Surveillance Impact Report
Smart Streetlights
San Diego Police Department

DESCRIPTION

Smart Streetlights are enhanced with embedded technology, including high-definition video cameras and automatic license plate recognition (ALPR). High-definition video from Smart Streetlights is recorded on a 24-hour basis in public areas where no reasonable expectation of privacy exists. The Smart Streetlights proposed do not use facial recognition technology or gunshot detection. The video may only be accessed by authorized Department members utilizing specialized software programs and secure, encrypted data transmission. Operating systems from the vendor of Smart Streetlights will allow Department members to access the camera footage and data to detect, deter, and prosecute crimes in San Diego. The technology helps safeguard against potential threats to the public, manage emergency response situations, enhance investigations, and increase officer accountability.

The Smart Streetlights proposed will incorporate ALPR technology. ALPR is a computer-based, information gathering system that utilizes specially designed cameras to rapidly capture an image of a vehicle license plate and convert the plate characters into a text file using optical character recognition technology. The text file can then be compared against pre-existing data files. If a match is found, the ALPR system user is notified by an audible alert and an associated notation on the user's computer screen. Because the ALPR system is programmed to check all vehicles in the same manner, it is designed to be an objective, non-discriminatory public safety tool. The data obtained by ALPR cameras is useful in criminal investigations. All information gathered via ALPR requires verification via the investigating officer before enforcement action can be taken.

Police departments need a scalable solution to increase clearance rates and deter crime. ALPR cameras see like a detective to make actionable evidence available when needed that is easily searchable by vehicle type, make, model, unique features, color, time frame, or plate details. ALPR can deliver these details through machine learning technology that scans each image for distinguishing features instead of traditional metal plates. This means ALPR technology can also detect vehicles with no plates, temporary plates, dirty/covered plates, and even get accurate state detection.

PURPOSE

Smart Streetlights with embedded ALPR technology are a component of the San Diego Police Department's crime-fighting strategy that involves the identification and successful prosecution of persons involved in criminal activity, deterrence of crime, and the protection of community members.

LOCATION

The proposed Smart Streetlights with embedded ALPR technology will be deployed citywide in all council districts. The locations selected were tied to several factors – analysis of violent crime locations (particularly areas with a strong nexus to gun violence) conducted by our Crime Analysis Unit, input from our centralized investigative units (e.g., Homicide, Robbery & Sex Crimes), and the final input from the commanding officers of every patrol division in the City.

Below is the proposed deployment map (Table 1) for the first five hundred Smart Streetlights with embedded ALPR technology. The below link provides optimal transparency. It can be accessed by

oversight bodies, the Privacy Advisory Board, City Council members and community members. The link displays the precise location of every proposed camera with embedded ALPR technology at the street and intersection level.

