

Privacy Protection & Technology  
Advisory Commission

May 6, 2024

**ITEM TITLE:** Technology Impact Report: Presentation of Automated License Plate Reader Technology and Program

**TECHNOLOGY CLASSIFICATION:** Surveillance

**DEPARTMENT:** Police

**RECOMMENDATION**

Hear the presentation, provide feedback, and take action as appropriate.

**DISCUSSION**

On September 13, 2023, the Police Department received notice of a \$3,037,986 award from the California Board of State and Community Corrections ("BSCC") Organized Retail Theft Prevention Grant Program. The Organized Retail Theft Prevention Grant Program was established via Senate Bill 154 (SB 154) (Chapter 43, Statutes of 2022). Organized Retail Theft Prevention Grant Program funds are to support local law enforcement agencies in preventing and responding to organized retail theft, motor vehicle or motor vehicle accessory theft, or cargo theft.

Each year, the City of Chula Vista experiences a high rate of vehicle theft and theft of vehicle accessories. Since 2018, there have been 4,224 vehicle thefts, an average of 768 per year. Vehicle thefts have increased by 28.5% in 2022 compared to the last three years. Between 2018-2022, there was an average increase of 8.5% in vehicle theft each year. In addition, only a small number of auto thefts result in arrests. In the past five years, only 373 arrests have been made for the 4,224 vehicle thefts that have occurred, resulting in a clearance rate of 8.8%. In other words, more than 91% of vehicle thefts go without an offender being arrested or held accountable for their actions.

Vehicle accessory thefts, including catalytic converters, have also been an ongoing issue in the city. Precious metals inside the catalytic converters are expensive, making catalytic converters lucrative for thieves to steal. Since 2020, there have been 666 cases of vehicle accessory theft. These thefts have been steadily increasing since 2020. More specifically, over a three-year period between 2020 and 2023, there was a 42% increase in cases of vehicle accessory theft in Chula Vista. Unfortunately, the clearance rate for arrests of catalytic converter thieves is almost non-existent, due to the lack of evidence to identify suspects.

The problem of vehicle theft and catalytic converter theft has a significant impact on the City of Chula Vista. With grant funding, the Police Department is able to help locate stolen vehicles and,

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arrest vehicle theft suspects to reduce victimization among the residents of Chula Vista. The Police Department's strategy is both proactive and reactive.

The Police Department's plan includes additional operational, investigative, and analytical resources, while simultaneously enhancing existing technologies to improve actionable evidence that helps identify and apprehend criminal suspects and deters vehicle thefts or thefts of catalytic converters. The grant covers the 38-month project period of October 1, 2023 to December 1, 2026. When the project activity period ends on December 1, 2026, there will be a 6-month period of January 1, 2027 to June 1, 2027 for completion of the Final Local Evaluation Report (conducted by SANDAG).

#### Resources for Operations, Investigations, and Analysis

Funding from BSCC has been granted to fund a Police Agent as a dedicated vehicle theft investigator, to oversee the Police Department's Automated License Plate Recognition (ALPR) program, and to help oversee the grant itself. Funding has also been granted for overtime for police operations intended to curtail vehicle thefts and apprehend theft suspects, for prevention materials and tools such as steering wheel locks and specialized paint to mark catalytic converters, for educational and community outreach materials, for enhanced training for investigators, and for increased flexibility through the acquisition of five detective vehicles. The BSCC is also providing funding to acquire contractual services with SANDAG to perform grant program evaluation and analysis.

#### Enhancing Existing Technologies

Additionally, funding from the BSCC grant expands the current Police Department ALPR program. The Police Department currently deploys four mobile ALPR cameras, which are affixed to patrol vehicles. With this grant funding, 150 (currently 101 have been installed) fixed ALPR cameras will be strategically installed in key intersections and thoroughfares likely to be traversed by criminal suspects during or immediately after committing a crime. The expanded use of ALPR cameras will have a significant positive impact on both vehicle theft and vehicle accessory theft by providing information to solve vehicle theft cases, while simultaneously having a positive impact on the investigation of many other crimes committed in Chula Vista. The Police Department intends to promote community safety, solve crime, reduce crime, and be transparent with the community about the expanded use of this technology.

#### About Automated License Plate Recognition

ALPR technology originated in the United Kingdom in the mid-1970s and has been widely used by law enforcement worldwide since 2001<sup>1</sup>. A January 2012 Police Executive Research Forum (PERF) Technology Summit in Washington D.C.<sup>2</sup> showed 71% of surveyed police departments in the United States employed ALPR systems to some extent and 85% planned to acquire or expand their use of LPR systems in the next five years.

Most law enforcement agencies in San Diego County now use ALPR systems in some capacity. In recent years, many municipalities in San Diego County have expanded their ALPR programs to include fixed ALPR systems and have publicized numerous success stories attributed to the use of ALPR technology.

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<sup>1</sup> Cohen, I. M., Plecas, D., & McCormick, A. V. (2007). A Report on the Utility of the Automated License Plate Recognition System in British Columbia. Retrieved from <http://cebcp.org/wp-content/lpr/BritishColumbiaLPRreport.pdf>

<sup>2</sup> Police Executive Research Forum (2012). Critical Issues in Policing Series: "How Are Innovations in Technology Transforming Policing?" Retrieved from [https://www.policeforum.org/assets/docs/Critical\\_Issues\\_Series/how%20are%20innovations%20in%20technology%20transforming%20policing%202012.pdf](https://www.policeforum.org/assets/docs/Critical_Issues_Series/how%20are%20innovations%20in%20technology%20transforming%20policing%202012.pdf)

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Today, ALPR systems have become commonplace because they are an effective strategy to deter criminals who would victimize our community, and to apprehend criminal offenders. The use of ALPR systems have become a standard and expected practice in police investigations throughout the region and the nation.

