BERKELEY CITY COUNCILMEMBER
TERRY TAPLIN
DISTRICT 2

Action~~CONSENT~~ CALENDAR
DATE: September 14, 2021

To: Honorable Mayor and Members of the City Council

From: Councilmember Taplin, Vice Mayor Droste (co-sponsor), Councilmember Wengraf (co-sponsor)

Subject: Budget referral: Automated license plate readers for community safety improvement

RECOMMENDATION
That the Berkeley City Council take the following actions to enable and deploy tactical technologies in strategic public spaces and the public ROW for the improvement of community safety and determent, intervention, prevention of illegal dumping and/or investigation of violent crime and traffic violations:

- Authorize the City Manager to install Automatic License Plate Readers (ALPRs) at strategic locations including public facilities, entrances to the city and the public right-of-way~~strategic intersections~~ in areas impacted by violent crime, traffic violations including infractions pertaining to bicycle and pedestrian safety, illegal dumping, Schedule II drug offenses~~drug offenses~~, and other criminal activity; ***and refer to the budget process cost of ALPRs*.**
- Refer to the City Manager the development of a policy pursuant and subject to City of Berkeley Surveillance Ordinance and Sanctuary City Contracting Ordinance enabling the use of ALPRs in fixed locations, mobile trailers, and vehicles~~ and mobile trailers~~ by the Berkeley Police Department;~~,~~ consider a data retention period of no greater than one year, no less than sixty days to account for reporting lag, and study the feasibility of shorter data retention periods for non-hit scans with final discretion resting with the City Manager; consider comparable and applicable standards in the ALPRs of policies of local governments including: the City of Alameda, The city of Emeryville, The City of Hayward,The City of Oakland,The City of Piedmont, The City of Richmond, The City of San Leandro, and The City of Vallejo; and consider provisions to safeguard efficacy against plate counterfitting, plate switching, and other methods of detection evasions ~~consider applicable standards in City of Vallejo Police Department Policy 426; permit law enforcement uses in r~~esponse~~ to moving violations including California Vehicle Code §14601.1(a); and study feasibility of shorter data retention periods for non-hit scans and potential impacts on criminial investigation with final discretion resting with the City Manager;~~

~~including those set forth in current or future drafts of Senate Bill 210 (Wiener, 2021)..~~

CURRENT SITUATION AND ITS EFFECTS

According to the Berkeley Police Department's 2019/2020 Crime Report, Berkeley has seen marked increases in aggravated assault, homicides, auto theft and larceny over the past two years.[1] While the overall crime rate remained relatively flat, specific categories of property crimes increased sharply—especially vehicle thefts, which increased by 66% in 2020. Homicides decreased to zero in 2021, but reports of gunfire and auto theft increased.

~~According to a 2018 study[2] by the Center for Policing Equity, Black people comprise only 8% of Berkeley's population, but a disproportionate 46% of people subject to police uses of force. In light of this evidence, and in the wake of the national outcry over the death of George Floyd, the City Council adopted a resolution[3] on July 14, 2020 directing the City Manager in part to "identify elements of police work that could be achieved through alternative programs, policies, systems, and community investments."~~

Currently, the police department's Parking Enforcement Bureau uses Automated License Plate Readers (ALPRs)[4] for time zone parking and scofflaw enforcement, replacing the practice of physically "chalking" car tires, but ALPR technology has not been implemented in the city for other law enforcement purposes. According to the City Manager's 2020 Surveillance Technology Report, there were an average of 12,059 successful license plate "reads" per day in the month of September, 2020. From October 2019 to October 2020, there were 44,068 "hits" detecting a positive violation, roughly 25% (14,945) of which resulted in enforcement by citation issuance.[5]

Pursuant to Berkeley Municipal Code Chapter 2.99 Section 2.99.070, the City Manager's office is required to report on surveillance technology on an annual basis.

