

# City of Alameda



## Interdepartmental Memorandum

Date: September 29, 2015

To: Paul J. Roller  
Chief of Police

From: Sergeant Wayland Gee  
Inspectional Services

RE: Automated License Plate Recognition (ALPR) Systems Audit

Background: The use of ALPR technology was examined and field tested by the Alameda Police Department in 2013. After the field testing, it was determined that four, three-camera systems, mounted on patrol vehicles, would provide effective deployment throughout the city. City Council authorized the Alameda Police Department to pursue grant funding for the ALPR equipment in October, 2013. Privacy concerns expressed by members of the community resulted in a public forum hosted by the Alameda Police Department in February, 2014 to discuss the use of the equipment and the retention of data. In May, 2014, City Council authorized the Alameda Police Department to purchase ALPR equipment using salary savings, as grant funding had been denied two months earlier in March, 2014. ALPR equipment was subsequently purchased from Vigilant Solutions and installed by LEHR Auto. ALPR 1 was installed on patrol vehicle 104 and became operational in December, 2014. With this one operational unit, the installer held a training class for 8-10 members of the department who were then responsible for training the remainder of the patrol force on the in-car use of the ALPR. The rest of the patrol force received training in January, 2015 when the other three ALPR units became operational. ALPR 2 was installed on patrol vehicle 110, ALPR 3 was installed on patrol vehicle 111, and ALPR 4 was installed on patrol vehicle 119. All four ALPR units were fully deployed by the Alameda Police Department in January, 2015.

As a result of the concerns expressed during the February, 2014 public forum, the Alameda Police Department drafted a revised ALPR policy with strict guidelines regarding the use of the system as well as access to, and retention of the data. The purpose of this audit of the ALPR system is to examine the adherence of the Alameda Police Department to the ALPR policy during the first six months of ALPR use, January 1, 2015 to June 30, 2015.

Methodology: *Policy 462 - Automated License Plate Readers (ALPRs)* was reviewed, and a current copy is attached to this audit. This policy was first adopted by the Alameda Police Department on January 22, 2015. Section 462.1(c) of the policy states, *"The ALPR system shall be restricted to legitimate law enforcement uses for the purpose of furthering legitimate law enforcement goals and enhancing public safety."* The section continues with a list of examples of legitimate law enforcement uses and goals, including investigations, crime prevention, and the identification and removal of stolen vehicles.

Section 462.3(b)6 of the policy lists some of the impermissible uses of the ALPR system, including invasion of privacy, harassment, and personal use.

Section 462.3(c) of the policy addresses privacy concerns and database access of license plate information. It states that investigators may only access license plate information from the ALPR database and connect it to Personally Identifiable Information via other computer systems as governed by the Federal Driver's Privacy Protection Act. All such queries into, or access of, the ALPR data are logged for audit purposes.

Section 462.3(d) of the policy addresses data retention. It states, *"All ALPR data downloaded to the server will be stored for a period of six months, and thereafter shall be purged unless it has become, or it is reasonable to believe it will become, evidence in a criminal or civil action or is subject to a lawful action to produce records."*

Other documents reviewed for this audit include Vigilant Solutions' Law Enforcement Archival Reporting Network (LEARN) 5.1 System User Guide and LEARN 5.1 Agency Manager Guide. In addition, I interviewed Support Services Sergeant Michael Abreu, who was heavily involved in the implementation of the ALPR system, Property Crimes Sergeant Jeff Emmitt, who used the system in his role as an auto theft investigator and was tasked with oversight of patrol procedures in the use of the ALPR units, numerous ALPR users in the Patrol and Investigations Divisions, and Brian Rodrigues, the Information Technology and Cyber Security Manager for the Northern California Regional Intelligence Center (NCRIC), where our ALPR data is stored. Additional assistance was provided by Mike McGee, Fleet Sales Manager for LEHR Auto, the installer and trainer of the ALPR system.

Using the LEARN software, I ran several reports regarding ALPR detections, hits, and queries during the time period of January 1, 2015 to June 30, 2015.