### Use of Automated License Plate Recognition Systems in San Diego County

City/ District/ Agency	Fixed	Mobile
Alpine	0	0
Carlsbad	128	24
Chula Vista	150*	4
Coronado	9	0
Del Mar (SDSO)	5	0
El Cajon	40	4
Encinitas (SDSO)	7	0
Escondido	2*	4
Fallbrook	0	0
Imperial Beach	0	0
Jamul	0	0
Julian (SDSO)	0	0
La Mesa	20	4

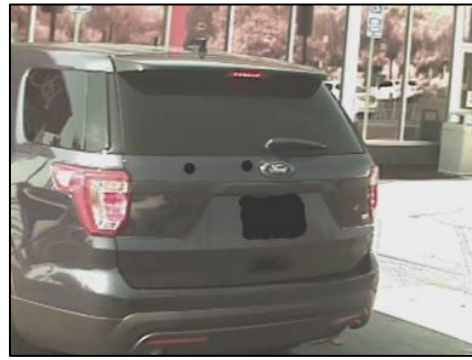
City/ District/ Agency	Fixed	Mobile
Lemon Grove	0	0
National City	96	0
Oceanside	10	0
Port of San Diego	5	0
Poway	0	0
San Diego City	500	27
San Diego County (SDSD)	0	39
San Marcos	0	0
Santee	0	0
Solana Beach	8	0
University of San Diego	0	4
Vista	0	0

ALPR systems involve the use of digital camera systems paired with software to identify license plate numbers. ALPR systems function by automatically taking a photographic image of a vehicle's license plate and transforming that image into alphanumeric characters using optical character recognition or similar software. The images often include the license plate as well as enough of the car to allow for identification of the make and model. The images and data about the license plate number and geolocation of the image are stored in the ALPR system for a pre-determined period of time, after which the images and data are automatically purged from the system. No personal identifying information is generated or stored in the ALPR system.

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Below is an example of what an ALPR image often looks like.



#### History of the Chula Vista Police Department ALPR Program and Related Technologies

- On October 9, 2007, the City Council approved a Police Department proposal to fund the purchase of ALPR camera systems. The proposal included the purchase of camera systems mounted to three marked, routine police vehicles used by uniformed patrol officers.
- On February 1, 2011, the City Council approved a Police Department proposal to fund the purchase of a fourth ALPR camera system.
- In 2017, due to vendor issues and aging equipment, the department switched ALPR vendors from 3M/PIPS to Vigilant Solutions, which included a subscription to the Vigilant ALPR database, also known as the Law Enforcement Archival Reporting Network (LEARN). Vigilant's LEARN service provides the subscribing law enforcement agency with the right to grant other authorized entities the limited ability to search that agency's ALPR data (sometimes known as "data sharing"). The LEARN service also provides entities with the capability of creating proactive alerts (sometimes known as "hot list" notifications) for wanted vehicles, should a wanted license plate be scanned by a subscribing ALPR system.
- On April 9, 2020, the ACLU submitted a Public Records Act request regarding the Department's subscription to Vigilant's LEARN database. The Department researched its Vigilant ALPR system and provided the list of Vigilant LEARN agencies the Department both shared and received data from. Included on the list of agencies were Immigration and Customs Enforcement (ICE) and the United States Border Patrol (USBP). Although the Department's perspective was focused on solving and preventing crime in the interest of community safety, the Department simultaneously consulted with the City Attorney's office to ensure legal compliance with the California Values Act of 2018 (SB54). Because ALPR data did not include Personally Identifiable Information (PII), nor did it contain any immigration-related information, the City Attorney's office concluded that the ALPR program and related data sharing was not in violation of SB54.
- By December 8, 2020, published media reports suggested the Police Department's ALPR system violated both SB54 and 2015 California State Senate Bill 34, which required law enforcement agencies to seek public input and City Council approval prior to starting or operating an ALPR system. The City Council requested a Staff Report on the Police Department's ALPR program.
- Between March 23, 2021 and April 20, 2021, the Police Department provided two reports to the City Council and held a public forum related to its ALPR system. At the conclusion of the April 20th meeting, the City Council unanimously reauthorized the ALPR program,

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directed staff to organize listening sessions throughout the City, and directed staff to evaluate the feasibility of establishing a group for oversight of the ALPR program.

- Between April 20, 2021 and April 25, 2022, a City steering committee was created to develop a community task force focused on providing advice related to the City's use of technology and privacy.
- On January 18, 2022, the City Council directed staff to develop a privacy protection and technology transparency policy and engaged a consultant to provide support for the development of the policy.
- In April 2022, the City Manager appointed 12 individuals to the Chula Vista Technology and Privacy Advisory Task Force, consisting of Chula Vista residents and subject matter experts who were charged with assisting with the development of comprehensive policy recommendations on technology and privacy issues.
- Between April 25, 2022 and September 26, 2022 the newly-formed Technology and Privacy Advisory Task Force held a series of public meetings, town-hall meetings, educational sessions of city technologies, and tours of various city departments. The task force ultimately adopted a final set of recommendations for the City Manager to consider in the development of a citywide policy. The majority of the recommendations were incorporated into a proposed policy governing privacy protection and technology transparency.
- On November 1, 2022 the City Council adopted Policy 112-04, Privacy Protection and Technology Transparency Policy. The policy defined different types of city technology and classified them into three groups: Surveillance Technology (technology designed or primarily intended for the purpose of surveillance), Sensitive Technology (technology that generates or collects sensitive personal information but is not designed or intended to be used for surveillance), and General Technology (any other type of technology). The policy also provided direction for enhanced controls and oversight for Sensitive Technologies and Surveillance Technologies.

Among other things, the Privacy Protection and Technology Transparency policy outlines that new Surveillance Technologies require a Use Policy (to regulate use of the technology) and Surveillance Technology Impact Report (to evaluate impacts of the technology), submitted for input to a Privacy Protection and Technology Advisory Commission, prior to acquisition of new technology.

- On July 25, 2023 the City Council adopted Ordinance 3553, creating a Privacy Protection and Technology Advisory Commission.

#### Current Police Department ALPR System:

Currently, the Police Department operates a maximum of four marked patrol cars equipped with ALPR camera systems that operate while the vehicles are in use. Patrol cars are assigned to patrol officers on an available basis and are not assigned based on geography. Due to shift overlaps, patrol cars may not be used on some shifts (e.g.. a day shift officer drives one, making it unavailable for the next shift, but available for an officer on the overnight shift to drive).

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The department's ALPR system has two primary functions. First, while the ALPR-equipped car is in use, the system compares license plate numbers to one or more existing databases of vehicles of interest to law enforcement agencies and alerts the officer operating an ALPR-equipped car when a vehicle of interest has been observed. This process typically occurs within seconds. At this point, the "automated" part of the process ends and officers must then independently validate that the ALPR system has accurately interpreted the license plate, validate that the license plate matches the vehicle of interest, verify that the alert is valid (e.g., not expired or otherwise deemed invalid), and make an informed decision as to what action to take, if any. An alert alone does not justify a traffic stop or detention. The officer must conduct these verification steps prior to any enforcement action.