Table 1 - Shows the City of San Diego Council District Map with proposed ALPR and Smart Streetlights. For further detail, open attached hyperlink.
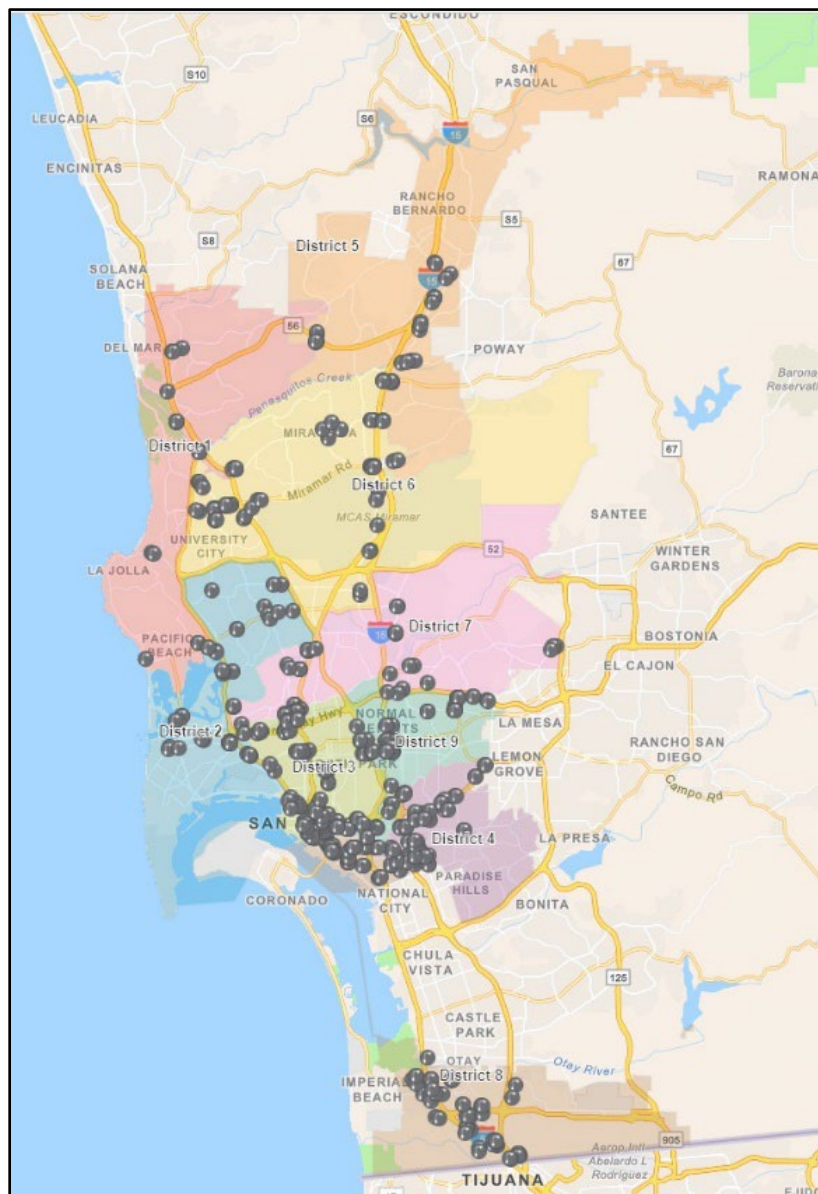
- https://webmaps.sandiego.gov/portal/apps/webappviewer/index.html

TABLE 1

Table 2 - Provides the proposed allocation of 500 Smart Streetlights, with embedded ALPR technology, in each of the nine council districts.

TABLE 2

District	Total ALPRS/Smart Streetlights
1	21
2	39
3	91
4	61
5	26
6	58
7	36
8	111
9	57
Total	**500**

Tables 3, 4 and 5 - Represents the work of SDPD's Crime Analysis Unit. They centered their analysis on San Diego's crime statistics from 2022, focusing on Part 1 FBI index crimes in each of the nine council districts. The information contained within the tables shows how Part 1 crimes informed the decision-making process as to deployment of the technology, along with the above other factors listed.

Table 3 - Shows the City of San Diego's Uniform Crime Reporting (UCR) for 2022 regarding violent crime.

TABLE 3

District	Murder	Rape	Armed Robbery	Unarmed Robbery	Aggravated Assault	Violent Crime Total
1	0	23	25	63	120	**231**
2	6	56	67	89	568	**786**
3	5	160	154	203	1,185	**1,707**
4	8	38	44	35	423	**548**
5	3	27	27	12	109	**178**
6	5	21	38	38	255	**357**
7	3	57	82	111	355	**608**
8	9	44	92	69	562	776
9	12	57	63	78	614	824
Unknown	0	13	1	1	13	**28**
Total	**51**	**496**	**593**	**699**	**4,204**	**6,043**

Table 4 – Shows the City of San Diego's Uniform Crime Reporting (UCR) for 2022 regarding property crime.

