

Public



Policy Review

PAB Review of the Berkeley Police Department's Acquisition Report
for Fixed Automated License Plate Readers and Proposed Policies
422 and 1305.

Presented at the July 25th, 2023 Berkeley City Council Meeting



Overview

- I. Police Accountability Board's (PAB) Stance on Fixed Automated License Plate Readers (ALPR) Technology
- II. Findings on the Effectiveness of Fixed ALPRs
- III. PAB's Concerns Regarding the Proposed Policies
- IV. PAB's Recommendations.

PAB's Stance on ALPR Technology

During its review, the PAB sought answers to the following two questions:

1. Should the City of Berkeley adopt Fixed ALPR technology?
2. Should the City Council accept the draft policies as currently presented?

The PAB's response to both question was "no." However, the PAB acknowledges the complexity of the adoption of any technological tools for public safety purposes.

Factors Considered

The PAB's position was influenced by the following factors:

1. There is an inadequate evidence base to support the overall effectiveness of fixed ALPR systems.
2. The BPD's objectives in using an ALPR system to address specific crimes remain unclear.
3. The presented policies have several shortcomings that require thorough review and careful alignment with the frameworks adopted by the City of Berkeley.

Findings on Effectiveness

"With policing research, the challenge is often transferability: what might work in one jurisdiction might not work in another—for a program to be effective, it must be tested within an agency's specific staff, demographics, environment, and culture."

- Lt. Potts, City of Vallejo, California

1. Lum and colleagues (2010) found that the use of LPRs in auto theft hot spots did not result in a reduction of crime generally or auto theft specifically, during the period measured.
2. A 2011 Police Executive Research Forum (PERF) report analyzed auto theft investigation units in Mesa, Arizona. ALPRs lead to no reduction in crime or motor theft.

Sources:

Quote: Potts, J. (2018). Research in brief: assessing the effectiveness of automatic license plate readers. Police Chief.

1. Lum, C. Linda Merola, Julie Willis and Breanne Cave. (2010). License Plate Recognition Technologies for Law Enforcement: An Outcome and Legitimacy Evaluation. SPAWAR and National Institute of Justice. http://gemini.gmu.edu/cebcp/LPR_FINAL.pdf.

2. Wexler, Chuck. "How Are Innovations in Technology Transforming Policing?" Police Executive Research Forum, 2012. Critical Issues in Policing, https://www.policeforum.org/assets/docs/Critical_Issues_Series/how%20are%20innovations%20in%20technology%20transforming%20policing%202012.pdf.

Findings on Effectiveness

- In 2018, the Vallejo Police Department conducted a randomized control trial (RCT) study that provided empirical evidence showing that ALPR technology effectively identifies stolen cars and individuals linked to auto theft crimes.
 - Police cars equipped with ALPR technology showed a 140 percent greater ability to detect stolen cars.
 - Fixed ALPR (stationary units) were found to be more efficient than mobile ALPR in making arrests, as officers tended to sit downstream of fixed locations waiting for hits, resulting in more custody arrests
- According to a 2021 joint report by the Independent Institute and Secure Justice, the use of ALPR systems does not reduce automobile thefts, nor are they an asset in generating investigative leads for police.

Sources:

International Association of Chiefs of Police (IACP). (2018, March). Research in Brief. Retrieved June 15, 2023, from <https://www.theiacp.org/sites/default/files/2018-08/March%202018%20RIB.pdf>

Hofer, J. (2021). Efficacy of Automated License Plate Reader Hits in Piedmont, California. Retrieved from https://www.independent.org/pdf/research_articles/2021_11_30_alpr.pdf

