



MEMORANDUM

TO: LeRonne L. Armstrong
Chief of Police

FROM: Drennon Lindsey, Deputy Chief of Police
OPD, Bureau of Investigations

SUBJECT: Automated License Plate
Reader – 2020 Annual
Report

DATE: October 1, 2021

Background

Oakland Police Department (OPD) ALPR Policy 430 (430.8 Agency Monitoring and Controls) states that the “ALPR Coordinator shall provide the Chief of Police and Public Safety Committee with an annual report for the previous 12-month period.” This report was completed in 2021, later than the requirement of ALPR Policy 430. OPD did not complete this report in 2020 or initially present it to the PAC and City Council as personnel were focused at this time on development of a new ALPR Policy. OPD’s ALPR Surveillance Use Policy (SUP) is still undergoing review by the PAC at the time of the production of this report.

2020 Annual Report Details

- A. A description of how the surveillance technology was used, including the type and quantity of data gathered or analyzed by the technology:

*The number of times ALPR technology was used in 2020 is shown in **Table 1**. More specifically, Table 1 shows the total scans by month – the total license plate photographs made and stored each month (2,591,990 total for the year). Table 1 also shows the number of times the vehicle-based systems had a match (“hit”) with a California Department of Justice (CA DOJ) database (4,150 total for 2020). OPD’s very outdated ALPR system can only quantify these two figures; the system can no longer quantify individual queries or perform any audit functions, as the software is no longer supported from the original vendor. Prior, the system could run reports that detailed the reasons for queries (e.g. a type of criminal investigation). OPD can only provide more comprehensive use data if and when a newer ALPR system is acquired.*

Table 1: 2020 OPD ALPR Scans and Hits

Month	Year	Scans	Hits
Jan	2020	391,547	552
Feb	2020	276,834	396
Mar	2020	316,767	379
Apr	2020	336,103	662
May	2020	316,319	571
Jun	2020	149,050	255
Jul	2020	116,318	169
Aug	2020	118,521	213
Sep	2020	93,011	117
Oct	2020	102,491	171
Nov	2020	207,760	372
Dec	2020	167,269	293
2020 Totals		2,591,990	4,150

- 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):

The Federal Bureau of Investigation (FBI) had access to OPD ALPR data without following the standard data access request protocols outlined in Policy 430.9 "Releasing or Sharing ALPR Data." OPD has provided this level of access because there is a Council-approved Safe Streets Task Force Memorandum of Understanding (MOU)¹. OPD believes that the Task Force MOU allowed for ALPR data-sharing with specific FBI agents who have been co-located with OPD in the Police Administration Building and worked- on homicide cases. However, OPD personnel ran an audit of ALPR data queries and discovered that there were no queries from these FBI personnel. OPD has decided to revoke access to FBI these agents as of 9/28/2021 to alleviate concerns over data privacy.

The following police agencies made specific requests to OPD for ALPR data related to specific criminal cases (the number to right of agency = amount of data requests):

- *Berkeley Police Department – 2*
- *Daly City Police Department – 1*
- *Fremont Police Department - 5*
- *Livermore Police Department - 2*
- *San Francisco Police Department - 1*
- *San Jose Police Department – 1*

OPD personnel provided the requested ALPR data in each of these data request cases, as each case complied with the Policy 430.9, including a request with name of agency, person making request, and intended purpose for the data with approvals being reviewed by

¹ The mission of the FBI San Francisco Violent Crimes Safe Streets Task Force MOU is to identify and target for prosecution criminal enterprise groups and individual responsible for crimes of violence such as murder and aggravated assault, as well as other serious crimes. The MOU does not specifically address the sharing of ALPR data; however, the MOU does specifically articulate protocols for data sharing.

authorized personnel with records maintained. OPD has developed new protocols and automated forms for internal tracking of future requests which will be part of future ALPR annual reports.

- C. Where applicable, a breakdown of what physical objects the surveillance technology hardware was installed upon; using general descriptive terms so as not to reveal the specific location of such hardware; for surveillance technology software, a breakdown of what data sources the surveillance technology was applied to:

The ALPR cameras are installed upon fully marked OPD patrol vehicles (29 operational; 6 inoperable).