TABLE 4

District	Residential Burglary	Non-Residential Burglary	Burglary Total	Grand Larceny	Petty Larceny	Vehicle Theft	Property Total
1	162	205	367	1,041	620	374	**2,402**
2	219	261	480	1,405	877	766	**3,528**
3	334	364	698	2,227	1,170	977	**5,072**
4	99	64	163	399	391	480	**1,433**
5	81	113	194	506	363	201	**1,264**
6	60	310	370	856	543	508	**2,277**
7	173	208	381	1,285	1,108	560	**3,334**
8	88	171	259	706	749	1,740	**3,454**
9	210	117	327	618	525	718	**2,188**
Unknown	0	0	0	1	0	1	**2**
Total	**1426**	**1,813**	**3,239**	**9,044**	**6,346**	**6,325**	**24,954**

Table 5 – Shows the City of San Diego's Uniform Crime Reporting (UCR) for 2022 crime total.

TABLE 5

District	Violent Crime Total	Property Crime Total	Crime Total
1	231	2,402	**2,633**
2	786	3,528	**4,314**
3	1,707	5,072	**6,779**
4	548	1,433	**1,981**
5	178	1,264	**1,442**
6	357	2,277	**2,634**
7	608	3,334	**3,942**
8	776	3,454	**4,230**
9	824	2,188	**3,012**
Unknown	28	3	**31**
Total	**6,043**	**24,954**	**30,998**

Table 6 – Shows the top 10 beats where persons were stopped with firearms between July 2018 and December 2022.

Table 7 – Shows the top 10 beats where crimes involved firearms between July 2018 and December 2022.

TABLE 6

Beat	Firearms
441	148
446	140
512	135
521	84
122	81
121	81
511	67
437	64
621	62
611	61
Total	**923**

TABLE 7

Beat	Firearm
512	115
441	108
122	82
521	74
712	73
446	72
813	69
627	62
821	59
242	58
Total	**772**

IMPACT

The San Diego Police Department's Smart Streetlights with embedded ALPR technology safeguard civil liberties and civil rights while fighting crime. The uses and deployments of the surveillance technology are not based upon discriminatory or viewpoint-based factors. The Department's use of the surveillance technology is intended to support and benefit the community members of San Diego while minimizing and mitigating potential impacts to civil rights and civil liberties of community members.

The Smart Streetlights with embedded ALPRs do not collect personal identifying information of people, drivers, or registered owners of vehicles. The technology does not employ facial recognition. Smart Streetlights are not monitored in real time. The information taken from the Smart Streetlights is used after the fact, only after a qualifying crime has taken place (e.g., homicide or shooting) and only when a legitimate investigative need exists. The Fourth Amendment rights of San Diegans are not implicated because the Smart Streetlights are physically deployed to view public areas where people and vehicles are exposed to view. Because the cameras view data in public areas where no reasonable expectation of privacy exists, no search has taken place under the Fourth Amendment. All Smart Streetlights will be individually aligned to optimize capture of images from public places. Because of the wide view of the camera some areas where an expectation of privacy exists may be inadvertently viewed. Therefore, every camera's view will be reviewed before the program goes online. The review will ensure that any area with an expectation of privacy is digitally masked off (e.g., window of home, curtilage or places of worship). The digital masking works in the following manner - the area behind the digital masking does not produce images which can be recorded. No information exists behind the masking and, therefore, it cannot be

recovered, even with a warrant. Therefore, the privacy rights of community members and visitors to San Diego will not be infringed.

Refer to Department Procedure 3.33 for additional information.

MITIGATIONS

The Smart Streetlights with embedded ALPRs do not collect personal identifying information of people, drivers, or registered owners of vehicles. The technology does not employ facial recognition. Smart Streetlights are not actively monitored. The information taken from the Smart Streetlights is used after the fact, only after a qualifying crime has taken place (e.g., homicide or shooting) and only when a legitimate investigative need exists. The Fourth Amendment rights of San Diegans are not implicated because the Smart Streetlights are physically deployed to view public areas where people and vehicles are exposed to view. Because the cameras view data in public areas where no reasonable expectation of privacy exists, no search has taken place under the Fourth Amendment. All Smart Streetlights will be individually aligned to optimize capture of images from public places. Because of the wide view of the camera some areas where an expectation of privacy exists may be inadvertently viewed.