Results: During the six month audit period, there were 995,029 vehicle license plates scanned by the four ALPR units, with 824 tentative hits, resulting in a tentative hit percentage of .08%. Reasons for the tentative hits included stolen vehicle, stolen license plate, stolen vehicle part, missing person, gang/terrorist member, sexual offender, felony warrant, and wanted person. There were 203 unique plates among the tentative hits and 621 repeated hits. Forty (40) of the unique plates were for stolen

vehicles, of which at least 28 were recovered as a result of the ALPR, according to the Automated Reporting System (ARS). The remaining 12 were stolen vehicles that were not located or not recovered for a variety of reasons, including incorrect plate, incorrect state, or unconfirmed as a stolen vehicle. The vast majority of the 621 duplicate hits were found to have occurred as a result of single stolen license plate cases. In these cases, the stolen license plate number was entered into the California Law Enforcement Telecommunications System (CLETS). The ALPR units then registered tentative hits each time it passed the rightful owner's vehicle that had the un-stolen license plate affixed. Another cause of duplicate hits was found to be ALPR patrol vehicle parking maneuvers at or around a vehicle that registered a tentative hit. During these parking maneuvers, it was not uncommon for the vehicle license plate to go in and out of camera view several times on at least one of the three cameras on the ALPR patrol vehicle, thus registering several repeat hits within a few seconds.

The 824 tentative hits were handled by patrol officers. Depending on the circumstances at the time, the disposition of the tentative hits could be in the form of a report or supplement, an incident card entry, the entry of a new call in the Computer Aided Dispatch (CAD) system for another officer to handle, or verbal clearance over the radio. Oversight of the proper disposition after a tentative hit rested solely on Sergeant Emmitt, who received an email message for every tentative hit. When possible, Sergeant Emmitt checked ARS, incident cards, unit histories, call histories, or dispatch recordings to ensure that proper action was taken. As this process was extremely time consuming, Sergeant Emmitt prioritized the different types of hits and conducted these checks on only the most important hits.

There were 68 queries into the ALPR database during the audit period, many of which were repeated several times. Thirty-eight (38) of the queries were immediately found to have a legitimate law enforcement purpose, either by cross reference to a report number in the user log or confirmation with an earlier query or other police document. The remaining 30 unconfirmed queries appear to have had a legitimate law enforcement purpose; however, they did not have sufficient information in the logs or any other known police document to immediately confirm the legitimacy of their search. These 30 unverified queries were caused in part by improper set up of the ALPR system. ALPR user profiles were originally set up so that some users were required to log their reason for a query, while others were not. After this error was discovered, all user profiles were changed in June, 2015 to require users to log their reason before they were able to initiate a search. The vast majority of the 30 unconfirmed queries occurred before the user profile error was corrected. The 30 unverified queries were made by 10 ALPR users. During this audit, the 10 users were provided with copies of their queries and requested to provide further details of the reason for their queries. Their responses led to 20 additional queries that were confirmed to have legitimate law enforcement purposes, either for investigations or training. The remaining 10 unverified queries were either not recalled by the three ALPR users that ran them or still lacked sufficient information to confirm the legitimacy of their search. Even so, research of these 10 unverified queries did not yield any evidence or suggestion of impermissible use of the ALPR database.

Reports seeking ALPR detections by the Alameda Police Department beyond 183 days yielded no results from the database. In contrast, reports seeking ALPR hits by the Alameda Police Department beyond 183 days were still found in the database and were searchable. This confirmed adherence to the six month data retention period.

This audit revealed that the Alameda Police Department is using the ALPR system as intended to further law enforcement goals and enhance public safety. There were no impermissible uses of the ALPR system identified. Any connections of raw license plate data from the ALPR system to Personally Identifiable Information would require examination of the department's use of CLETS, which is conducted as a separate audit by the Department of Justice, and is beyond the scope of this audit. All ALPR data was found to be in line with the six month purge and retention policy. In summary, the Alameda Police Department is adhering to the ALPR policy.