The second function is the ability for officers to manually search the database for a specific vehicle related to an official investigation (crimes, missing persons etc.). The department currently subscribes to Vigilant Solutions, which provides data storage for CVPD ALPR images and allows officers to search for images from the department's images, those collected by other law enforcement agencies, and those from commercial entities that are willingly shared with law enforcement. Commercial systems are widely used by non-public entities such as shopping malls, apartment complexes, home-owners associations, amusement parks, and parking garages. Commercial systems greatly outnumber law enforcement systems.

This manual search function is the part of the system that is most invaluable to the department as it is used in almost every investigation conducted. There are hundreds of instances where cases would not be solved without the use of the ALPR system.

Regulations surrounding the use and auditing of the Department's ALPR systems are governed by Chula Vista Police Department Policy § 460. The policy, publicly available on the Department's webpage, outlines specific requirements for access, administration, operation, data sharing, retention, and measures for accountability.

As stated earlier, there are 101 out of the 150 fixed ALPR systems installed. Unlike mobile ALPR cameras, fixed ALPR systems cannot be readily moved throughout the City to drive through crime scenes or areas with an increased risk of crimes such as shopping malls. Mobile ALPR systems are sometimes operated in an area where a significant crime has occurred, and potentially help detectives to identify vehicles associated with suspects.

Fixed ALPR cameras can support interdiction of crimes in-progress when users are logged into the system and can receive real time alerts. In mobile systems, an officer driving an ALPR-equipped patrol vehicle can be immediately alerted to a potential criminal offense or criminal offender, allowing the officer to take immediate action to investigate the alert and potentially stop a crime in progress, locate a missing person, or identify a wanted vehicle.

On the other hand, fixed ALPR cameras can be mounted on traffic lights and poles in major thoroughfares, points of ingress or egress into or out of the city limits and positioned in areas with high traffic density. Since criminal offenders are not bound to stay within a particular location within the city, or even within the city limits, a fixed ALPR camera's ability to capture images from key locations 24 hours a day provides detectives with significantly improved capability to identify and locate vehicles involved in crimes that have victimized members of our community.

### Oversight of the ALPR System

The ALPR program is overseen by a Police Captain, who manages a designated Police Lieutenant and a Police Sergeant. The team oversees the ALPR system with the support of the Police

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Technology Manager. In accordance with the BSCC grant, the Police Department intends to add a new Police Agent to assist the team with oversight, training, and auditing of the ALPR system.

#### Access and Security of the ALPR System

The department will continue to restrict access to the ALPR system to limited employees and positions that need access to ALPR data to conduct their official duties. Examples include sworn personnel, police dispatchers, crime analysts, and other similar positions. Employees are required to receive a minimum of two-hours of training before accessing the system. All access to the ALPR system is regulated not only by departmental policies that restrict its use, but also by federal and state laws. The ALPR system is compliant with Criminal Justice Information Services ("CJIS"), which requires the Police Department to safeguard the civil liberties of individuals and businesses, and to shield private and sensitive information.

CJIS compliance is central to all of the Police Department's sensitive information sources, including the ALPR system. Under CJIS regulations, a user is required to demonstrate that they have the right to access the data, and that they have a bona fide reason to access the data. This requirement is sometimes referred to as the *need-to-know/right-to-know* standard.

In other words, whenever a user accesses the ALPR system, they must first attribute the inquiry to a specific police investigation. This attribute, the reason that the user accesses the system, is required and is logged in the system for future auditing.

System access logs can be audited by a system administrator or department manager to assure compliance with regulations and that each inquiry meets the *need-to-know/right-to-know* standard. By law, the Police Department is required to conduct audits of the system's usage, and currently audits the system quarterly. Federal authorities also conduct periodic audits of the Police Department's CJIS systems to ensure compliance with security laws, database access limitations, and training requirements.

#### Ownership and Protection of ALPR Data

Under the terms of the agreement for an expanded ALPR system, all ALPR data, including but not limited to license plate data, images, geospatial data, user data, logging data, and system management data is owned and controlled exclusively by the City of Chula Vista. ALPR data shall not be sold for any reason and shall not be shared without the permission of the City, unless required by law. ALPR data is stored on servers residing in the United States, is encrypted end to end, and systems are protected against compromise. In the sixteen years that the Police Department has operated an ALPR system there have been no reports of a data breach.

#### Retention of ALPR Data

Since 2021, the Police Department's ALPR system retained photographs and data for a period of one year, after which the information was automatically purged from the system.

This retention period gives the department a reasonable amount of time to conduct an inquiry during the early phases of a police investigation, while helping reduce risks to the individual liberties and privacy of our community. As a matter of standard investigative practice, specific ALPR data that is determined to be evidence in a police investigation (such as a record and photograph of a suspect vehicle) is migrated to the Police Department's pre-existing digital evidence management system. ALPR data is automatically purged from the ALPR system after the 30-day retention period.

#### Data Sharing of ALPR Data

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Since 2017, the Police Department has authorized specific law enforcement agencies limited access to search its ALPR data.

The authorization is sometimes broadly referred to as “data sharing.” Data sharing does not transmit nor provide wholesale ALPR data to any agency, nor does it provide any agency with direct or comprehensive access to the Police Department’s ALPR data. Instead, the phrase “data sharing” in the context of the Police Department’s ALPR system refers to the capability that an authorized law enforcement agency’s ALPR system may, during the course of conducting a search of their own ALPR data during an investigation, simultaneously search the ALPR data of any other agency that has permitted it. In other words, one jurisdiction is searching for a suspect’s vehicle in its ALPR system, can also search for the vehicle in other jurisdictions that have so authorized it. Actual ALPR data (such as the license plate or photograph) is only shared between agencies when there is a “hit” to an active search.

Other law enforcement agencies may similarly authorize sharing their data with the department, allowing investigations in Chula Vista to find suspect vehicles that have fled the city.

Data sharing authorizations are crucial since crime is not limited to the city limits, and criminal offenders commonly traverse city and county jurisdictions in the process of committing criminal acts. Sharing information with other vetted law enforcement agencies is essential to solve crime. Suspects move about the community and look for opportunities to perpetrate crime, especially regarding auto theft or auto accessory theft. By sharing and receiving ALPR data, agencies can leverage each other’s data to solve more cases quickly, potentially reducing the number of victims and thus driving crime rates down, making communities safer as a byproduct. Each agency’s access and use of ALPR data is still governed by CJIS and by state laws, helping protect individual rights to liberty and privacy.