Therefore, every camera's view will be reviewed before the program goes online. The review will ensure that any area with an expectation of privacy is digitally masked off (e.g., window of home, curtilage, or places of worship). The digital masking works in the following manner - the area behind the digital masking does not produce images which can be recorded. No information exists behind the masking and, therefore, it cannot be recovered, even with a warrant. Therefore, the privacy rights of community members and visitors to San Diego will not be violated.

The collection, use, retention, or dissemination of data shall not be used to violate the Constitutional rights of any person, or in any manner that would discriminate against any person based upon their ethnicity, race, gender, natural origin, religion, sexual orientation, or gender identity.

Refer to Department Procedure 3.33 for additional information.

DATA TYPES AND SOURCES

The Smart Streetlights collect high-definition video images. The audio sensors embedded in the technology are not activated and will not record sound. Smart Streetlights are embedded with ALPR technology and therefore also capture images of license plates, and distinctive vehicle characteristics. If the license plate matches to investigative hotlists, Amber Alerts, Silver Alerts, Feather Alerts or stolen vehicle alerts the system notifies the Department.

DATA SECURITY

The data collected by Smart Streetlight technology is secure. Data stored and transmitted by the Smart Streetlight technology is encrypted on the system using industry leading 256-bit encryption. This is a higher level of digital security than exists on many commercial banking applications which use 128-bit encryption to protect their financial transactions.

Video footage recorded will only be maintained by the Smart Streetlight for fifteen days unless it is downloaded by an investigator as evidence in a qualifying criminal investigation. The information will only be accessed by a trained investigator. When video is accessed by the investigator it will be archived with the rest of the investigation as evidence in compliance with Department Policy 3.02 – Investigations. Department members are practiced at maintaining the security of their investigative files and the digital information therein which is password protected on the Department's secure network. The video is also protected with physical security as it is housed in secure law enforcement only buildings.

Smart Streetlight system audits shall be conducted on a regular basis by the Special Projects Unit. The audits will ensure users of the system follow "need to know, right to know" criteria mandated by the California Law Enforcement Telecommunications System ("CLETS").

Special Projects sworn personnel will monitor the use of Smart Streetlight technology to ensure compliance with all applicable laws, including laws providing for process and time period system audits.

SDPD works with the City's Department of Information Technology ("IT"), which oversees the IT governance process. IT governance also encompasses safety and security of the information which flows through the San Diego Police Department computer and information technology systems. For additional details related to the IT governance processes, which involves risk assessment, along with data and cyber security, refer to the information at the following link:

- https://www.sandiego.gov/sites/default/files/fy23-fy27-it-strategic-plan-sd.pdf

FISCAL COST

Initial Purchase Cost:

The cost is approximately $4,000 per unit, with 500 units proposed in the initial deployment. That cost includes the hardware, software, and wireless data plan needed to operate the Smart Streetlight technologies proposed and would require an annual payment of $2,000,000 for every 500 units deployed.

There is also a one-time installation charge for an additional $1,500,000 for any units deployed during the five-year proposed contract. An initial deployment of 500 units would cost approximately $3,500,000 for the units and one-time installation charge.

The use of Smart Streetlights would have to be reviewed annually by the Privacy Advisory Board and City Council, along with City Council approving costs associated with adding any additional units. The Department is working to determine any power charges that may be associated with the installment and use of these devices, as well as savings associated with removing the 3,200 sensor nodes previously

deployed along with evaluating the cost associated with repairing and updating traditional streetlights where Smart Streetlights are proposed for deployment.

Ongoing Costs

Ongoing costs are primarily associated with the annual fee of $4,000 per unit deployed, along with associated power costs and repair of traditional streetlights as Smart Streetlight technology is deployed. For example, if a traditional streetlight is inoperable, it could be replaced for approximately $125 when Smart Streetlight technology is installed.