Highlights: The ALPR system was instrumental in the following cases during the six month audit period:

- 15-0276 011515 ALPR alerted on a moving stolen vehicle. Subsequent felony car stop resulted in the arrest of the driver who had a suspended license and possessed burglary tools.
- 15-0368 012015 ALPR database queried for vehicle of suicidal subject who ingested pills to end her life. Vehicle located in area of last ALPR detection with subject hidden inside. This was likely the first life saved that can be credited to the Alameda Police Department ALPR system.
- 15-0372 012015 ALPR alerted on lost/stolen plate. Subsequent traffic stop resulted in arrest of vehicle owner for possession of loaded firearm, and passenger for outstanding theft warrant and probation violation.
- 15-0443 012515 ALPR alerted on parked stolen vehicle in residential area. Officers found the vehicle occupied and arrested both occupants, one for auto theft and possession of burglary tools, the other for possession of switchblade, possession of narcotics paraphernalia, and probation violation.
- 15-0454 012515 ALPR alerted on parked stolen vehicle in business district. Subsequent investigation resulted in the location and identification of the vehicle occupants and the arrest of one subject who had possession of the vehicle keys.
- 15-1183 030515 ALPR alerted on parked stolen vehicle in business district.

Surveillance on the vehicle resulted in the arrest of two individuals, both for auto theft, one for possessing narcotics paraphernalia and outstanding warrants as well.

- 15-1996 050415 Partial plate from criminal threats case queried in ALPR resulting in a similar vehicle and the development of a possible suspect.
- 15-2044 041915 ALPR alerted on parked stolen vehicle in residential area. Officer found vehicle occupied and arrested the occupant for auto theft, possession of burglary tools, and probation violation.
- 15-2186 042615 ALPR alerted on a moving stolen vehicle. Subsequent felony car stop resulted in the arrest of two individuals, both for auto theft, one for violation of restraining order and probation violation as well.
- 15-2262 043015 During shoplift investigation, two subjects found in possession of a stolen vehicle with previous ALPR hits that was never located. Both subjects arrested for auto theft, one for possession of narcotics paraphernalia as well.

Recommendations:

1. Require report or incident card documentation for every ALPR database query, listing the plate queried and the reason.

The current audit log in LEARN provides for a case number field and a requestor field, but no field is included for remarks or a specific reason for the query. Even when a report number or incident number is listed, the reason for a query is not always clear, especially when there is no mention of the queried plate in the referenced report or incident card. Any future audit in LEARN will show a report or incident card reference with no clear reason why a query was made. Requiring report or incident card documentation of the plate and reason would greatly enhance the intent of the log, as well as streamline any future audit process.

2. Distribute the oversight responsibility of ALPR hits to the patrol sergeants.

Ensuring that proper action is taken on all ALPR hits is overwhelming for any one person due to the sheer number of hits. Distributing the responsibility to the eight patrol sergeants would make the task more manageable and more likely to occur.

The patrol sergeant is responsible for ensuring that patrol officers are following proper procedures and taking the right actions during their shift. This is accomplished through inspection, review and monitoring. The patrol sergeant is best suited for these activities, as the patrol sergeant is working on the same shift when these calls are occurring and when the actions are taken by the patrol officer. In the same manner,

patrol sergeants are best suited to ensure that patrol officers under their supervision are following procedures and taking the proper action on ALPR hits that occur during their shift. Inspection, review, and monitoring can be contemporaneous to the ALPR hit, rather than occurring on the following day or several days later.

3. Establish written procedure for ALPR users in a Training Bulletin.

The ALPR policy provides general guidelines for the use of the ALPR system. A written procedure in the form of a Training Bulletin would enhance the uniformity of how the ALPR system is used by the patrol force and the investigators. It could clearly address how ALPR hits are to be handled, the sergeants' responsibility for oversight, and the required log and documentation for database queries, among other areas.

4. Consider adjustment of the ALPR data retention period.

During this audit, 19 investigators and frequent users of the ALPR system were polled regarding the ALPR data retention period. Specifically, they were asked if the six month retention period hindered any known investigations, and whether they felt a longer retention period would be more beneficial to their investigations. The respondents unanimously said the six month retention period did not hinder any known investigations. However, most also recognized and added that it would be difficult, if not impossible, to observe that an investigation was hindered, since the data would no longer be available during a query to show it. Overwhelmingly, the respondents felt that a longer retention period would be more beneficial to their investigations, with one year being the most frequently recommended retention period.