Since 2021, the Police Department has limited ALPR data sharing to only those agencies located within the State of California, who are all governed by SB 54 and other state requirements. The list of agencies with whom the department has authorized to share data is maintained on the Police Department’s website and is updated quarterly.

The Chula Vista Police Department does not permit the sharing of ALPR data gathered by the City or its contractors/subcontractors for purpose of federal immigration enforcement, pursuant to California Values Act (Government Code § 7282.5; Government Code § 7284.2 et seq) – these federal immigration agencies include Immigrations and Customs Enforcement (ICE) and Customs and Border Patrol (CBP).

#### Strategic Deployment of Fixed ALPR Cameras

The Police Department has had sixteen years of experience using ALPR technology to bolster and support police investigations and identify suspects in criminal investigations, with the primary goal of protecting the community, solving crime, and holding offenders accountable. Within the region, the use of ALPR systems has become commonplace, and a standard practice in effective criminal investigations.

The addition of 150 fixed ALPR cameras will significantly improve the department’s capacity to keep the community safe. The number of fixed ALPR cameras is consistent with many other jurisdictions in the San Diego region.

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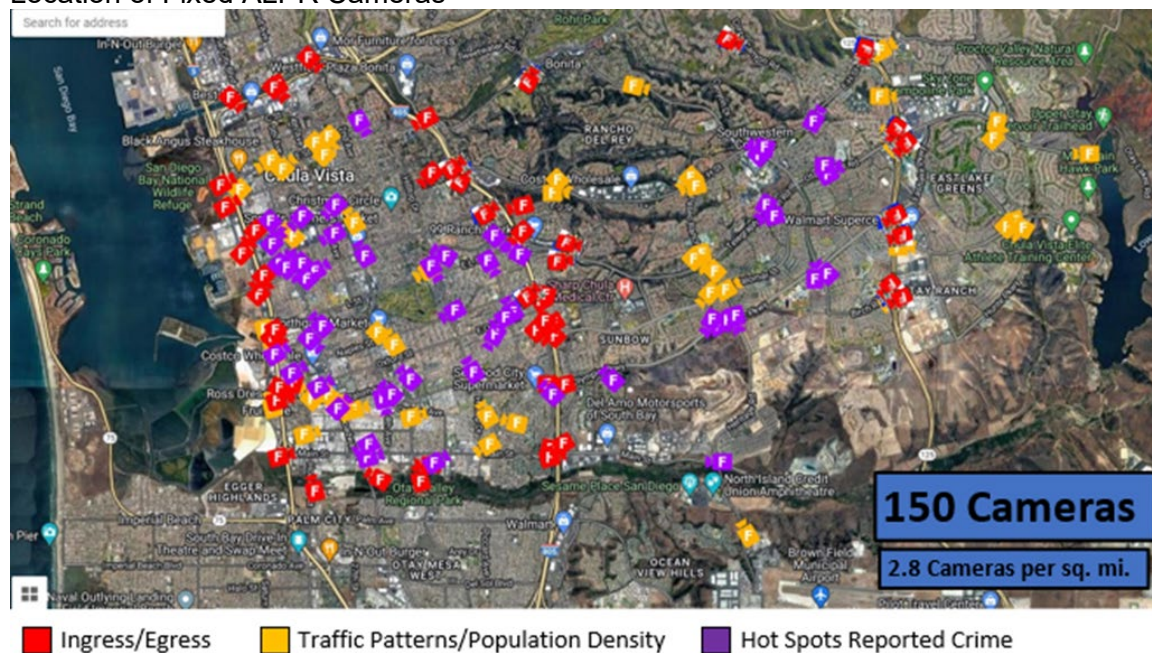
LE Jurisdiction	Fixed ALPR Cameras	Mobile ALPR Cameras	Total	Total per Square mi.
Carlsbad	128	24	152	3.27
Chula Vista	150	4	154	2.88
Coronado	9	0	9	1.13
El Cajon	40	4	44	2.77
Escondido	2*	4	6	18.75
La Mesa	20	4	24	2.19
National City	96*	0	96	10.55
Oceanside	10	0	10	0.24
Port of San Diego	5	0	5	1.33
San Diego City	500	27	527	1.54
San Diego County	20 <sup>†</sup>	39	59	N/A

\* Pending

<sup>†</sup> Includes Fixed locations in Del Mar, Encinitas, Solana Beach

Each fixed ALPR camera will be strategically installed (installation is currently still in progress) in key intersections and thoroughfares likely to be traversed by criminal suspects during or immediately after committing a crime. Below is a visual representation of a proposed deployment strategy for fixed ALPR cameras throughout the city.