Potential Sources of Funding

- Grant Funds
- General Funds

THIRD PARTY DEPENDENCE

The Smart Streetlight technology is entirely web based and housed domestically in United States based Amazon Web Services' ("AWS") government cloud. The Smart Streetlights use Advance Encryption Standards (AES) 256-bit encryption as it sends data to the AWS cloud. No data will be stored on city hardware, unless downloaded from the web application for use in a qualifying investigation and maintained in an active case file. When data is accessed by the authorized user it will be archived with the rest of the investigation as evidence in compliance with Department Policy 3.02 – Investigations. Department members are practiced at maintaining the security of their investigative files and the digital information therein which is password protected on the Department's secure network. The data is also protected with physical security as it is housed in secure law enforcement only buildings.

ALTERNATIVES

There are currently no alternatives on the market that have the same capabilities as this singular product, which blends high-definition video recording and ALPR technology.

TRACK RECORD

Smart Streetlights have been successfully deployed in San Diego and other jurisdictions as well, although few jurisdictions have employed the combined technology contemplated here.

Table 8 - Shows governmental agencies that utilize Public Cameras and ALPR for similar purposes.

TABLE 8

Cities	ALPR	Public Cameras
City of Nashville		X
City of Seattle	X	X
City of San Francisco	X	
City of Davis	X	
City of Vallejo	X	
City of San Jose	X	
City of Oakland	X	

Success Stories:

- The Department became aware of the crime fighting capabilities of the Smart Streetlights in 2018. A Homicide investigator responded to a shooting in the Gaslamp and discovered the Smart Streetlight above had recorded high-definition video of what was initially viewed as an unlawful homicide. Careful review of the footage showed the Smart Streetlight's capacity to produce irrefutable evidence. In this case, irrefutable exculpatory evidence which showed the shooter acted in self-defense. The shooter was being severely beaten with a street sign and ultimately produced a handgun in defense of his life. The shooter was not prosecuted for murder based on the strength of the Smart Streetlight's video evidence. Our investigative units came to understand the power of this technology to convict the guilty and exonerate the innocent. Since 2018 there have been numerous examples of how the technology enabled prosecution of homicides and violent crimes, which could not have been successfully prosecuted without the technology. There were also numerous cases where the video evidence was another strong piece of evidence, fortifying the case for successful prosecution.

- The technology has transparency and accountability implications for law enforcement in the City of San Diego. In May of 2020, video from a first-generation Smart Streetlight captured the unjustified shooting of an unarmed individual fleeing from a San Diego Sheriff's deputy in downtown San Diego. The video clearly showed the crime taking place. The deputy sheriff ultimately pleaded guilty to manslaughter and no trial was necessary. All law enforcement agencies who operate in the City of San Diego are observed by this accountability tool.

- In another instance, an unhoused San Diegan was brutally murdered under the full view of several first-generation Smart Streetlights. This crime was captured in horrific detail and ultimately led to the identification and apprehension of the murderer. The implications of this technology to protect our vulnerable unhoused cannot be understated. Often, witnesses to crimes affecting persons experiencing homelessness are difficult to locate or unwilling to testify and therefore the cases languish for lack of witness testimony.

PUBLIC ENGAGEMENT AND COMMENTS

There was one community meeting held in each of the nine City of San Diego Council Districts. The total number of community meeting attendees was **336 people**. This number includes members of the media and repeat participants who attended more than one meeting.

To maximize the reach of the materials presented at the community meetings, the Department created a QR code which directly links smart phones to all materials presented and additional materials. See the below QR code:

The materials can also be accessed by visiting the below web address:

- www.sandiego.gov/police/technology

The web address was presented in conjunction with the QR code in the PowerPoint presentation at the community meetings.

The Department also video recorded a meeting so that it could be presented to a larger group. The benefit of the video was the capability of translating the presentation into other languages such as Spanish, to maximize penetration of the materials to affected groups.

