

Recommendation to Provide Direction to Staff Regarding the Installation and Use of Automated License Plate Readers (ALPR), including Fixed and Mobile Equipment on Alameda Police Department Vehicles. (Police 10031110) [Continued from December 7, 2021]

To: Honorable Mayor and Members of the City Council

EXECUTIVE SUMMARY

Staff has developed an objective analysis of the benefits and concerns associated with the use of Automated License Plate Reader (ALPR) equipment and is seeking direction on whether to move forward with the installation and utilization of fixed and mobile ALPR equipment.

ALPRs are considered by agencies as a useful tool for law enforcement and are used by several law enforcement agencies to help solve crimes. However, based on available information and the manner in which solve factors are documented in cleared cases, the quantitative research to assess the ability of ALPRs to stop crime is lacking at this point in time. While it can be challenging to quantify this information because of the lack of controlled experiments, it is important to consider that ALPRs are one more investigative tool which law enforcement may utilize to identify vehicles that are involved in criminal activity and locating missing persons or other vulnerable populations.

Additionally, ALPRs can help support the Alameda Police Department's (PD) intelligence led policing initiatives. By focusing resources on specific vehicles engaged in criminal activity or missing person(s), PD would certainly increase its investigative efficacy while reducing unnecessary delays in leads. Equally as important, the use of ALPRs would minimize and mitigate the unintended consequences associated with over-policing as staff would not be relegated to antiquated policing strategies that include investigating **similar vehicles** as opposed to investigating **the actual vehicle** responsible for criminal activity.

BACKGROUND

Use of Mobile ALPRs

PD has been utilizing *mobile* ALPRs since May of 2014, when the City Council approved the purchase of the technology.

As originally approved, PD currently has four marked patrol vehicles with ALPR cameras. The cameras record: the license plate number, date, time, and location for each license plate scanned. The cameras are not designed to photograph the occupants of the vehicles, and they do not record any personal identifying information of the occupants or registered owner of the vehicle. As required by current PD policy, which was created with community and City Council input, the data is stored in a law enforcement only database by a private vendor for a period of six months (see Exhibit 1 –PD Policy No. 462,

Automated License Plate Readers). The data is used by PD for crime prevention, as an investigative tool for solving crimes, and locating missing persons or persons of interest.

The current ALPR system is inherently limited in its ability to provide complete coverage of the city, as scans can only be accomplished by the four equipped patrol cars while they are deployed and in service. In order to obtain a functionally effective data set of current ALPR data, the ALPR equipped patrol vehicles must be in use across the city with some regularity. Even when all four camera equipped vehicles are deployed and in service, the data obtained is not as complete as it could be, as it is not possible to cover the entire city at any given point in time.

PD has significantly reduced the use of these four ALPR equipped vehicles due to maintenance issues. The most recent use was on May 1, 2021. Additionally, staff has been reluctant to use the equipment until guidance on updated use protocol has been solidified.

To improve the ALPR system coverage, PD is proposing to install and utilize fixed ALPR equipment (camera and associated hardware) strategically mounted at all motor vehicle entry and exit points in the city.

A law enforcement tool such as the ALPR fixed system has understandably raised privacy concerns for some members of the community and this report attempts to address those concerns.

Chronology:

October 1, 2013 – Community concerns regarding the use of ALPRs were expressed to the City Council. The City Council directed PD to conduct a public forum related to the use of ALPR system.

February 3, 2014 – The public forum was held at the Alameda Free Library and was moderated by the Assistant City Manager at that time. Participants at the forum were representatives from PD, the American Civil Liberties Union (ACLU), and the Northern California Regional Intelligence Center (NCRIC). Approximately 50 members of the general public and media were in attendance and provided comments and feedback regarding the proposed system and draft policy.

The most common concerns raised were about:

- 1) Data retention period;
- 2) Release of the data through Public Records Act requests; and
- 3) Proposed PD ALPR Policy 462.

May 20, 2014 – Further public comment and discussion occurred at the regular meeting of the City Council. All concerns were addressed and the mobile ALPR equipment

proposal was approved. Subsequently, the final version of PD Policy 462 on ALPR use was created.

Following the May 20, 2014 approval, four marked PD patrol vehicles were each equipped with a three camera ALPR system. While these patrol vehicles have been instrumental in identifying stolen vehicles, wanted subjects, missing/suicidal persons, and leads that were helpful in solving violent and felonious crimes, their use has significantly declined due to maintenance issues and a need for updated use protocols. PD conducts semi-annual audits to ensure the ALPR system is being used correctly, within legal standards, and consistent with PD policy.

The collection, retention, and use of data collected by the fixed ALPRs would be regulated by the existing PD policy. Once uploaded, the data would be housed on a secure server and would not be available for use by other agencies. In response to regional concerns regarding Immigration and Customs Enforcement (ICE), NCRIC has removed ICE's access to any data to comply with SB 54, the data sharing and "Sanctuary State" law.