#### Location of Fixed ALPR Cameras



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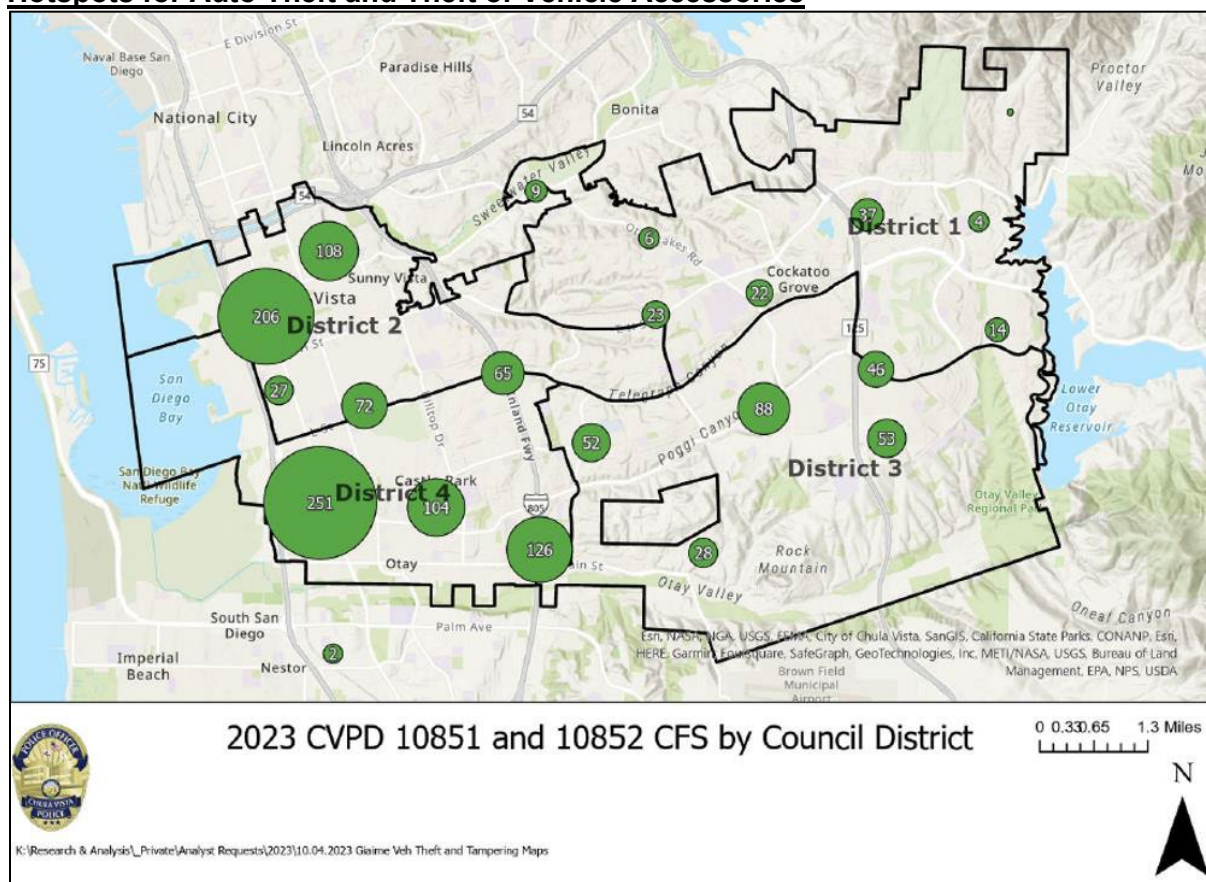
The location of each fixed ALPR camera was carefully chosen based on a number of factors, including but not limited to rates of traffic density on city roadways, locations of ingress and egress points to and from the city limits, geographic land features, population densities throughout the city, key areas and hotspots from auto theft crimes and catalytic converter thefts, and more. Key consideration was also given to ensuring appropriate and equitable distribution of systems to maximize effectiveness while minimizing inequitable impacts on micro communities.

The following diagram and table provide population density statistics and were analyzed in developing the location for fixed ALPR cameras.

Population Density and Number of ALPR Cameras by City Council District			
City Council District	Population Density (per sq. mi.)	Number of Fixed ALPR Cameras	
1	3,969	23	
2	7,509	49	
3	4,517	22	
4	7,903	56	

The next pages are visual representations of population density by census tract and areas where vehicle and vehicle accessory theft occur most in the city and a map depicting ALPR placement and vehicle theft/vehicle accessory theft.

### Hotspots for Auto Theft and Theft of Vehicle Accessories



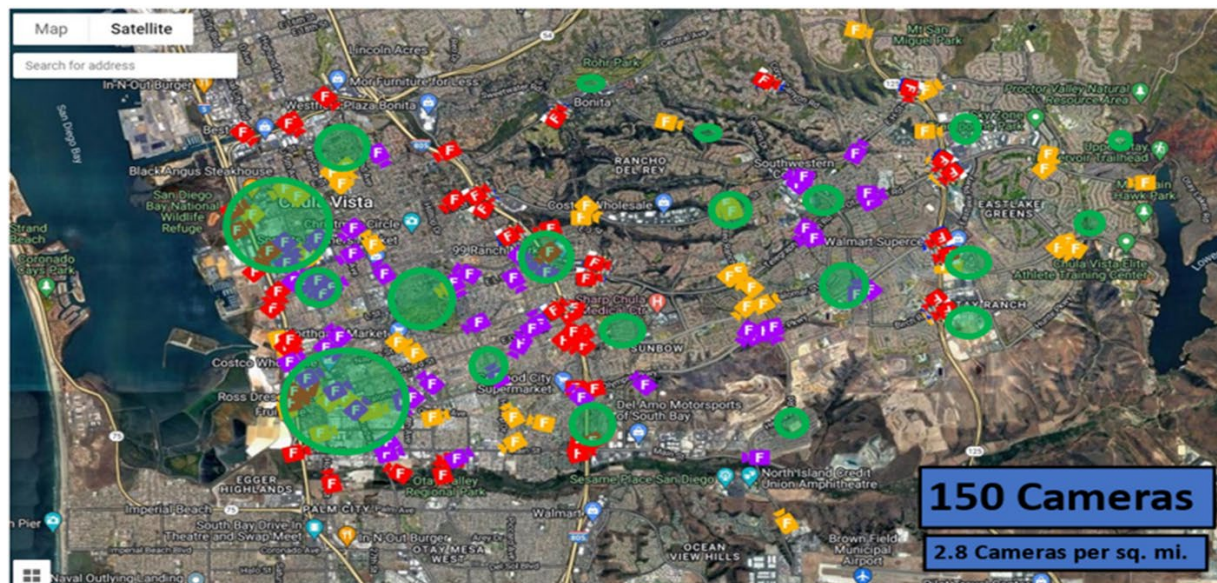
### Hotspots Compared to Location of Fixed ALPR Cameras

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■ Calls For Service for Stolen Vehicle/ Stolen Vehicle Accessories

■ Ingress/ Egress

■ Traffic Patterns/ Population Density

■ Hot Spots Reported Crime

**101 Cameras Installed. Expect the remaining cameras to be installed by the end of the second quarter of 2024.**

### Expanded ALPR System Provider

The Police Department has conducted extensive research regarding the installation of fixed ALPR cameras at street intersections and on roadways, and is using the ALPR solution from Flock Group, Inc. Flock pairs license plate and state recognition with other vehicle attributes such as color, type, make and objects (roof rack, bumper stickers, etc.) based on image analytics (not car registration data). Flock is the only ALPR provider that offers a “Visual Search” feature, which allows investigators to search ALPR data not only by license plate number but also by vehicle description and attributes such as make, model, color and more. Flock positions cameras to capture images of the rear of vehicles to provide license plate data and the vehicle’s color and make while reducing the chance of accidentally capturing the faces of drivers or passengers. This supports the ethical use of the system in that it does not have a filter for people, no facial recognition component, no traffic enforcement, or indiscriminate evidence. Additionally, Flock is the only ALPR provider to interface with the Police Department’s pre-existing digital evidence management system, Evidence.com, simplifying the process for investigators that need to save evidence for later prosecution.

