How Bias-Free Technologies Might Play a Role in Re-Imagining Policing?

Jason Potts – Moderator: Public Safety Director / Chief - City of Las Vegas

Pippin Dew – Panelist: Councilmember - City of Vallejo

Board Member & Chair Public Safety Policy Committee - California League of Cities.

Walt Allen: Panelist: Councilmember – City of Covina

Board Member Public Safety Policy Committee - California League of Cities

Andrew Salinas: Panelist: Police Chief - City of Port Hueneme

OVERVIEW

- ✓ License Plate Readers

- ✓ Auditory Detection

- ✓ Security Cameras

- ✓ The Research - Evidence-Based Policing Concepts

- ✓ Panel Discussion

What is ALPR tech?

- License plate recognition
- Gathers objective evidence and facts about vehicles
- Alerts police of wanted vehicles
- Used to solve crime
- Adheres to all state laws
- Data automatically deletes every 30 days

What Isn't ALPR tech?

- No facial recognition
- Not tied to PII
- Not used for immigration or traffic enforcement

Are we effective, just, and reducing harms?

Hiring, Staffing and Retention Concerns – **nationally many PDs 20% below targeted/allotted**

Tech as a force multiplier for staffing

Ability to Slow Down & Solve Crime Distance, Time, Cover, Numbers, Options

The **Philadelphia Police** Department is already operating at about 20% below its target staffing level. Another 800 officers and civilians are planning to retire in the next four years, and hiring isn't keeping pace inquirer.com/politics/phila… with @rw_briggs

inquirer.com
The Philly Police Department is short 1,300 officers. Here's why the si…
Police leaders have blamed both the city's uniquely stringent hiring requirements and a national shortage of people who want to become …

How a PD Responds to Alerts

in Solano County

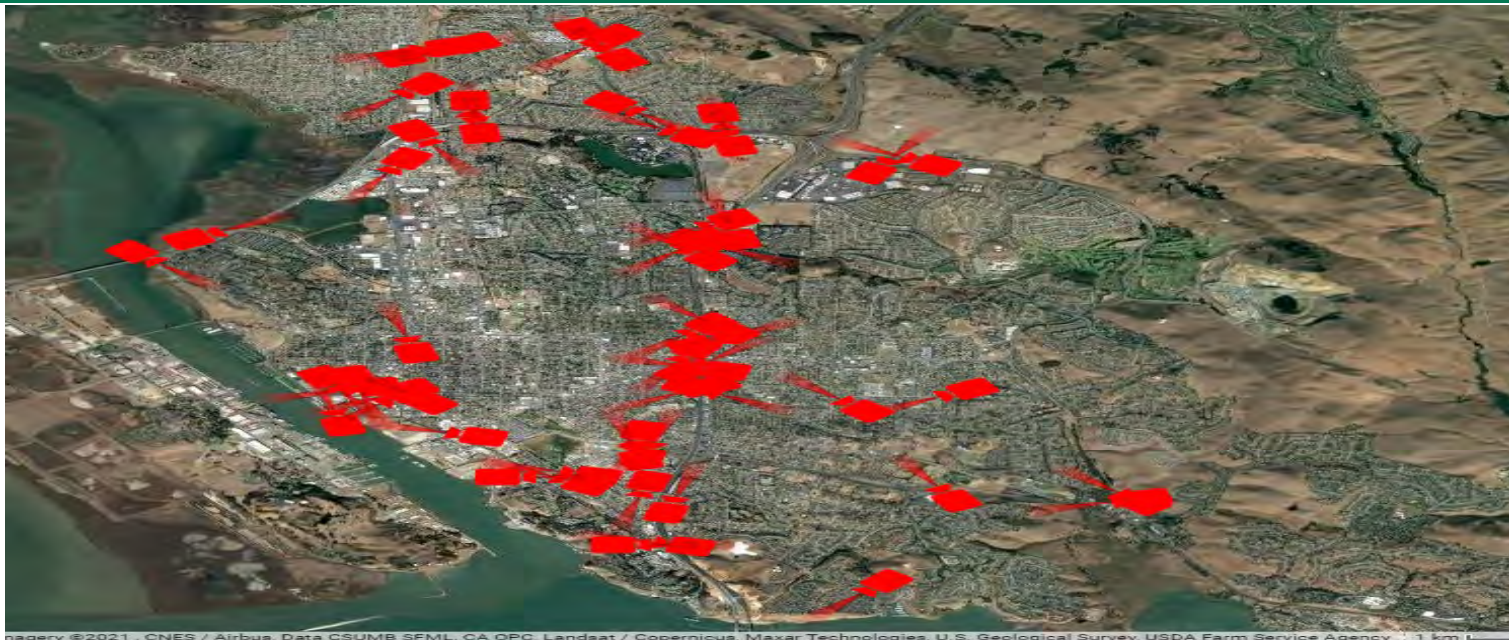**Solano Cty SO**
Vacaville PD
Fairfield PD
Rio Vista PD
Benicia PD
Vallejo PD