The link to the video is at:

- https://www.youtube.com/watch?v=mRtdFglWB0A&feature=youtu.be

A great many of the questions asked by community members were answered by the presentation itself. Questions about data retention periods, digital security, policies, procedures, types of crimes and transparency were frequently asked and answered by Captain Jordon through the vehicle of the PowerPoint. Throughout the community meetings, engagement varied. There were questions and comments on both sides of the issue. Comments included support for the San Diego Police Department and/or the proposal, a lack of support for the police or proposal, or were broader based in nature regarding the use of technology in general. During the entirety of the presentations, Captain Jordon answered the

various questions or responded to most of the comments, if needed. Some comments required no feedback or the questions were more rhetorical in nature or position based and an answer was not easily identified. A compilation of the more frequently asked questions and responses include, but are not limited to:

- Use/abuse of the technology with immigration enforcement.

  - SB 54 prohibits SDPD from being involved in any immigration enforcement, in person or via data shared.

- The overpopulation of cameras deployed to District 8 and/or other areas appeared to overly impact populations of protected classes.

  - Deployment was based on a multitude of factors, crime statistics analyzed by our Crime Analysis Unit, feedback from investigative units and input from the Divisional Captains. At no time were any protected groups or individuals targeted in the analysis and proposed deployment.

- A request to use the cameras for traffic enforcement.

  - Utilization of the system for traffic enforcement, per the Zencity survey, would erode public trust with SDPD. Public support tended to erode for surveillance technology being used for lower-level crimes and public disorder.

- Questions regarding audit procedures, public oversight of the audits, and access of the public to the information.

  - The audits would be done by SDPD's Special Projects Unit, which completes internal audits. Additionally, the Office of the City Auditor, State Auditor, and the Department of Justice would have potential further audits and oversight authority. The San Diego Commission on Police Practices (CPP) could have potential oversight responsibilities as well.

- How masking is accomplished and who verifies that the deployment meets privacy concerns.

  - As the cameras are put in place, the Department will ensure cameras are positioned to optimize collection of data from public spaces and avoid collection or filming in private spaces. Each camera will be evaluated for the need to digitally mask off areas where inadvertent collection in a private area was taking place, or where citizens expressed privacy concerns (i.e., places of worship or a private area like a window). The Department would evaluate all concerns passed along to the Department based on the proposed deployment map.

- If there is a way to retrieve the data after the retention periods have passed.

  - There is no way to retrieve data after the retention period has expired.

- The overall cost of the technology, along with any additional services.

  Initial Purchase Cost:

- The cost is approximately $4,000 per unit, with 500 units proposed in the initial deployment. That cost includes the hardware, software, and wireless data plan needed to operate the Smart Streetlight technologies proposed and would require an annual payment of $2,000,000 for every 500 units deployed.

- There is also a one-time installation charge for an additional $1,500,000 for any units deployed during the five-year proposed contract. An initial deployment of 500 units would cost approximately $3,500,000 for the units and one-time installation charge.

- The use of Smart Streetlights would have to be reviewed annually by the Privacy Advisory Board and City Council, along with City Council approving costs associated with adding any additional units. The Department is working to determine any power charges that may be associated with the installment and use of these devices, as well as savings associated with removing the 3,200 sensor nodes previously deployed, along with evaluating the cost associated with repairing and updating traditional streetlights where Smart Streetlights are proposed for deployment.

  Ongoing Costs

  - Ongoing costs are primarily associated with the annual fee of $4,000 per unit deployed, along with associated power costs and repair of traditional streetlights as Smart Streetlight technology is deployed. For example, if a traditional streetlight is inoperable, it could be replaced for approximately $125 when Smart Streetlight technology is installed.

  Potential Sources of Funding

  - Grants and General Funds

- The audio recording capabilities of the equipment.

  - The system includes acoustic sensors, but they will not be activated, per the proposed agreement being considered.

- The removal of the previous generation of cameras and/or the setup of the new systems.