The Flock system enables neighborhoods, schools, businesses, and law enforcement to work together across an entire city to solve and prevent crime. The Flock platform can alert law enforcement when a wanted or stolen vehicle license plate is recognized by a camera. At the same time, the Flock platform includes a public transparency portal helping maintain public trust without compromising transparency or human privacy.

The agreement with Flock Group, Inc. satisfies requirements for a single source contract. The agreement was negotiated based on Flock’s demonstrated competence and qualifications for the services provided, pursuant to Chula Vista Municipal Code section 2.56.110(A)(1). In order to procure these services, Flock Group, Inc. was chosen based on their unique knowledge, skills, and abilities not available from other sources. In accordance with Chula Vista Municipal Code

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sections 2.56.110(H)(3) and 2.56.070(B)(4), award of this contract to Flock is not subject to competitive bidding requirements.

#### Adherence to Privacy Protection and Transparency Policy

ALPR technology is defined as Surveillance Technology by the City's Privacy Protection Technology and Transparency Policy (112-4; effective 11/01/2022). As such, staff has adhered to all requirements of the Privacy Protection Technology and Transparency Policy. This includes sharing a revised version of the Police Department's Use Policy related to ALPR (previously reviewed by the City Council), a Surveillance Technology Impact Report, and this Staff Report.

#### Measuring Effectiveness of the ALPR System

Tracking specific data and quantifying data related to ALPR success stories or the number of cases ALPR technology helps to solve is highly complex. Simply put, ALPR data may help narrow or expedite an investigation by providing a resource to investigate the potential presence of related vehicles (or lack thereof) concerning the location and time of a specific crime. All ALPR data requires a trained investigator to evaluate, investigate, and confirm or refute if the data is connected to the crime. As a result, ALPR data does not solve crimes in and of itself. ALPR data alone is unlikely to be the sole reason for solving a crime.

In addition, ALPR data is one of many potential tools that our officers and investigators may utilize to help them identify vehicles of interest during a criminal investigation or to help eliminate a potential vehicle from suspicion.

Tracking statistical data about specific success of any of these tools is not practical. About 25,000 crimes are reported to the Police Department each year. These crimes must be investigated, and the department maintains a small complement of sworn detectives. Investigations take dozens of hours of investigative work, and some take hundreds of hours. It is neither practical nor efficient for the investigative division to track quantitative data about each action, database search, or other investigative step in every case under investigation. This tracking would be incredibly time-consuming for each detective, who may have a simultaneous workload of 30-60 ongoing investigations representing countless victims in our community seeking justice. As a result, the Police Department does not make it a practice to track the types of minute details for many investigative processes for reasons of practicality.

Although measuring the statistical effectiveness of this technology or other tools is impractical, the department does track and capture statistical data related to ALPR inquiries and usage, and date related to crimes and their investigations.

#### Examples of Success Stories (Other Law Enforcement Agencies) Associated with ALPR Use

The Department also tracks anecdotal information about specific success stories associated with ALPR use. A small number of success stories are highlighted below.

- Located an at-risk missing person using ALPR images that assisted detectives by providing real-time information about their whereabouts.
- Made several arrests in a homicide investigation because an ALPR image provided detectives with a location frequented by the suspects.
- Used the system to identify the suspect truck in a fatal hit and run.
- Located a suspect in a countywide fraud and theft series when detectives noticed the same car was in the area every time crimes were committed. ALPR data allowed them to query vehicles in the area when the crimes occurred.
- Located a fugitive child molestation suspect swapping cars frequently to avoid capture. A confidential tip about his new vehicle allowed detectives to use ALPR data to find frequent scanned locations. They waited for him nearby and made an arrest.

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- Detectives broke up a fentanyl smuggling ring using unsuspecting motorists. Provided with a vehicle description, using ALPR data, we were able to find a matching car and observe the suspects removing the fentanyl.

#### Chula Vista Police Department Success Stories Associated with the ALPR Program

24-04676: ALPR assisted officers in locating an occupied stolen vehicle. The driver was arrested and booked for various felony charges. The vehicle was not damaged, and no one was injured.

24-04193: Officers respond to an ALPR notification and locate the vehicle abandoned near a motel. The vehicle was ultimately recovered without incident. No arrests in that incident were made. The vehicle had been stolen out of the upper Los Angeles area.

24-04580: ALPR assisted officers in locating an occupied stolen vehicle. The driver was arrested and booked for various felony charges without incident.

24-04537: ALPR assisted officers in locating an occupied stolen and embezzled vehicle. The driver was arrested and booked for various felony charges, and it was discovered he also had an outstanding felony warrant. The owner of the embezzled vehicle had just filed the report with a neighboring agency and was able to recover their vehicle from the Chula Vista Police Department the same afternoon.

24-114030 (SDSD Case): Regional Auto Theft Task Force (RATT) detectives located an occupied stolen vehicle. RATT and Chula Vista PD patrol units locate the vehicle and arrested the driver for various felony charges without incident.

24-04645: ALPR assisted officers in locating an occupied stolen and embezzled vehicle. The driver was arrested and booked for various felony charges without incident.

24-04959: Patrol responds to a possible domestic violence incident. ALPR assisted officers in determining the suspect's vehicle's license plate since they had fled the scene prior to officers' arrival. The suspect was not located, but through an investigation, it was learned the suspect had an active felony warrant for his arrest.

24-05029: Patrol responded to an ALPR hit and locates an occupied stolen vehicle. Officers follow the vehicle into Imperial Beach and detain the driver. I also responded to assist. It was determined the elderly driver was an innocent purchaser of a vehicle. He drove the vehicle home to his elderly wife who was waiting for him. Both were released at the scene and the vehicle was returned to its rightful owner who "couldn't believe the police found her car." The elderly driver was understandable of Chula Vista PD officer's actions to detain him and had no prior criminal history. Information regarding the fraudulent purchase was provided. This experience was a good learning experience for training officers on scene, who learned about "Innocent Purchasers."

24-03963: Traffic Division officers investigating a felony hit and run collision utilized ALPR cameras, which ultimately led them to the suspect's vehicle. The vehicle was towed for evidence for the ongoing investigation.

24-05350: Patrol responds to an ALPR hit and locates the stolen vehicle. The driver failed to yield, and a pursuit ensued. The driver fled on foot and was not located. Inside the vehicle, among other

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things, a sawed-off shotgun was located. It was learned the vehicle was wanted by the Carlsbad Police Department on a sexual assault and robbery investigation. Carlsbad Police responded to take possession of the vehicle and the evidence for their investigation.