- Leverage a larger network of cameras throughout the region – HOAs, private business, parks etc.

- Collaboration with other agencies

- Sharing of Hotlists

DEPLOYMENTS

ALPR MODEL POLICY and SAFEGUARDS

Policy 426 — Vallejo Police Department
Vallejo PD Policy Manual

Automated License Plate Readers (ALPRs)

426.1 PURPOSE AND SCOPE
The purpose of this policy is to provide guidance for the capture, storage and use of digital data obtained through the use of Automated License Plate Reader (ALPR) technology.

426.2 DEFINITIONS
(a) Automated License Plate Reader (ALPR): A device that uses cameras and computer technology to compare digital images to lists of known information of interest.

(b) ALPR Operator: Trained Department members who may utilize ALPR system/equipment. ALPR operators may be assigned to any position within the Department, and the ALPR Administrator may order the deployment of the ALPR systems for use in various efforts.

(c) ALPR Administrator: The Investigations Bureau Captain or the Chief's designee, serves as the ALPR Administrator for the Department.

(d) Hot List: A list of license plates associated with vehicles of interest compiled from one or more databases including, but not limited to, NCIC, CA DMV, Local BOLO's, etc.

(e) Vehicles of Interest: Including, but not limited to vehicles which are reported as stolen; display stolen license plates or tags; vehicles linked to missing and/or wanted persons and vehicles flagged by the Department of Motor Vehicle Administration or law enforcement agencies.

(f) Detection: Data obtained by an ALPR of an image (such as a license plate) within public view that was read by the device, including potential images (such as the plate and description of vehicle on which it was displayed), and information regarding the location of the ALPR system at the time of the ALPR's read.

(g) Hit: Alert from the ALPR system that a scanned license plate number may be in the National Crime Information Center (NCIC) or other law enforcement database for a specific reason including, but not limited to, being related to a stolen car, wanted person, missing person, domestic violation protective order or terrorist-related activity.

426.3 ADMINISTRATION
The ALPR technology, also known as License Plate Recognition (LPR), allows for the automated detection of license plates along with the vehicle make, model, color and unique identifiers through the Vallejo Police Department's ALPR's system and the vendor's vehicle identification technology. The technology is used by the Vallejo Police Department to convert data associated with vehicle license plates and vehicle descriptions for official law enforcement purposes, including identifying stolen or wanted vehicles, stolen license plates and missing persons. It may also be used to gather information related to active warrants, suspect interdiction and stolen property recovery.

Safeguards:
- ✓ CLETS verification of status on hotlist
- ✓ Visual verification
- ✓ Clearing lists
- ✓ Entries and outcomes indicated in police reports and other reports – *for efficacy evaluation*
- ✓ Training
- ✓ Login/Log-Out Procedure
- ✓ Audits and reason for search

Prohibited
- ✓ Harassment
- ✓ Immigration enforcement
- ✓ Invasion of Privacy – only capture in public
- ✓ Personal use
- ✓ First amendment protected speech

AUDITORY DETECTION
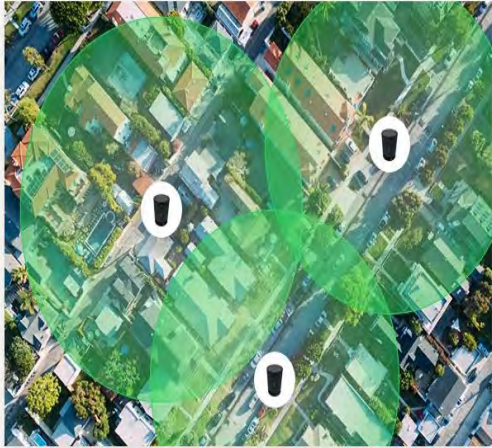
Audio detection that matches your city layout