BACKGROUND

[1] https://www.cityofberkeley.info/Clerk/City_Council/2020/10_Oct/Documents/2020-10-13_Presentations_Item_19__Pres_Police_pdf.aspx

~~[2] Buchanan, K.S., Pouget, E., Goff, P.A. (2018). The Science of Justice: Berkeley Police Department. *Center for Policing Equity*. Retrieved from https://www.berkeleyside.org/wp-content/uploads/2018/05/Berkeley-Report-May-2018.pdf~~

~~[3] https://www.cityofberkeley.info/Clerk/City_Council/2020/07_Jul/Documents/2020-07-14_Item_18d_Transform_Community_Safety_pdf.aspx~~

[4]

[5] https://www.cityofberkeley.info/Clerk/City_Council/2020/11_Nov/Documents/2020-11-10_Item_19_Resolution_Accepting_the_Surveillance.aspx

According to a 2018 study[6] by the Center for Policing Equity, Black people comprise only 8% of Berkeley's population, but a disproportionate 46% of people subject to police uses of force. In light of this evidence, and in the wake of the national outcry over the death of George Floyd, the City Council adopted a resolution[7] on July 14, 2020 directing the City Manager in part to "identify elements of police work that could be achieved through alternative programs, policies, systems, and community investments."

Some research has found that ALPRs contribute to marginal improvements in public safety outcomes with respect to vehicle thefts and traffic safety. The use of LPR technology has increased significantly in law enforcement agencies across the US in the past decade, but outcomes have been inconsistently tracked, which limits available research.[8] One qualitative case study found that criminal investigators adapted LPR technology to a broader range of investigative work, such as rapid responses and corroborating suspect alibis.[9]

An analysis of a randomized control trial in the City of Vallejo found that ALPRs attached to police vehicles enabled a 140% increase in detection of stolen vehicles, while arrests were more efficient with stationary ALPRs in fixed locations.[10] A study on LPR technology in Mesa, AZ found that LPRs resulted in an eightfold increase in the number of plates scanned, more positive scans, arrests and recovery of stolen vehicles, and a reduction in calls for drug offenses. However, the study did not find a statistically significant reduction in vehicle thefts in hot spots compared to manual checks, possibly because the presence of law enforcement officers performing manual checks had a more preventative effect.[11] Another study of the Charlotte-Mecklenburg Police Department found that "LPR use may have contributed to modest improvements in case closures for auto theft and robbery"—the former in the long term, and the latter both short- and long term.[12]

According to recent analysis by the National Highway Traffic Safety Administration, one law enforcement agency found that drivers with suspended, revoked, or restricted licenses were 2.2

[6] Buchanan, K.S., Pouget, E., Goff, P.A. (2018). The Science of Justice: Berkeley Police Department. Center for Policing Equity. Retrieved from https://www.berkeleyside.org/wp-content/uploads/2018/05/Berkeley-Report-May-2018.pdf

[7] https://www.cityofberkeley.info/Clerk/City_Council/2020/07_Jul/Documents/2020-07-14_Item_18d_Transform_Community_Safety_pdf.aspx

[8] Lum, C., Koper, C.S., Willis, J., Happeny, S., Vovak, H. and Nichols, J. (2019). The rapid diffusion of license plate readers in US law enforcement agencies. Policing: An International Journal, (42)3, pp. 376-393. https://doi.org/10.1108/PIJPSM-04-2018-0054

[9] James J. Willis, Christopher Koper & Cynthia Lum (2018). The Adaptation of License-plate Readers for Investigative Purposes: Police Technology and Innovation Re-invention, *Justice Quarterly, 35*:4, 614-638, DOI: 10.1080/07418825.2017.1329936

[10] Potts, J. (2018). Research in brief: assessing the effectiveness of automatic license plate readers. *POLICE CHIEF.* Retrieved from http://www.theiacp.org/sites/default/files/2018-08/March%202018%20RIB.pdf

[11] Taylor, B., Koper, C. S., & Woods, D. J. (2012). Combatting auto theft in Arizona: A randomized experiment with license plate recognition technology. *Criminal Justice Review, 37*, 24-50.