24-05284: Patrol responds to a family disturbance where it was learned through an investigation the suspect, a juvenile, carjacked the vehicle from a family member. During that special form of robbery, the mother was injured significantly. ALPR cameras were utilized which ultimately led to the recovery of the vehicle and the arrest of the juvenile. The juvenile was booked into the juvenile detention center on carjacking charges without incident.

24-02456: Dispatch airs an ALPR hit for a stolen vehicle. Patrol searches the area and locates the vehicle. Juvenile suspect was arrested.

24-04938: A vehicle was stolen from a local business parking lot. ALPR hits showed the vehicle nearby where it from originally stolen from. Patrol checked motel parking lots and located the vehicle in a local motel parking lot. Officers staged and waited for the vehicle to be occupied. The vehicle was stopped, and the driver was arrested.

24-4574: Patrol responded to an ALPR hit and conducted a stop. The registered owner was driving the vehicle and said he found it himself and was not able to get in touch with anyone to have it removed from LE Databases.

2024: The US Marshals Fugitive Apprehension Team responded to another jurisdiction for a sexual assault suspect who had escaped from a detention facility. ALPR cameras were used and effectively guided Task Force Officers to the suspect's last known locations, where he was eventually located and re-arrested. Due to ALPR's assistance, time was saved since no stakeouts were needed.

24-04027: ALPR assisted Patrol in identifying a hit and run suspect vehicle. In one incident, the suspect's vehicle was identified within minutes of the initial call coming into dispatch.

### Conclusion

The Police Department anticipates the expansion of the pre-existing ALPR program, will have significant positive impacts on the overall number of vehicle thefts or vehicle accessory thefts in Chula Vista. The ALPR program has proven effective at increasing the solvability rate for criminal investigations, and the department seeks to improve solvability from the single-digit percentage rate currently to double-digit percentage rates in the future.

## **CURRENT- YEAR FISCAL IMPACT**

On October 17, 2023, City Council accepted the Organized Retail Theft Prevention Grant from the California Board of State and Community Corrections (BSCC). The funding from BSCC expands the current Police Department ALPR Program by strategically installing 150 fixed ALPR cameras in key intersections and thoroughfares throughout the city. The chart below outlines the spending plan of the grant funds.

CATEGORY	FY 23/24	FY 24/25	FY 25/26	FY 26/27	44-MONTH TOTAL
Agent Salaries and Benefits	\$140,074	\$194,523	\$204,248	\$104,615	\$643,460
Overtime	\$34,570	\$69,140	\$69,140	\$34,570	\$207,420

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License Plate Reader Cameras & Subscription (Flock Safety)	\$472,500	\$450,000	\$450,000		<b>\$1,372,500</b>
Integration into Existing Traffic Camera Software; Camera Installation Costs	\$124,500				<b>\$124,500</b>
Auto Theft Steering Wheel Locks	\$8,758				<b>\$8,758</b>
Education Flyers/Postcards	\$1,000				<b>\$1,000</b>
High Heat Resistant Paint for Catalytic Converters	\$378	\$756	\$756	\$378	<b>\$2,268</b>
Local Evaluation Plan/Report (SANDAG)	\$24,000	\$48,000	\$48,000	\$24,250	<b>\$144,250</b>
Five (5) Detective Vehicles	\$250,000				<b>\$250,000</b>
Western States Auto Theft Investigators Conference	\$2,550	\$2,550	\$2,550		<b>\$7,650</b>
Indirect Costs (10%)	\$75,458	\$79,647	\$80,619	\$40,456	<b>\$276,180</b>
<b>TOTAL BSCC FUNDING</b>	<b>\$1,133,788</b>	<b>\$844,616</b>	<b>\$855,313</b>	<b>\$204,269</b>	<b>\$3,037,986</b>

### ONGOING FISCAL IMPACT

Because the grant period covers multiple fiscal years, subsequent budgets will include allocations as outlined in the chart above.

### ATTACHMENT(S)

1. Surveillance Technology Impact Report (STIR) - Automated License Plate Readers (ALPRs)
2. Chula Vista Police Department Policy PDM 460- Automated License Plate Readers (ALPRs)
3. Privacy Protection & Technology Advisory Commission PowerPoint Presentation

### STAFF CONTACT

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# Surveillance Technology Impact Report

## Automated License Plate Recognition

October 17, 2023

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### SUMMARY

Automated License Plate Recognition (ALPR) systems involve the use of digital camera systems paired with software to identify license plate numbers. ALPR systems function by automatically taking a photographic image of a vehicle's license plate and transforming that image into alphanumeric characters using optical character recognition or similar software. The images often include the license plate as well as enough of the car to allow for identification of the make and model. The images and data about the license plate number and geolocation of the image are stored in the ALPR system for a pre-determined period, after which the images and data are automatically purged from the system. No personal identifying information is generated or stored in the ALPR system.

ALPR technology originated in the United Kingdom in the mid-1970s and has been widely used by law enforcement worldwide since 2001. A January 2012 Police Executive Research Forum (PERF) Technology Summit in Washington D.C. showed 71% of surveyed police departments in the United States employed ALPR systems to some extent and 85% planned to acquire or expand their use of ALPR systems in the next five years.

Today, most law enforcement agencies in San Diego County also use ALPR systems in some facet. In recent years, many municipalities in San Diego County have expanded their ALPR programs to include fixed ALPR systems and have publicized numerous success stories attributed to the use of ALPR technology.

City/District/Agency	Fixed	Mobile
Alpine	0	0
Carlsbad	128	24
Chula Vista	150*	4
Coronado	9	0
Del Mar (SDSO)	5	0
El Cajon	40	4
Encinitas (SDSO)	7	0
Escondido	20*	4
Fallbrook	0	0
Imperial Beach	0	0
Jamul	0	0
Julian (SDSO)	0	0
La Mesa	20*	4

City/District/Agency	Fixed	Mobile
Lemon Grove	0	0
National City	96*	0
Oceanside	10	0
Port of San Diego	5	0
Poway	0	0
San Diego City	500*	27
San Diego County (SDSO)	0	39
San Marcos	0	0
Santee	0	0
Solana Beach	8	0
University of San Diego	0	4
Vista	0	0

The above table shows San Diego County Law Enforcement agencies that currently have ALPR systems and the number of fixed/mobile devices. The "\*" shows agencies that are in the process of procuring ALPR systems.