Instead of broad, square mile coverage and large minimals due to complex infrastructure requirements, Flock can deploy as small as a ¼ mile at a time, think a single neighborhood or a single park (i.e., to cover the two main malls in Atlanta is 0.23 sqm, to cover my neighborhood is 0.2 sqm).

What makes integrated ALPR and Audio Detection helpful?
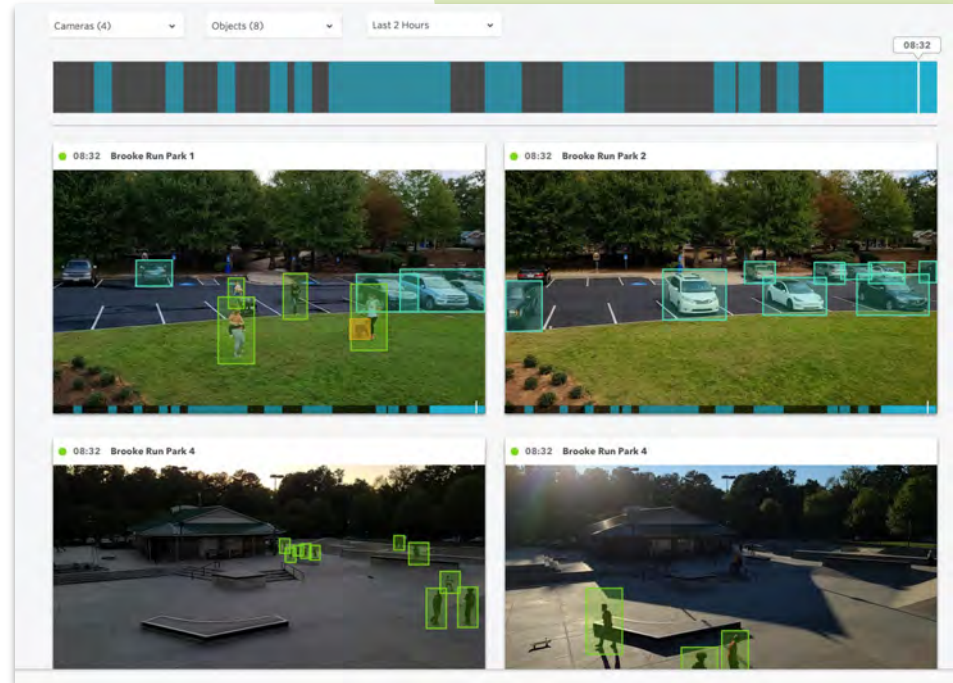
Screeching Tires

Broken Glass

Gunshots

SECURITY CAMERAS
Smart vision - a camera that knows how to call 911

- Non-vehicular evidence

- 100% cloud based

- 4k video with integrated connectivity (LTE, PoE)

- No humans required

- Send notifications on programed events

- ✓ **Harm-Focused**
- ✓ **Intelligence-Led**
- ✓ **Problem-Oriented**
- ✓ **Evidence-Based**

RESEARCH

Weisburd, D. (2015). The law of crime concentration and the criminology of place. Criminology, 53(2), 133-157.

Focused, balanced and fair – using directed and precise patrols

3- 5% of any location accounts for 50% of all crime.

Uncover the infrastructure or **crime attractors** that facilitate crime

Hotspot policing - empirical research shows that it works

> Koper Curve patrols – 15-20 minutes in an area and patrolled sporadically every 2 hours

Work the area – like an investigator works a case. Place cameras strategically and in contained hotspot areas

RESEARCH

Do license plate readers enhance the initial and residual deterrent effects of police patrol? A quasi-randomized test

Christopher S. Koper ✉, Cynthia Lum, Xiaoyun Wu, William Johnson & Megan Stoltz

Cite this article

✓ **LPR use increased stolen vehicle recoveries** but not arrests.