May and June 2017 – The City Council considered as part of its two-year budget adoption whether to include funding for ALPRs at the city's motor vehicle entry points. The City Council voted not to include funding during the budget adoption, but verbally supported the program and consequently directed staff to return to City Council if PD salary savings could cover the cost of the system.

October 2017 – APD and the City Council heard from Alameda residents, who were concerned about what was perceived as a dramatic increase in crime in the city. On October 20, 2017, the entire City Council attended a community meeting during which multiple crime and safety concerns were raised.

November 24, 2017 – The Chief of Police published a report showing Alameda was in the midst of an overall 30-year decline in crime. That being said, there had been a spike in property crimes in recent years, but the overall amount of crime remained low relative to the levels that exist in other jurisdictions along the Highway 880 corridor. The rise in property crimes was a regional problem with multiple causes. Stolen vehicles and crimes committed by people in vehicles were the most significant crime problem faced by Alameda at that time.

September 21, 2021 - The Chief of Police provided an update on crime in Alameda. While street crimes such as robberies are on the decline, crimes such as auto theft and other thefts were significantly up as compared to data from 2020. Additionally, shooting crimes are also on the rise as compared to 2020.

DISCUSSION

To further improve public safety for the residents and visitors and their property in Alameda, one approach could be to expand the current ALPR system to incorporate fixed ALPR equipment at the motor vehicle entry and exit points. The proposed ALPR system, which requires one camera per traffic lane, would be located at:

- the Webster and Posey Tubes (which is controlled by the California Department of Transportation, Caltrans),
- Park Street,
- Fruitvale Bridge (Alameda County property),
- High Street Bridge (Alameda County property),
- Doolittle Drive and Harbor Bay Parkway (Caltrans), and
- Harbor Bay Parkway and Ron Cowan Parkway (City of Alameda).

The system would require 13 ALPR systems, each with two cameras and associated equipment. The options for powering the systems are listed in Exhibit 2.

With respect to a fixed ALPR system, preliminary site surveys by staff and consultation with other cities that have been successful in implementing fixed ALPR systems within their respective jurisdictions have found this project to require a tentative budget at approximately \$500,000 to \$700,000. Some variance in cost is expected due to the different powering requirements for each location, depending on what is available and whose property the ALPR camera will be affixed. APD is committed to researching options that could be less expensive without compromising operational efficacy. The cost to update the mobile (vehicle mounted) ALPR system is estimated at \$150,000 to outfit 30 patrol vehicles.

The use of ALPR technology has rapidly spread in neighboring communities and around the nation. The hope is that such a system, along with other enforcement efforts, will contribute to investigative efficacy and efficiency. The technology could assist in clearing crimes while minimizing a policing footprint. By knowing which vehicle is involved in criminal activity, efforts can be focused on that specific vehicle to develop investigative leads and to further support APD's intent to focus on intelligence led deployment. Intelligence led strategies require timely and data driven technology. ALPR technology could provide that information and help mitigate the number of investigate vehicle stops. Most importantly, ALPR technology could allow PD to be better positioned to call into question stops that were not data driven.

This technology automates a time consuming, manual process that officers routinely complete during their daily operations. It significantly improves effectiveness in identifying vehicles of interest among the hundreds or thousands observed during routine patrol. Without ALPRs, officers are not easily able to determine if a particular plate is associated with a stolen car or a particular crime or warrant. However, with the ALPRs, the system will alert the officer of a finding on a particular car as soon as the plate is scanned entering or leaving the city. In the case of mobile ALPR technology, the same benefits could be available to officers on patrol in the community.

Not only is this system more efficient, but it frees up officers' time for other duties, including routine patrol in the rest of the city and/or special assignments. This is particularly important during times of high call volumes. In addition to freeing up officers' time, ALPR can improve officer safety by providing critical information regarding the

nature of the identified offense in advance of the officer contacting the occupant(s) of the vehicle.

Just as importantly, ALPR can generate a record of vehicle sightings, complete with time, date, and geographic location information for each observation, which may bolster other evidence, including eye witness testimony, in a criminal proceeding. The system uses the retained data and has analytical tools to assist officers and investigators in intelligence gathering and crime solving. This data can substantially enhance PD's investigative capabilities.

To ensure operational use is limited to concrete investigative need, current PD policy clearly outlines the permitted/impermissible use criteria. The policy also describes the consequences of improper use by PD personnel which includes criminal prosecution, civil liability, and administrative sanctions. If the City Council approves this initiative, the current policy would be updated to include system access procedures. Access to the system would require supervisory approval and could not occur without appropriate clearance and cause. The supervisor would assess if the reason to access the system was justified and would grant/deny appropriately. All PD personnel would be re-trained on the ALPR policy and personnel would be required to demonstrate knowledge and proficiency of the policy.