Since it was originally authorized by the City Council in 2007, an ALPR system has been a component of the Police Department's crime-fighting and investigative strategy and has been used to identify vehicles associated with criminal suspects, missing persons, and other vehicles related to official police investigations. ALPR improves the Department's ability to narrow the focus of investigations managed by its limited investigative resources, deter the occurrence of crime, and enhance public safety.

Currently, the Police Department operates a maximum of four marked patrol cars equipped with ALPR camera systems that operate while the vehicles are in use. Patrol cars are assigned to patrol officers on an available basis and are not assigned based on geography. Due to shift overlaps, patrol cars may not be used on some shifts (i.e. a day shift officer drives one, making it unavailable for the next shift, but available for an officer on the overnight shift to drive).

ALPR systems do not collect nor store sensitive personal information.

As a result of state grant funding that includes the expansion of the Police Department's ALPR system, and under an action item brought before the City Council on October 17, 2023, the Police Department proposes to expand the Department's ALPR program to add 150 fixed-location ALPR cameras.

Unlike mobile ALPR cameras, fixed ALPR systems cannot be readily moved throughout the city to drive through crime scenes or areas with an increased risk of crimes such as shopping malls. (Mobile ALPR systems are sometimes operated in an area where a significant crime has occurred, and potentially help detectives to identify vehicles associated with suspects.)

Fixed ALPR cameras also have a reduced capability for immediate interdiction of crimes in-progress. While fixed ALPR cameras have the capacity of alerting personnel to a crime in-progress, the alerting process is multi-layered, is dependent on which users are logged into the system at any given time, and often goes through third-party personnel in the Police Department's communications center. In mobile systems, an officer driving an ALPR-equipped patrol vehicle can be immediately alerted to a potential criminal offense or criminal offender, allowing the officer to take immediate action to investigate the alert and potentially stop a crime in progress, locate a missing person, or identify a wanted vehicle.

But fixed ALPR cameras can be mounted on traffic lights and poles in major thoroughfares, points of ingress or egress into or out of the city limits and positioned in areas with high traffic density. Since criminal offenders aren't bound to stay within a particular location within the city, or even within the city limits, a fixed ALPR camera's ability to capture images from key locations 24 hours a day provides detectives with significantly improved capability to identify and locate vehicles involved in crimes that have victimized members of our community.

## POTENTIAL FOR DISPROPORTIONATE ADVERSE IMPACTS, AND MITIGATION

The Police Department is aware of concerns that ALPR data will be shared with other agencies that engage in immigration enforcement. Community members have also expressed concern that ALPR data will be used for purposes other than law enforcement, or could disproportionately affect specific communities or cultures. The Police Department is also aware of concerns that ALPR data may be used to track the movements of people around sensitive areas, such as houses of worship, health clinics and may be used to infringe upon the First Amendment rights of individuals.

The Chula Vista Police Department has had an ALPR program since 2007. At the inception of the program the department put safeguards in place to minimize or mitigate potential disproportionate impacts. Access to the ALPR system is limited only to employees with a justifiable need related to their official duties, such as sworn officers, dispatchers, and crime analysts. The department established a comprehensive use policy requiring that all users attend a minimum of 2-hours training. The department requires that only authorized users may access the system, and then only when necessary to conduct their official duties, otherwise known as a *need-to-know and right-to-know basis*. Authorized users can only access the system for the purposes of a police investigation, and user activity in the system is logged for auditing by supervisory or management personnel.

The department's use policy also specifies which law enforcement agencies we may authorize to search Chula Vista's ALPR data. The ability to share ALPR data with other agencies is restricted to command personnel for the department. As a matter of practice, the department shares ALPR data with only California state law enforcement agencies. The department does not share data with federal law enforcement agencies, nor with any law enforcement agency for the purpose of immigration enforcement. The department's use policy was recently updated based on the proposed expansion of the ALPR System, and includes a change to the department's retention guidelines. The department proposes to reduce the retention of ALPR data from one year, to 30-days. The ALPR system will be configured to automatically purge ALPR data after the 30-day period expires.

ALPR is content-neutral; it does not identify the race of the driver or the registered owner of the vehicle. To ensure that the Police Department continues to build trust in the community and mitigates any potential disparate impacts, the Police Department will continue to adhere to its use policy of limiting access and use of the ALPR system to official investigations or community caretaking functions, and limiting access to the ALPR system to trained and authorized department personnel. Further, the Police Department will continue to audit the ALPR system on a regular basis to provide a measure of proactive accountability. In doing so, the department can mitigate the likelihood of disparate treatment of individuals based on factors not related to true police investigations and simultaneously minimize perceived oversurveillance of specific communities or demographics of our city.

The department does not collect data on the demographics about the owners or operators of vehicles. The ALPR program operates as a stand-alone system and does not capture nor store personally identification information.

The department recently decided to expand the ALPR program to add fixed camera locations throughout the city. These locations were determined based on population density, traffic patterns, ingress locations, egress locations into and out of the city and crime data, and locations were identified so as to distribute ALPR cameras in such a way to minimize the potential for disparate impacts on local communities.

## **POTENTIAL FOR ADVERSE IMPACTS ON THE SECURITY AND ACCESS TO SENSITIVE PERSONAL INFORMATION, AND MITIGATION**

ALPR systems do not collect nor store sensitive personal identifiable information and are stand-alone systems. The system also does not access outside or third-party databases that contain personal identification information. Nonetheless, the Police Department tightly controls access to the ALPR system and logs user activity in the system for proactive audits. Access to the system is granted only with authorization, after training, and only through unique usernames and passwords for each authorized user. Department policies prohibit sharing usernames and passwords.

## **FINANCIAL IMPACTS AND FUNDING SOURCE**

Approval of the Police Department's proposal to accept \$3,037,986 in grant funds from the Board of State and Community Corrections for the Organized Retail Theft Prevention Grant Program, and to therefore expand the Police Department's ALPR system, will designate \$1,372,500 of grant funds for the expanded ALPR system.

Because the grant period covers three fiscal years, subsequent budgets will include allocations for the expanded ALPR system based on costs provided by the provider. Currently, these costs are estimated at \$472,500 in year one and \$450,000 a year for year two and year three. This is in addition to the annual costs of the Police Department's pre-existing ALPR system, estimated at \$73,000 per year.

## **POTENTIAL TECHNOLOGY ALTERNATIVES**

ALPR is a technological capability rather than a specific tool. While a variety of tools exist that can perform the functions of ALPR, the Police Department is not aware of any other technology that does what ALPRs technology can do.