✓ LPR use did not reduce the likelihood of a new call in the hot spot while an officer was present,

✓ It did not affect the timing or seriousness of the next call following a patrol.

Fixed Versus Mobile Readers – *Research*

RESEARCH IN BRIEF

The IACP Research Advisory Committee is proud to offer the monthly Research in Brief column. This column features evidence-based research summaries that highlight actionable recommendations for *Police Chief* magazine readers to consider within their own agencies. The goal of the column is to feature research that is innovative, credible, and relevant to a diverse law enforcement audience.

Research in Brief: Assessing the Effectiveness of Automatic License Plate Readers

By Jason Potts, Lieutenant, City of Vallejo, California, Police Department

Although the evidence-based policing movement has gained traction, many of the policies and practices U.S. law enforcement employ are still based on dogma and tradition, rather than research. As a result, there are efforts under way to promote the use of research to make jurisdictions more effective, more efficient, and safer.

In this line of thinking, the Vallejo Police Department (VPD) in California sought to discover whether automatic license plate reader (ALPR) technology would help improve motor vehicle theft detection. In partnership with a nonprofit research organization, BetaGov, VPD conducted a randomized control trial (RCT) study that provided empirical evidence showing that ALPR technology effectively identifies stolen cars and individuals linked to auto theft crimes. This trial provided invaluable information to inform the VPD's approach to auto theft. It also showed a few of the cynics that an RCT design could be conducted successfully and result in applicable, relevant findings.

The United States presents a challenging environment for police research. With 18,000 distinct police departments, police practices often go untested despite the enormous cost of inefficient and even harmful operations.[1] Further exacerbating the issue, many departments have fewer than 10 officers and significant resource constraints.[2] Given huge variations in the size, resources, training, and culture of these agencies, many policing practices are based on traditions and anecdotal experience—not on data or research.

VPD's partnership with a research organization mitigates this limitation by providing practitioners with a roadmap to run trials that are relevant and useful to their departments.[3] With policing research, the challenge

alerts "activated" (ALPR alert function on). The control condition had their alerts "deactivated" (ALPR alert function off). The randomization schedule was set to a 2:1 ratio of intervention (alert on) to control (alert off).

Analysis of trial data found that police cars equipped with ALPR technology showed a 140 percent greater ability to detect stolen cars. However, further analysis showed the technology also identified many more lost or stolen plates—as many as four times more—many of which were duplicates

ALPR technology showed a **140 percent greater ability** to detect stolen cars.

Technology also identified **many more lost or stolen plates—as many as four times more**—many of which were duplicates that may have desensitized officers to legitimate hits.

Fixed ALPR (stationary units) were found to be more efficient than mobile ALPR in making arrests, as officers tended to sit downstream of fixed locations waiting for hits, resulting in more custody arrests.

35 percent of all hits were mis-reads for the mobile readers, with a similar number (37 percent) for the fixed readers.

San Marino PD   San Marino, CA

70%
DECREASE IN RESIDENTIAL BURGLARIES

19%
DECREASE IN PART 1 CRIMES

36%
REQUESTED INCREASE IN # OF CAMERAS

Police Chief and City Council Attribute Crime Decrease to More Cases Cleared With LPR Cameras

As the number of cleared cases increases, crime correspondingly decreases.

CPD   Chamblee, Georgia

Stranger on Stranger Abduction
August 28, 2020

When every second matters.