  - The removal of the previous systems and installation of the new systems would largely be independent of one another. Some areas for cameras would overlap, but the old system

would not be utilized, due to an approximate 75% failure rate of the equipment as a direct result of failure to update software and hardware. The original technology is past its recommended service life.

- The use of AI in the technology.

  - While the system uses character recognition software, there would be no facial recognition system software and no artificial intelligence for predictive policing. The system employs machine learning artificial intelligence in the ALPR application to identify vehicles beyond the plate (e.g., distinctive markings or features of the vehicle). But the ALPR does not utilize facial recognition software.

- The associated concerns of First Amendment speech and civil disobedience.

  - First Amendment protections are of the utmost importance to the San Diego Police Department. The Department's desire to protect free speech, assembly and lawful protests are enshrined in the multiple Department Procedures governing the right of people to assemble peaceably. This technology will not violate those Department Procedures or state and federal laws.

- The camera locations and the process to decide placement.

  - The locations selected were tied to several factors – analysis of violent crime locations (particularly areas with a strong nexus to gun violence) conducted by our Crime Analysis Unit, input from our centralized investigative units (e.g., Homicide, Robbery & Sex Crimes), and the final input from the commanding officers of every patrol division in the City.

  - The placement is a proposal only and is subject to change based on community feedback.

- The example of the 400 cases where the technology was used versus the 500,000 total cases for SDPD.

  - It was pointed out that 400 cases had previous use of Smart Streetlight technology that allowed the collection of videos from public spaces. Of that, 100 crimes would not have been solved without Smart Streetlight technology, 100 cases were significantly aided by the technology, and the other 200 cases may or may not have had an impact. However, the seriousness of the criminal activity is a deciding factor on the access of the system and dictated that it only be used 400 times during the reviewed time period and is independent of the approximate 500,000 crimes reported/investigated in that same time period. Additionally, in measuring success rates associated with Smart Streetlights, the Department views the 200 cases that were critical or enhanced by the technology should be measured against the number of times it was used and this results in approximately a 50% success rate.

- The concern for the use of facial recognition technology within the proposed system.

  - The proposal clearly stated facial recognition was not a part of the proposal. In the event facial recognition technology was pursued later, it would trigger a community meeting process similar to the ALPR and Smart Streetlight technology under the mandates of the Surveillance Ordinance.

- The sharing of the data and which entities would have access.

  - The data would be owned by the SDPD and would only be shared for law enforcement purposes. The data would not be shared with Federal Immigration authorities.

- Whether ALPR would be deployed on vehicles.

  - Mobile ALPR technology on vehicles will not be deployed at this time and would require review by the Privacy Advisory Board and a separate proposal.

- Concerns over who has access to the information and what training is required.

  - Data would be limited to trained personnel in selected units and access would be governed by SDPD procedures as well as state and federal law. The need to know right to know standard would apply to every usage of this technology, (i.e., investigative need, qualifying crime and authorized user).

- How the Zencity information was collected and who provided the answers.

  - The Zencity survey was conducted anonymously over social media applications. Respondents' nexus to San Diego was confirmed via the survey process and questions asked.

- It feels like the meetings and the process, in general, has been rushed through without community engagement.

  - The Department complied with, or exceeded, the requirements of the Surveillance Ordinance as written.

One question from an attendee was "Why is there a portion of the ALPR PowerPoint that referenced a vehicle being a "Resident." That example pertained to resident of a homeowner's association ("HOA") and not any manner of immigration status.

Online comments and questions were also collected during this process. A portal to submit questions or comments was provided online, from March 1, 2023 through March 14, 2023, via the San Diego Police Department's website at:

- https://www.sandiego.gov/police/data-transparency/public-comment-draft-procedures.

In conjunction with the online recording of the presentation, the online comments and questions portal provided 24-hour accessibility to provide feedback for those unable to attend the community meetings in person. The drawback of the website access is that none of the sources are completely verifiable as to whether they are community members of San Diego. SDPD has no ability to know if the contributor is a locally based stakeholder or if the contributor was spoofed or a "bot" that could have been providing feedback as well.