Additionally, PD would continue to audit access and use of the technology to ensure it is consistent with policy. Violations of the policy would be investigated and violators will be held accountable. The accountability process would expand to examine failures in supervision and appropriate corrective action would occur at these levels as well.

There is limited data and/or research surrounding the rates of case clearance of crimes due to the use of ALPRs. A study entitled "The Impacts of Large-Scale License Plate Reader Deployment on Criminal Investigations" by Christopher S. Koper and Cynthia Lum (Exhibit 3) analyzes the ability of ALPRs to enhance police investigations. The study uses Charlotte-Mecklenburg North Carolina Police Department (CMPD) as a case study to evaluate the effect of ALPR technology on the incidence of case clearance.

Charlotte-Mecklenburg, North Carolina is a consolidated city-county jurisdiction covering 546 square miles with a population of nearly 1 million and a law enforcement agency with about 2,000 sworn personnel that responded to 6,600 violent crimes and 36,700 property crimes in 2016. The CMPD is in possession of 95 LPRs located at 44 fixed positions throughout the city with 14 additional mobile units on patrol vehicles. In addition to the ALPR technology, the CMPD boasts a Real Time Crime Center (RTCC) that is in receipt of the real time data collected by the ALPR throughout the city.

Out of a total 4,047 investigations analyzed, 25% account for each auto theft and vehicle parts theft, 17% for robberies, 6% for aggravated assaults and 5% for homicides, missing persons, etc. Out of these cases, ALPR technology helped investigators resolve the case in approximately 1 in 5 or 20% of investigations. Further findings show that ALPR hits were not always the critical factor in helping resolve these cases nor did all these cases

result in case clearance. Nonetheless, in all 20% of these cases, ALPR technology did in some way contribute to helping resolve these incidents.

This research study used a difference method in which results were compared across divisions with high ALPR concentrations and divisions with low ALPR concentrations. The results show that the changes in results are not statistically significant, meaning we cannot be certain that it is necessarily the ALPRs that are causing the discrepancies across divisions. Furthermore, it points to the existence of confounding variables, meaning other factors could be affecting the results. This study does find that fixed ALPR units are more effective than mobile units and that the existence of a RTCC enhances ALPR data usage. Although PD does not have a RTCC, PD is looking to hire a Crime Analyst to assist with support to field operations. The study also highlights that for discernible impact, ALPR deployment may need to reach high density levels.

Before making any conclusions using the findings of this study, it is important to consider the differences within Alameda as well as the organizational operations of PD. It is important to understand that the data linked to these findings can be inherently flawed due to experiment design and an existence of confounding factors that could be influencing the results. Like any academic study, the findings are not universally applicable and due to the recent nature of these technologies are not backed with enough research.

ALTERNATIVES

1. Direct staff to move forward with the next step in implementation of fixed ALPRs and revamping and expanding the mobile ALPR program.
2. Direct staff to not move forward with the implementation of fixed ALPR technology at this time.
3. Authorize APD to expand its existing fleet, beyond the current four patrol vehicles outfitted with APLRs, to ensure all patrol vehicles have an ALPR camera system.
4. Do not direct staff to move forward with expanding the mobile ALPR program.

FINANCIAL IMPACT

If the City Council directs staff to move ahead with implementation of a fixed and/or mobile ALPR system or an alternative approach staff will present the cost of the project and ongoing operation and maintenance.

MUNICIPAL CODE/POLICY DOCUMENT CROSS REFERENCE

The proposed action does not affect the Alameda Municipal Code or City Council Policies. Should the City Council direct staff to move forward with implementation of a fixed ALPR system, the project and operation of the system would be executed in a manner consistent with adopted policies.

ENVIRONMENTAL REVIEW

This action is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines sections 15061(b)(3) (common sense exemption) and 15321 (law enforcement activities).

CLIMATE IMPACTS

There are no identifiable climate impacts or climate action opportunities associated with the subject of this report.

RECOMMENDATION

The Police Chief recommends that the City Council approve moving forward with bringing back costs and options on the installation and utilization of fixed ALPR equipment. Alternatively, the City Council could consider directing staff to bring back installation of mobile ALPR equipment to all PD vehicles assigned to field duties.

CITY MANAGER RECOMMENDATION

If the City Council approves moving forward with License Plate Readers, the City Manager's Office will work with the Police Department Administration in moving forward the project and bringing back the option approved.

Respectfully Submitted,
Nishant Joshi, Police Chief

By:
Nishant Joshi, Police Chief

Financial impact section reviewed,
By: Annie To, Finance Director

Exhibit(s):

1. APD ALPR Policy No. 462
2. APLR Power Options
3. Study

cc: Eric Levitt, City Manager
Gerry Beaudin, Assistant City Manager