12:33 PM — Amber Alert Issued

1:01 PM — Search Conducted with cameras

2:30 PM — Suspect Vehicle Located

5:03 PM — Felony Stop + Arrest

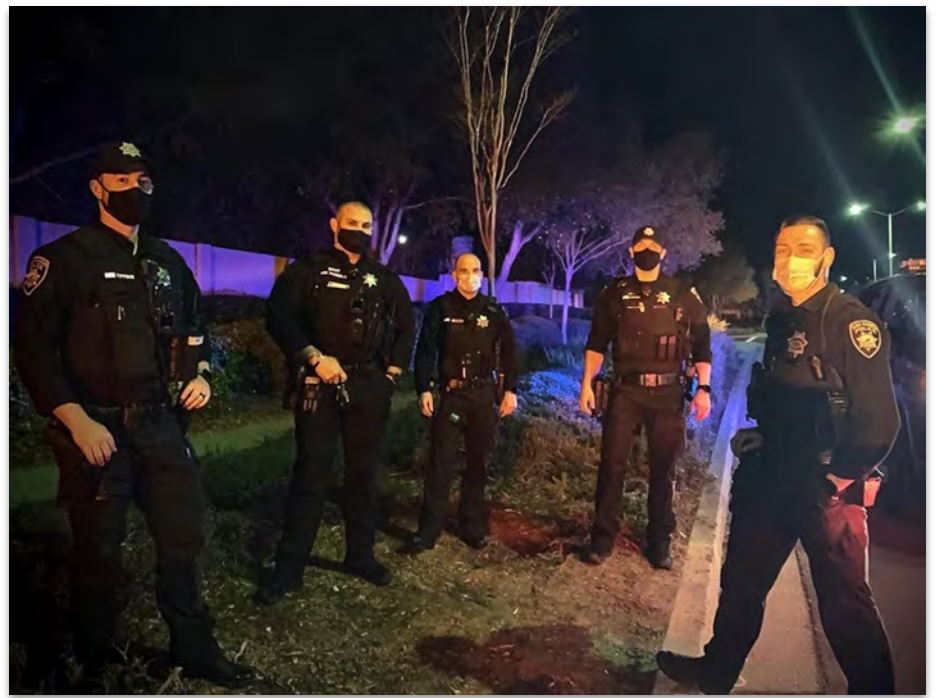**6:00 PM** — Baby Reunited with Mother

⬟ San Ramon PD   📍 San Ramon, CA

- Jan. 14: Officers received an alert on a **vehicle believed to be associated with burglaries** in the area
- Vehicle was located and officers **found 1.5 ounces of meth, stolen property and burglary tools in the vehicle.**

Before LPRS

6 Stolen Vehicle Recoveries in 8 Mo.

After LPRS

21 Stolen Vehicle Recoveries in 5 Mo.

5X Better Results

DATA-INFORMED COMMUNITY ENGAGEMENT (DICE)

DICE coordinates responses by multiple stakeholders to develop and deploy place-based strategies that disrupt situational contexts and opportunities for crime

Precise and focused approaches

Illuminating (revealing hidden problems and patterns)," and that decouple crime problems from policing solutions

Questions?

Bias Free Policing and Tech

How the City of Covina is utilizing Bias-Free policing technology

Walter Allen, Mayor Pro Tem

Is Technology Biased?