[12] Koper, C. S., & Lum, C. (2019). The Impacts of Large-Scale License Plate Reader Deployment on Criminal Investigations. *Police Quarterly, 22*(3), 305–329. https://doi.org/10.1177/1098611119828039

times more likely to be involved in serious or fatal crashes than other drivers, and that identifying these drivers with ALPRs "could affect traffic safety positively by targeting violator vehicles that are more prone to crash risk."[13] A quasi-experimental survey of data from Buffalo, NY found a reduction in violent crime and traffic accidents associated with roadblocks using LPRs.[14]

RATIONALE FOR RECOMMENDATION

Reimagining public safety necessitates significant improvements in public safety outcomes, including practical solutions to traffic safety and property crime. California law currently preempts municipalities from transferring traffic~~law~~ enforcement ~~in~~to civilian duties or automated speed cameras.

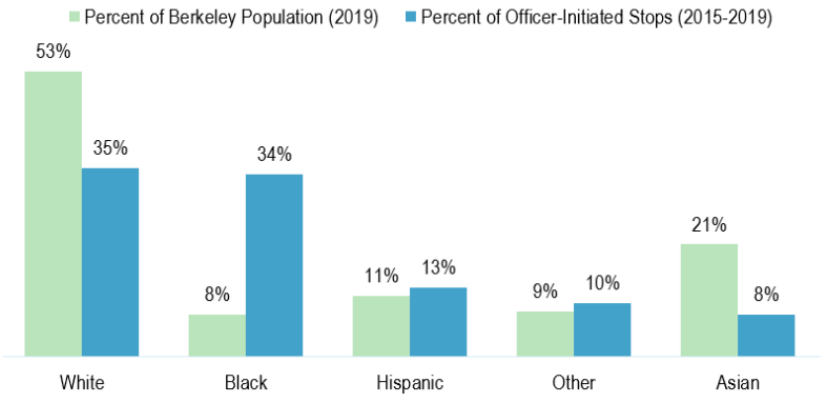
While auto thefts in Berkeley increased by 6~~46~~% from 2019 to 2020, and increased 54% year-over-year in the first half of 2021[15]~~in 2020~~, a 2021 City Auditor analysis[16] of the Berkeley Police Department found that Officer-Initiated Stops disproportionately target Black and Latino drivers relative to their share of the city's population.

[13] Zmud, J., Walden, T., Ettelman, B., Higgins, L. L., Graber, J., Gilbert, R., & Hodges, D. (2021). State of Knowledge and Practice for Using Automated License Plate Readers for Traffic Safety Purposes. Retrieved from https://rosap.ntl.bts.gov/view/dot/55586/dot_55586_DS1.pdf

[14] Wheeler, A.P., Phillips, S.W. (2018). A quasi-experimental evaluation using roadblocks and automatic license plate readers to reduce crime in Buffalo, NY. *Secur J 31,* 190–207. https://doi.org/10.1057/s41284-017-0094-1

[15] https://www.cityofberkeley.info/Clerk/City_Council/2021/10_Oct/Documents/2021-10-19_Item_01_BPD_Annual_Report_pdf.aspx

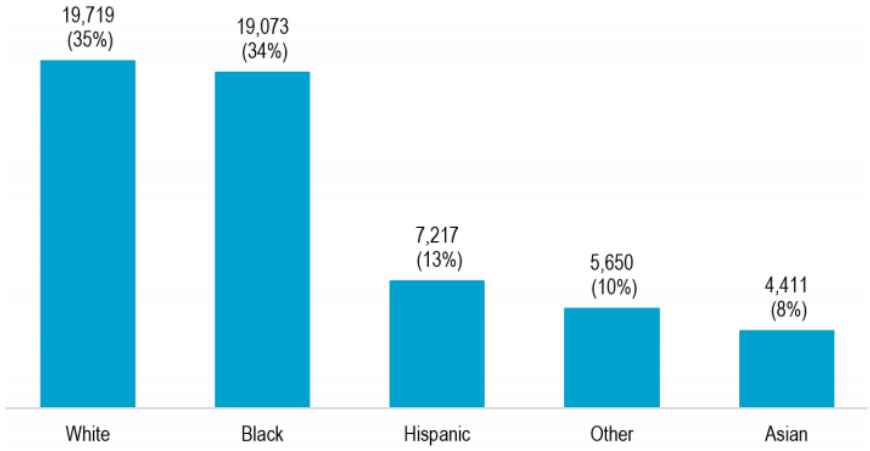
[16] Berkeley City Auditor. (2021, Apr. 22). Data Analysis of the City of Berkeley's Police Response. Retrieved from https://www.cityofberkeley.info/uploadedFiles/Auditor/Level_3_-_General/Data%20Analysis%20of%20the%20City%20of%20Berkeley's%20Police%20Response.pdf



Note: For the purposes of this figure for Berkeley populations, the U.S. Census categories of American Indian and Alaska Native alone, Native Hawaiian and Other Pacific Islander alone, and Two or More Races are summed for Other; White is White alone, not Hispanic or Latino.

Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data and 2019 US Census data

Figure 18. Officer-Initiated Stops by Race, 2015-2019 (n = 56,070 individuals stopped)



Source: Auditor's analysis of Berkeley Police Department Computer Aided Dispatch data

ALPRs therefore present an opportunity to reduce property crimes and improve traffic safety while also reducing civilian encounters with police officers conducting ad hoc traffic enforcement, which the 2021 audit found to have a significant racial bias against Black and Latino drivers. ALPRs could make enforcement more fair, impartial, and effective.

In 2015, the Berkeley Police Department used ALPR technology on a mobile trailer to investigate five attempted kidnappings by Willard Middle School.[17]

However, ALPR data storage gives rise to several privacy concerns. In *Carpenter v. United States*, the U.S. Supreme Court ruled that accessing location data tracking an individual's movements from their cell phone constitutes a search under the Fourth Amendment and requires a search warrant.[18] While ALPR scans are subject to reasonableness standards for searches under Fourth Amendment jurisprudence, state courts have found that ALPR alerts are sufficient to establish a reasonable suspicion, though there are situations that require further intervention to establish reasonableness or avoid error.[19]

In *Neal v. Fairfax County Police Department*, the Virginia Supreme Court ruled that GPS data and images associated with license plate numbers were private personal information (PPI), but license plate numbers themselves stored in ALPR databases were not.[20] The California Supreme Court has also underscored such a distinction between "bulk data collection" of license plate numbers that did not "produce records of investigations" for particular crimes.[21] By contrast, U.S. Supreme Court Justice Sotomayor argued in *United States v. Jones* that government agencies collecting "private aspects of identity" could be "susceptible to abuse."[22] This calls into question the so-called third party doctrine of the Fourth Amendment—the longstanding precedent that individuals may be reasonably considered to waive their right to privacy and assume any information provided to third parties may eventually be accessed by the government—given the vast array of information government agencies can now access through surveillance technology. To carefully balance privacy and policing efficacy under this new paradigm, Newell (2013) recommends strictly limiting data retention for non-"hit" scans, and maintaining anonymized ALPR data subject to public disclosure laws.[23]

California Vehicle Code Section 2413(b) restricts the California Highway Patrol (CHP)'s retention LPR data for 60 days unless it is being used as evidence in a felony investigation. Subsection (c) restricts the distribution of this data strictly to law enforcement agencies or officers and "only for purposes of locating vehicles or persons when either are reasonably suspected of being involved in the commission of a public offense."

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[17] Raguso, E. (2015, Oct. 30). Berkeley police use license plate reader in kidnapping attempt investigations. *Berkeleyside*. Retrieved from https://www.berkeleyside.org/2015/10/30/berkeley-police-use-license-plate-reader-in-kidnapping-attempt-investigation

[18] Carpenter v. United States, 138 S. Ct. 2206 (2018).

[19] Fash, L. (2018). Automated License Plate Readers: The Difficult Balance of Solving Crime and Protecting Individual Privacy. *Md. L. Rev. Endnotes, 78*, 63.

[20] *Neal v. Fairfax County Police Dept.*, 812 S.E.2d 444, 295 Va. 334 (2018).

[21] Am. Civil Liberties Union Found. of S. Cal. v. Super. Ct. of L.A. Cty., 400 P.3d 432 (Cal. 2017).

[22] United States v. Jones, 565 U.S. 400, 415 (2012) (Sotomayor, J., concurring);

[23] Newell, B. C. (2013). Local law enforcement jumps on the big data bandwagon: Automated license plate recognition systems, information privacy, and access to government information. *Me. L. Rev., 66,* 397.