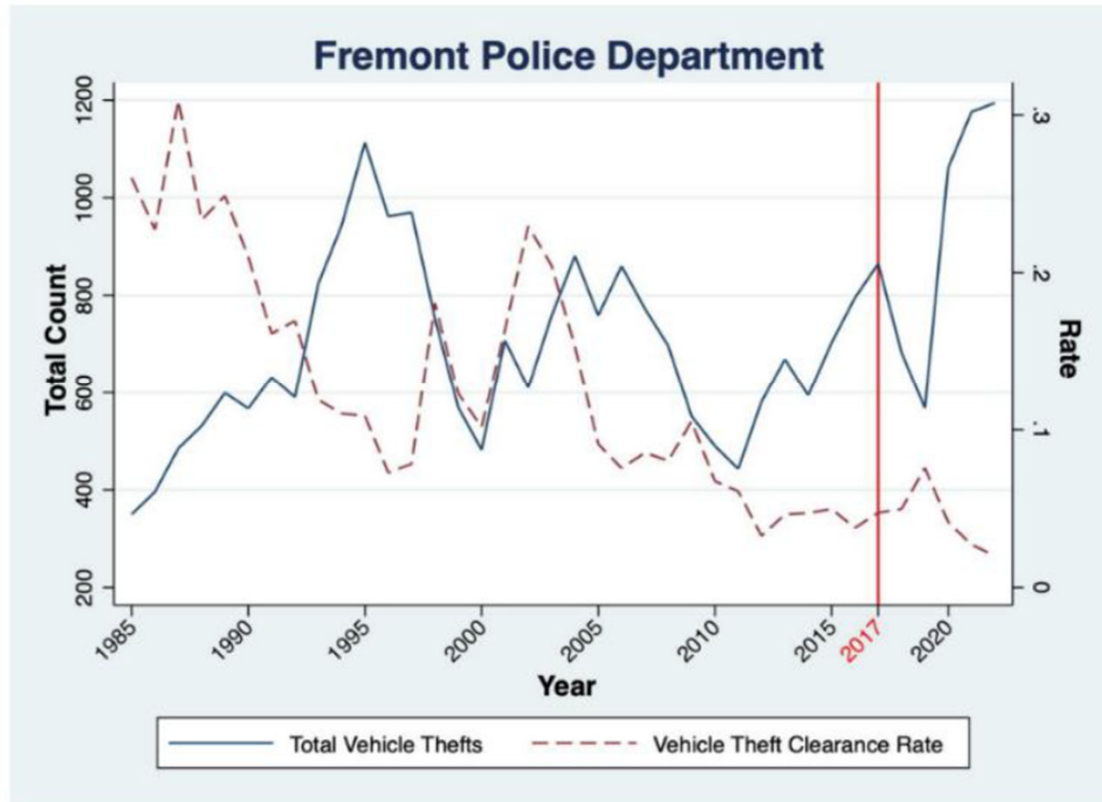
Fremont's Experience

- Fremont, CA installed ALPRs in 2017 and vehicle theft rate fell the following year and the clearance rate rose.
- Fremont had a rate of 236 stolen vehicles per 100,000 population in 2019.
- By 2019, the theft rate began to rise again, and the clearance rate fell.
- By 2022, five years after ALPRs had been adopted the theft rate hit an all-time high.

Sources:

Federal Bureau of Investigation. (2019). Crime in the United States, 2019. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-8/table-8-state-cuts/california.xls>

Vehicle Theft



Fremont's Experience

Auto-Theft Rates from 1985 – 2022

The red vertical line reflects the year when ALPRs were installed.