- D. Where applicable, a breakdown of where the surveillance technology was deployed geographically, by each police area in the relevant year:

These vehicles are assigned to the Bureau of Field Operations I (administered out of the Police Administration Building in downtown Oakland) as well as Bureau of Field Operations II (administered from the Eastmont Substation). The vehicles are deployed throughout the City in a patrol function to allow for large areas of the City to have ALPR coverage as the patrol vehicles are used to respond to calls for police service.

- E. A summary of community complaints or concerns about the surveillance technology, and an analysis of the technology's adopted use policy and whether it is adequate in protecting civil rights and civil liberties:

Members of the public have spoken at PAC meetings regarding concerns of negative impacts to privacy protections (e.g. that OPD could use ALPR server data to establish travel patterns of particular vehicles associated with particular license plates, and/or that ALPR data can be inadvertently released through inadequate privacy protocols). OPD has also heard comments that more advanced ALPR systems may be used to track other vehicle attributes (e.g. bumper stickers). Furthermore, OPD personnel are of media reports of ALPR systems where a lack of updates between local systems and State CA DOJ databases lead to inaccurate stolen vehicle notifications, which have led law enforcement to stopping motorists because of stolen vehicle notifications.

- F. The results of any internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response unless the release of such information is prohibited by law, including but not limited to confidential personnel file information:

*2019 audits were performed solely to ensure system functionality. The current system is outdated, and the software is not supported from the original vendor. Prior to this loss in function, the system could be used to run reports for sample audits that detailed the reasons for queries (e.g., type of criminal investigation). The ALPR system can currently quantify only hit and scan data as noted in Part A above. However, with support from the software vendor as well as the Information Technology Department, 2019 data has since been audited for accuracy (see **Appendix A** to this report below).*

OPD can only provide more comprehensive use data if and when a newer ALPR system is acquired. OPD has developed a plan for future robust ALPR system audits - should OPD be allowed to purchase an updated system after approval of the updated ALPR SUP. A more robust system oversight and review protocol will include: Use Policy review and training, same use audits, authorized user control, IT oversight, and review of the requests for ALPR data from outside agencies.

ALPR 430 lists a six-month ALPR server data retention policy. However, OPD has maintained a 730-day data retention policy during 2019, based upon legal counsel, and in alignment with the draft DGO I-12 ALPR Policy. The draft Surveillance Impact Report for draft DGO I-12 ALPR, Section F. "Data Types and Sources" provides more detailed information about OPD's ALPR data retention protocols.

OPD's ALPR 430 Policy does not explicitly delineate a separate data-sharing process for law enforcement agencies where there is a Council-approved MOU in place (as explained in Section B above). OPD recognizes that current data-sharing practice does not align with the limits set forth in ALPR 430. The new draft DGO I-12 ALPR Policy, Section I. "Third Party Data Sharing," provides for separate protocols for 3rd party data sharing where there is a Council-approved agreement or taskforce, and when the data is shared in connection with criminal investigations.

- G. 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:

The City's Information Technology Department (ITD) confirmed to OPD that they have not detected any ALPR information breaches at the time of OPD's inquiry for the production of this annual report.

- H. Information, including crime statistics, that helps the community assess whether the surveillance technology has been effective at achieving its identified purposes:

*The ALPR system does not allow for automated connections to the many cases where ALPR is instrumental in either immediate notifications to stolen vehicles and/or vehicles connected to other crimes. The system also does not offer any automation to cases where crimes are investigated, and ALPR provides useful data. Therefore, OPD has conducted time-consuming research as part of updating the Surveillance Impact Report for review of a new Surveillance Use Policy. The Surveillance Impact Report, which was offered for presentation as part of the February and March 2021 PAC meetings (as the PAC reviewed a draft ALPR Surveillance Use Policy), highlights many uses (see **Attachments A and B**) of the draft Surveillance Impact Report). Section (A) above shows that there were 4,150 hits against CA DOJ cases. OPD estimates that ALPR was hundreds of times in OPD investigations in 2020. In 2020, there were 180 OPD incident reports that had either the keyword LPR or ALPR or both in the narrative (including supplements). Auto thefts represent most of these cases; however, these reports also relate to cases of violent crime.*

OPD personnel conducted manual reviews of 2020 cases where vehicle ALPR system data alerted officers to vehicles on CA DOJ hotlists as well as cases where OPD CID investigated criminal cases using ALPR data. The data includes many stolen vehicle and car jackings (as well as some cases related to homicide, rape and human trafficking).

