were no violations of the Surveillance Use Policy for the proposed Trip Verification Technology. The program was never executed due to COVID impact to funding.

Crime Statistics

Not applicable. This solution is not a Crime Prevention tool.

Public Records Act Requests

There were no public records act requests for the Trip Verification technology.

Costs

Per the approved Surveillance Impact Report for Trip Verification Technology, the start-up development costs for the trip verification technology included the software development, hardware (android phones), device management and an initial marketing strategy for a total of \$40,000. The program was not initiated so no maintenance costs were incurred.