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In 2015, Senate Bill 34 imposed additional security and privacy requirements on the use of ALPR data.[24] Unfortunately, a State Auditor report in 2020 surveying four local law enforcement agencies in California found that ALPR policies were out of compliance with SB34, retained images for far longer than needed or allowed, and had no processes in place to safeguard local compliance. For example, the State Auditor "did not find evidence that the agencies had always determined whether an entity receiving shared images had a right and a need to access the images or even that the entity was a public agency."[25]

In 2018, a lawsuit by the American Civil Liberties Union of Northern California revealed that Immigration and Customs Enforcement (ICE) had purchased access to private databases containing ALPR data with 5 billion individual data points for civil immigration enforcement, and had obtained ALPR data from over 80 local law enforcement agencies.[26] However, in 2017, Senate Bill 54 greatly restricted the ability of California law enforcement agencies to share information with ICE.[27]

~~Introduced in January 2021, Senate Bill 210 by State Sen. Scott Wiener (D-SF) would further limit data storage and access for ALPRs.[28] These may be infeasible for local jurisdictions with current and anticipated staffing levels but merit some consideration.~~

Berkeley Parking Enforcement uses PCS Mobile ALPR units using Genentech ALPR technology regulated by BPD Administrative Order #001-2016, which limits storage of reads to 30 days and hits to 365 days. Images of reads are not stored on the server, and data may only be used for legitimate law enforcement purposes. Police Departments in the cities of Vallejo and Piedmont utilize the Flock Safety Operating System, which comes with a transparency portal listing permitted and prohibited uses, data storage, access provided to outside agencies, numbers of hits and scans, and other relevant metadata.[29][30]

ALTERNATIVES CONSIDERED

1. Gun buyback programs have not demonstrated significant efficacy except in limited circumstances within more holistic community-based violence prevention programs.[31]

[24] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB34

[25] Howle, E.M. (2020). Automated License Plate Readers: To Better Protect Individuals' Privacy, Law Enforcement Must Increase Its Safeguards for the Data It Collects. *Auditor of the State of California.* Retrieved from https://www.auditor.ca.gov/reports/2019-118/index.html

[26] Talla, V. (2019). Documents Reveal ICE Using Driver Location Data From Local Police for Deportations. *ACLU Northern California.* Retrieved from https://www.aclunc.org/blog/documents-reveal-ice-using-driver-location-data-local-police-deportations

[27] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB54

[28] ~~https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB210~~

[29] https://transparency.flocksafety.com/vallejo-ca-pd

[30] https://transparency.flocksafety.com/vallejo-ca-pd

[31] Makarios, M. D., & Pratt, T. C. (2012). The Effectiveness of Policies and Programs That Attempt to Reduce Firearm Violence: A Meta-Analysis. Crime & Delinquency, 58(2), 222–244. https://doi.org/10.1177/0011128708321321.

2. With the stalling of Assembly Bill 550[32] in this year's legislative session, automated speeding cameras are not currently permitted in the state of California.

3. On October 27, 2020, the City Council referred to the Community Engagement Process for Reimagining Public Safety the creation of a Group Violence Intervention Program (GVI), or "Operation Ceasefire," that will assemble a Berkeley-centered interjurisdictional working group of community members, law enforcement personnel, and supportive services providers to address gun violence. Current staffing capacity in the City Manager's office is insufficient to develop such a program before the process is complete.

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ENVIRONMENTAL IMPACTS

None.

FISCAL IMPACTS

In 2017, an amendment to Contract No. 9977[33] from the City Manager's Office itemized a unit cost of $78,363 for each ALPR system. Costs for this referral may be different because this contract was only for mobile ALPRs used for parking enforcement, not in fixed locations or mobile trailers.

CONTACT

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ATTACHMENTS

1. City of Vallejo ALPR Policy
2. the City of Alameda,
3. City of Emeryville,
4. City of Hayward,
5. City of Oakland,
6. City of Piedmont,
7. City of Richmond,
8. City of San Leandro,
9. City of Vallejo,

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[32] https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB550

[33] https://ci.berkeley.ca.us/Clerk/City_Council/2017/07_Jul/Documents/2017-07-11_Item_13_Contract_No_9977_Amendment.aspx