Appendix A to the ALPR Surveillance Impact Report (**Attachment A**), the parallel document to the draft SUP being presented to the PAC for review, provides over 100 cases where the vehicle ALPR System alerted officers to vehicles on a CA DOJ hot list during the 2020 year. These examples are a few of the hundred cases listed:

- Example #25 20-016962 4/8/2020: Oakland police officers took a report of a carjacking on 3/30/20. Nine days later Oakland officers on patrol were alerted to the carjacked vehicle parked on the side of the road by their vehicle ALPR system. A suspect was observed in the vehicle. The suspect was arrested. The vehicle was recovered from the 1400 Blk of 16th Ave. Age of Data 9 days.
- Example #82: 20-037670 7/31/2020: While on patrol Officers were alerted by their ALPR system on a Stolen Vehicle traveling east bound 1400 block of 19th Ave. The ALPR system affixed on top of their Patrol vehicle alerted the Officers and the Officers confirmed that the vehicle was indeed stolen. One (1) individual was detained following a foot pursuit. A firearm was recovered. That individual was later arrested for stolen vehicle, possession of a stolen vehicle, Various firearm charges (Loaded firearm in public, concealed loaded firearm in vehicle), and a probation violation. Date of Theft 7/21/2020.
- Example #95 - 20-024499 5/19/20: While on patrol Officers were alerted by their ALPR system to an unoccupied stolen vehicle parked on the 2500 block 10th Ave. The ALPR system that is affixed above their patrol vehicle provided a picture of the vehicle and the license plate. One (1) of the license plates had been switched with another stolen license plate of another similar vehicle. Officers verified the vehicle was indeed stolen and unoccupied. Suspect still outstanding.

Most cases alerted OPD to stolen vehicles - the ALPR hits led to the recovery of scores of stolen vehicles. In some cases, the ALPR system alerted officers to vehicles connected to carjackings – an ALPR hit on April 8, 2020 led to the arrest of a carjacking suspect. In another case in August 2020, an ALPR photo connected to a robbery case led to the arrest of a suspect connected to a homicide investigation. In the case noted on July 31, 2020 in the Appendix A, officers were alerted to a stolen vehicle while traveling east bound on 19th Ave. One individual was detained following a foot pursuit. A firearm was recovered. That individual was later arrested for stolen vehicle, possession of a stolen vehicle, various firearm charges (included having a loaded firearm in public, and a concealed loaded firearm in a vehicle), and a probation violation.

I. Statistics and information about public records act requests regarding the relevant subject surveillance technology, including response rates:

OPD has received zero PRRs in 2020 related to ALPR; there were 11 total open ALPR-related PRRs as of December 31, 2020. These requests related to the number of ALPR camera systems (see Section C above), ALPR data (the license plate number, date, time, and location information for each license plate recorded for related to either specific license plates or all captured data during certain time periods), and OPD emails related to ALPR data. Other requests related to the sharing of data with other agencies as outlined in Section B above. There are also PRRs relating to technology contracts.

For all ALPR PRRs, OPD can generally provide date and time information. OPD cannot provide information related to locations where license plates were photographed, nor information related to the specific vehicles. Some of these PRRs have been processed and

completed in 2021 during the time of the production of this latest iteration of this report – status information below reflects recent updates made in 2021. The following is the list of PRRs outstanding during 2020:

PRR#	Nature of Request	Status	Content Provided
RT 16630	All records responsive to the below requests dated from January 1, 2014 through July 28, 2016. - The full documentation of all contracts or non-disclosure agreements (enacted OR IN EFFECT between the above dates) with the companies "Persistent Surveillance Systems" or "Vigilant Solutions" (more of request: https://oaklandca.nextrequest.com/requests/RT-16630).	Still being processed	n/a
RT 17577	All ALPR data ever collected or generated by the Oakland Police Department	closed	2019, 2020, 2021 ALPR scans along with date and time stamp (OPD does not have access to any previous years as they have been purged); some records are not being released, or have been redacted pursuant to Gov. Code Sec, 6255(a) as the public interest in nondisclosure clearly outweighs the public interest in disclosure; City of San Jose vs Superior Court (1999) 74 Cal.App.4th 1008
RT 17949	All ALPR data ever collected or generated by the Oakland Police Department	open	2019, 2020, 2021 ALPR scans along with date and time stamp (OPD does not have access to any previous years as they have been purged); some records are not being released, or have been redacted pursuant to Gov. Code Sec, 6255(a) as the public interest in nondisclosure clearly outweighs the public interest in disclosure; City of San Jose vs Superior Court (1999) 74 Cal.App.4th 1008
18-391	What company (or companies) makes Oakland's license plate readers, and with which cities and other law enforcement agencies Oakland shares its LPR data.	open	n/a
18-649 –	The names of all agencies, organizations and entities with which the Oakland Police department shares Automatic License Plate Reader ("ALPR") data, such as the National Vehicle Location Service;	open	OPD ALPR Policy 430: https://oaklandca.nextrequest.com/documents/618507/download