Vallejo's Experience

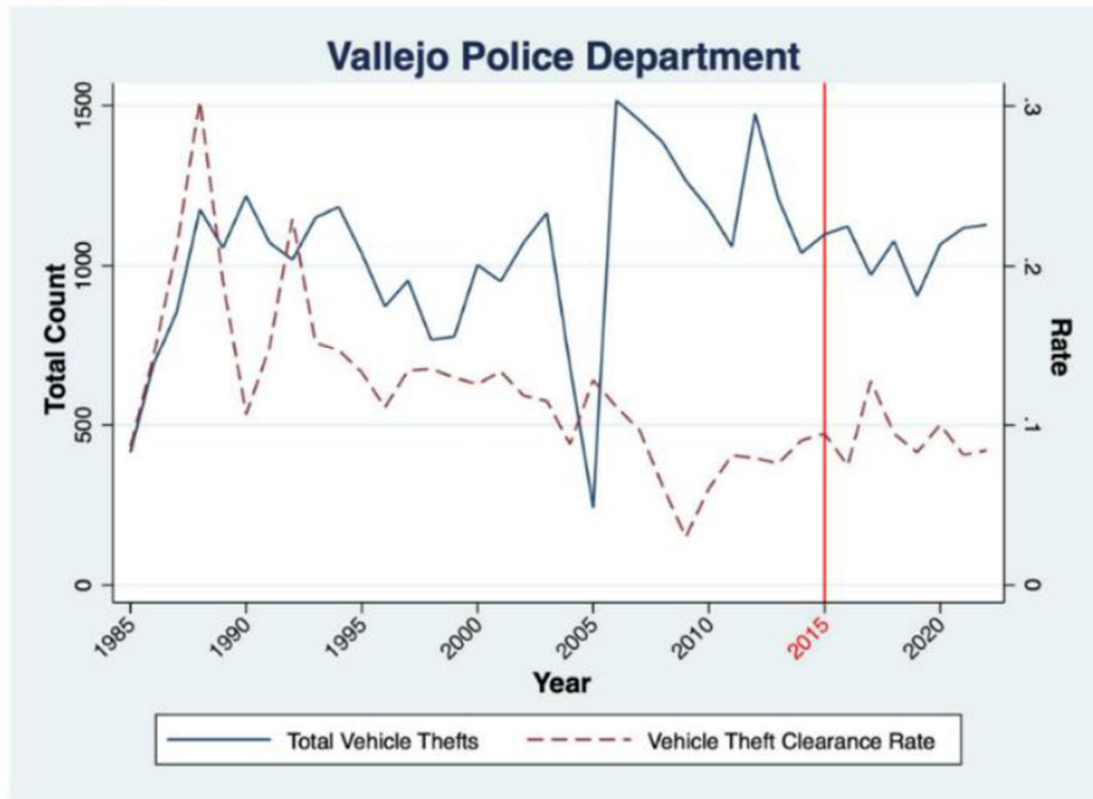
- Vallejo, CA installed ALPRs in 2015 and their rates have fluctuated ever since.
- In 2019, Vallejo had a rate of 738 stolen vehicles per 100,000 population in 2019.
- By 2022, auto theft was higher than when ALPRs were installed.
- 98 ALPR units installed

Sources:

Federal Bureau of Investigation. (2019). Crime in the United States, 2019. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-8/table-8-state-cuts/california.xls>
BPD Memo titled: Response to the PAB Objections and PSPC on Surveillance Ordinance item related to Fixed Automated License Plate Readers (ALPRs)

Vallejo Police Department

Vehicle Theft



Vallejo's Experience

Auto-Theft Rates from 1985 – 2022

The red vertical line reflects the year when ALPRs were installed.

Concerns Regarding the Proposed Policies and Acquisition Report

The PAB voiced the following concerns regarding the proposed policies and acquisition report:

1. Several drafting improvements are required to ensure clarity, accuracy, and alignment with relevant regulations and community expectations.
2. Critical components of the respective policies and acquisition report are overly vague and/or out of compliance with BMC 2.99.
3. The acquisition report does not thoroughly evaluate alternatives to ALPR or metrics for assessing their impact.

Examples Requiring Attention

Section 1305.3.e states "If feasible, the officer *should* verify an ALPR response through the California Law Enforcement Telecommunications System (CLETS) before taking enforcement action solely on an ALPR alert...Before any law enforcement action is taken because of an ALPR alert, the alert *will* be verified through CLETS inquiry via MDT or through Dispatch"

Section 1305.11 does not include the training required for any employee authorized to use the Surveillance Technology or to access information collected as required by BMC 2.99.020(4)(j).

Section 1305.12 does not provide guidance on what the Professional Standards Bureau's Audit will include. BMC 2.99.020(4)(k) requires that "Mechanisms to ensure that the Surveillance Use Policy is followed, technical measures to monitor for misuse, and the legally enforceable sanctions for intentional violations of the policy" be included.

Policy 422 does not include the language regarding "California Law Enforcement Purposes" consistently in the policy.

Concerns within the Acquisition Report

The purpose for the acquisition needs to be clearly defined.

The anticipated location of the 52 cameras are not disclosed.

There is no thorough assessment of alternatives to ALPR.

Metrics to Consider

- Tracking The Number Of Hits
- The Hit Rate
- Hit Quality
- Number Of Arrest
- Recovery Rates Of Stolen Vehicles
- Time To Locate
- Case Clearance Rates

Recommendations

City Council should not approve the procurement of fixed ALPRs.

If Council decides to proceed, they should defer the vote to address the concerns highlighted in the presented documents and refine the policies and acquisition report.