Some respondents were listed under pseudonyms such as "John Q. Public" which likely is not a given name. After reviewing the 394 comments / questions provided to the public comments section of the SDPD website as of March 10, 2023, we had the following summarized results: 324 comments or questions were negative in their response, and some vehemently so. The negative comments ranged from money for the program being better spent on other things such as more police or community services which respondents felt would have a greater impact on crime. Other negative comments addressed privacy concerns, totalitarian surveillance state concerns, and spending money on this technology while crime is falling, distrust of the police, other cities in the county being reckless with usage and sharing of the technology and the like. Some comments were multiples of the same response from the same user, and many appeared to be coming from a similar "script." 40 comments or questions were positive, generally showing support for the technology, 37 comments or questions specifically requested further time to review the proposed technology for public comment and Privacy Advisory Board input, and the rest were neutral in nature or did not meet the level of a question or comment related to the topic. A great many of the questions asked by community members were answered by the presentation itself. Questions about data retention periods, digital security, policies, procedures, types of crimes and transparency were frequently asked and answered by Captain Jordon through the vehicle of the PowerPoint presentation.

Crime and Technology Survey:

The San Diego Police Department's survey provider Zencity conducted a real-time public sentiment survey as it relates to Smart Streetlights with embedded License Plate Recognition technology. The survey was an on-demand, statistically representative survey of community members, with 12 custom questions developed by the San Diego Police Department. The survey methodology ensured the respondents were San Diegans. The respondents provided insight into the feelings of actual/verifiable San Diegans regarding the employment of smart streetlights with automated license plate reader technology as a public safety tool.

Survey Methodology:

1. 914-person sample survey of San Diego adults 18+.
2. Respondents recruited online.
3. Fielded January 31 – February 19, 2023.
4. Survey was conducted in English and Spanish.
5. Data was weighted to represent the population in San Diego.

There were 914 respondents recruited online between January 31 and February 19, 2023, using targeted ads on various platforms (e.g., social media, apps for Android and IOS) as well as online survey panels.

Using data from the Census Bureau, this survey employed quotas to match the distribution of race, age, and gender in San Diego, ensuring that the sample represents the entire city.

Summary by the Numbers:

The following is a statistical breakdown of the Smart Streetlight with embedded License Plate Recognition technology survey. The information is broken down into the two survey categories. The percentages are based on the 914 surveys taken by the citizens of San Diego.

License Plate Readers

- 45% are completely or mostly familiar with license plate readers.
- 42% reported they would feel safer if license plate readers were introduced compared to 13% reported that they would feel less safe.
- 64% felt very comfortable with the use of license plate readers to investigate missing persons or children compared to 5% who were not at all comfortable.
- 42% believed they would be very effective in investigating missing persons or children compared to 5% who believed they were not at all effective.
- 52% felt very comfortable with the use of license plate readers to investigate violent crimes compared to 5% who were not at all comfortable.
- 35% believed that they would be very effective in investigating violent crimes compared to 6% who believed they were not at all effective.
- Privacy and accuracy/ effectiveness were the top concerns about license plate readers.

Cameras in Public Spaces

- 77% are completely or mostly familiar with cameras in public spaces.
- 47% reported they would feel more safe if cameras in public spaces were introduced compared to 10% reported that they would feel less safe.
- 65% felt very comfortable with the use of cameras in public spaces to investigate missing persons or children compared to 3% who were not at all comfortable.
- 48% believed they would be very effective in investigating missing persons or children compared to 6% who believed they were not at all effective.
- 56% felt very comfortable with the use of cameras in public spaces to investigate violent crimes compared to 4% who were not at all comfortable.
- 45% believed that they would be very effective in investigating violent crimes compared to 4% who believed they were not at all effective.
- Privacy and accuracy/ effectiveness were the top concerns about license plate readers.

Please see the Smart Streetlights with embedded License Plate Recognition technology survey at the link provided below.

- https://www.sandiego.gov/sites/default/files/zencity-technology-survey-2023.pdf