PRR#	Nature of Request	Status	Content Provided
	<p>* The names of all agencies and organizations from which the department receives ALPR data; * The names of all agencies and organizations from which the department shares "hot list" information; * The names of all agencies and organizations from which the department receives "hot list" information; more of request: https://oaklandca.nextrequest.com/requests/18-649</p>		
19-1546	<p>How many automated license plate readers the Oakland Police Department has in use currently? Are they in fixed locations or on police cars, or other? How many vehicles on your hotlist currently? What's is the hit rate currently, and what was it in March 2018? How long is this data retained for? Is there a formal data retention limit? Have you shared any of this LPR data with any third parties, including non law enforcement bodies? If so, who? Have you bought license plate data from any third parties, and if so who? Has there been any communication between the department and representatives from or people acting on behalf of US Immigration and Customs enforcement and / or US Border Patrol? If so, please can you share all correspondence (inc attachments)? More information: https://oaklandca.nextrequest.com/requests/19-1546</p>	Open	Content not yet provided
19-1897	<p>Oakland Police Department representative Bruce Stoffmacher verbally represented to the Privacy Commission (and via the draft automated license plate reader policy he presented) that 147 emails exist wherein an officer requested that an automated license plate query be performed due to an investigative need.</p>	closed	redacted emails
19-2270	<p>all ALPR data ever collected or generated by the Oakland Police Department, including at a minimum,</p>	open	Content not yet provided

PRR#	Nature of Request	Status	Content Provided
	<p><i>the license plate number, date, time, and location information for each license plate recorded; more information: https://oaklandca.nextrequest.com/requests/19-2270</i></p>		
<p>19-3334</p>	<p><i>A copy of all contracts signed between the Oakland Police Department and Palantir Technologies, Inc., from 2008 to the present, including all existing annexes, addendums, exhibits or modifications to these contracts. This should include any contracts with the Northern California Regional Intelligence Center (NCRIC) through which the Oakland Police Department has access to Palantir software as a NCRIC member agency.</i></p> <p><i>2. Any audits, progress statements, performance assessments, or internal or external reports concerning Palantir's software, hardware or services for the Oakland Police Department from 2008 to the present.</i></p> <p><i>3. A copy of all email communications between Oakland Police Department personnel and representatives of the company Palantir Technologies, Inc. from the domain "@palantir.com" from 2008 to the present.</i></p> <p><i>4. A copy of all email communications among Oakland Police Department personnel, and between Oakland Police Department personnel and the Northern California Regional Intelligence Center (NCRIC) containing the terms "Palantir", "Vigilant Solutions", "license plate recognition", "LPR" or "ALPR".</i></p> <p><i>More information: https://oaklandca.nextrequest.com/requests/19-3334</i></p>	<p><i>closed</i></p>	<p><i>The Oakland Police Department does not have any contracts with Palantir Technologies.</i></p>
<p>19-6125</p>	<p><i>All Automated License Plate Reader data that Oakland PD has regarding 2008 Ford E-150 van, #8N22328 created or recorded on or after December 8, 2019.</i></p>	<p><i>open</i></p>	<p><i>Content not yet provided</i></p>

PRR#	Nature of Request	Status	Content Provided
19-1382	Information related to California Senate Bill 34 (ALPR) requires the Oakland Police Department to maintain a record of access that captures certain information (cut and paste below for ease of your reference); more information: https://oaklandca.nextrequest.com/requests/19-1382	closed	Data with the User ID, Justification entry and date/time provided

- J. Total annual costs for the surveillance technology, including personnel and other ongoing costs, and what source of funding will fund the technology in the coming year:

Zero; OPD did not incur any maintenance, licensing, or training costs. Training is completed using OPD's online training portal as well as staff time.

- K. Any requested modifications to the Surveillance Use Policy and a detailed basis for the request:

OPD and the PAC are developing and reviewing a new ALPR Surveillance Policy contemporaneous to the production of this report for OPD ALPR Use Policy 430. OPD is requesting PAC review and recommendation to City Council of this new Surveillance Use Policy (SUP). This new policy will cover all required areas of OMC 9.64.

Respectfully submitted,

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Appendix A

2020 ALPR Accuracy Audit

Policy 430 states in section 430.7(c) System Monitoring and Security: ALPR system audits shall be conducted on a regular basis by the Bureau of Services. The purpose of these audits is to ensure the accuracy of ALPR Information and correct data errors.

Determining accuracy of captured ALPR data is difficult based on the fact that license plates can be in length from 1 character to 7 characters. These characters can be in many different formats due to the age and type of the vehicle as well as personalized plates. The one thing that remains constant with California plates is the character limit is set at 7. Per the policy this audit is meant to correct data errors. This audit cannot correct the errors. What this audit can do though is show how the system is working on a year to year basis to make sure the ALPR system optical recognition algorithm is operating as it should and the error rate stays very low.

Method of Audit:

- Compiled all captures for the year.
- Sorted all captures to identify all that were over 7 characters.
- Divided the number of bad captures by the total captures to obtain the percentage of time the system was not correct.

2020 Audit

A query of all plates for 2020 revealed 2,592,055 captures. A sort of captures containing over 7 characters was completed. The amount of captures over 7 characters resulted in 2,843 captures. The percentage of bad captures with over 7 characters equals 0.111% of the total captures. After looking at the bad captures it appears that the system sometimes captures road signs and other objects containing text. Due to the very low percentage of incorrect captures it appears the system is working correctly but the optical recognition system has some small issues with identifying license plates. It should be noted that the photo obtained at the time of the system capture will show the user what the optical character recognition thought was a license plate.

2020 ALPR Justifications Audit

Lexipol Policy 430 Automated License Plate Readers (ALPRs) was created prior to the implementation of justification and auditing features being activated on our ALPR system. In the policy there is mention of a right to know and a need to know prior to accessing ALPR data but there is no mention to what must be entered into the software justification fields. The Current ALPR system has the following fields in the justifications tab: (Audit, BOLO Post Scan Query, Crime Scene Query, Criminal Investigation, Test, Trend Analysis). One of the above Justifications must be selected prior to continuing with the Query. There are two additional free form boxes (Justification Note and File Number). The Justification Note box must have something entered in order to continue with the query. The File Number can be bypassed without entering anything. SB34 (Automated license plate recognition systems: use of data) was passed by the California Legislature. In this law there are several requirements that a government entity must abide by.

In Section 1798.90.52 the law states, "If an ALPR operator accesses or provides access to ALPR information, the ALPR operator shall do both of the following:

- a. Maintain a record of that access. At a minimum, the record shall include the following:
 1. The date and time the information is accessed.
 2. The license plate number or other data elements used to query the ALPR system.

3. The username of the person who accesses the information, and, as applicable, the organization or entity with whom the person is affiliated.
 4. The purpose for accessing the information.
- b. Require that ALPR information only be used for the authorized purposes described in the usage and privacy policy required by subdivision (b) of Section 1798.90.51.

In February of 2021 raw ALPR Justification data was retrieved by City IT and the Neology vendor for years 2019 and 2020. This raw data was extracted directly from the database and was not retrieved as it normally would have been from the software included with the BOSS3 system.

Method of Audit:

Ensure the following state requirements were included in the ALPR queries to include:

1. Data and time of Query
2. License plate of other data used to query
3. Username of person accessing
4. Purpose of the access

The 2020 ALPR justification data consisted of 3996 queries. All the queries included an identifiable Username as well as a date and time of the query. There were 166 queries that had no license plate or other querying characters present. There was only 1 query that had no purpose of access identified. A character must be entered into the plate tab to conduct a query as well as a justification reason (purpose of the access). Due to these sections being completely blank it is unknown if the system allowed this to occur, which is highly unlikely, or if it was due to the way the raw data was extracted from the server. The current system is unable to run automated justification audits at this time. The department was only able to run these audits after obtaining the raw data and going through the data manually.