Biased Policing Defined: Discrimination in the performance of law enforcement duties or delivery of police services, based on the <u>personal</u> prejudices or partiality of agency <u>personnel</u> toward classes of people based on specific characteristics.
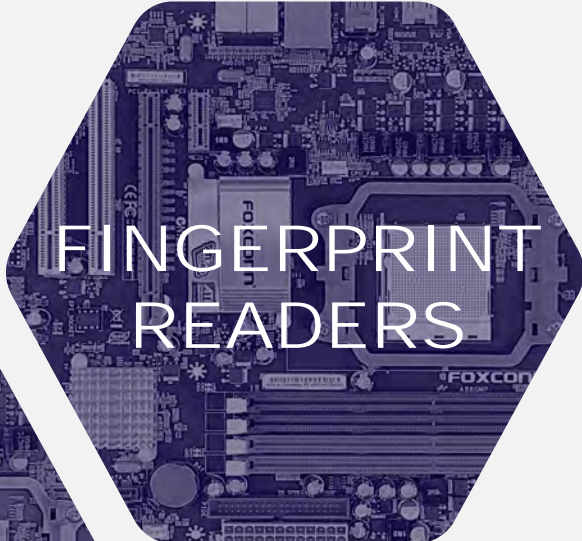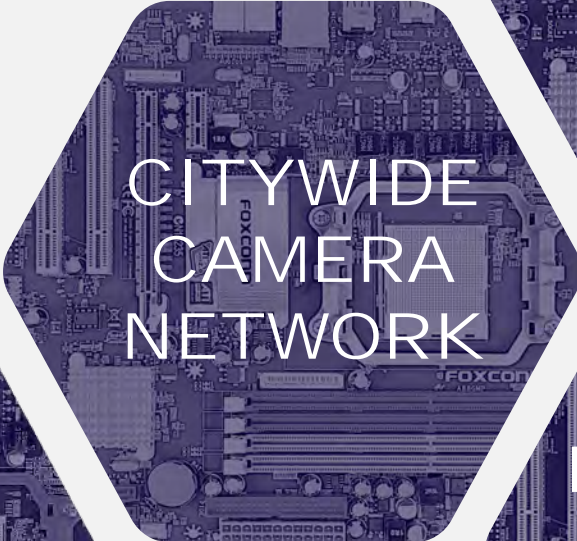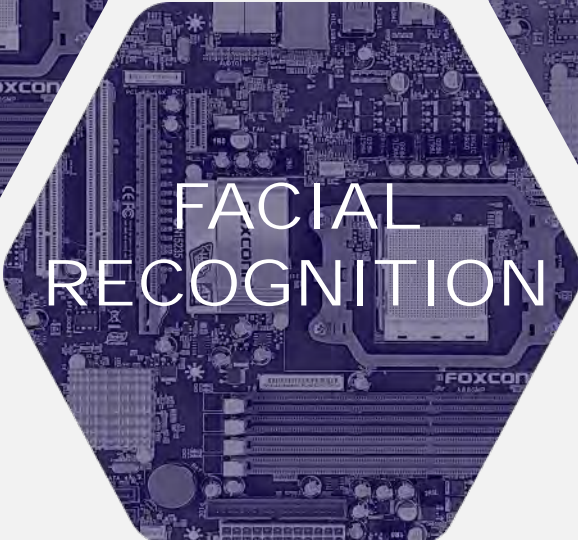
- IACP

From Palantir to Ring, to body cameras and GPS databases, technology has transformed policing – and incorporated the biases of its creators.

- Russel Contreras – Axios

Protecting our community through ethical policing and the relentless pursuit of crime

Covina PD Mission Statement

ALPR

FACIAL RECOGNITION

CITYWIDE CAMERA NETWORK

FINGERPRINT READERS

PREDICTIVE POLICING ANALYSIS

3

Automated License Plate Readers

The number one priority for any city must be public safety and the proper use of technology can provide tremendous benefits for a community

ALPR technology provide an inexpensive way to enhance public safety

services in a city.

- 70% of crimes involve a vehicle

- Roughly 750,000 children become missing or adducted each year

- ALPR data is instantly compared with an FBI database of license plates associated with criminal investigations involving murder, rape, child molestation, terrorism, sex offenders, drug trafficking, missing person, etc.

- An officer will get an immediate alert in a patrol unit and can take appropriate action to arrest a suspect, solve a crime , or save life.

- Law enforcement can also utilize historical date in their efforts to solve ongoing cases, including cold cases.

- In a national NetChoice Survey of law enforcement agencies across the US, 60% of the respondents stated that their access to historical LPR data has saved lives and of that 60% the data has been used to solve a wide range of violent crimes: murder (55.1%); kidnappings (33.2%); rapes (31.9%) and many other crimes including human trafficking, terrorism and narcotic trafficking.

4

Automated License Plate Readers

Covina PD transitioned from mobile ALPR devices to 21 cameras placed throughout the community.

Each camera scans multiple lanes of traffics for:

- Stolen vehicles (color, make, model)
- Lost/Stolen license plates
- Felony vehicles
- Other movement
- Pedestrians, bikes, etc.

Searchable database has been used to solve a variety of crimes ranging from vandalisms to homicides (*first hit resulted in human trafficking investigation)

- Ease of use enables dispatchers and patrol officers to conduct follow up immediately
- Safer apprehension of suspects (*traffic stop on the way to work vs. search warrant at home)
- Forensic use pairs with other cameras to solve crimes
- Budget friendly and more easily modified compared to previous systems
- 30 day retention period on data to address privacy concerns
- Auditable
- Does not use facial recognition

Covina TODAY

Police Dispatcher Crystal Goins monitors Cougar Park.

EXTRA SET OF EYES

CAMERA PROGRAM HELPS POLICE PROTECT PUBLIC
PAGE 5

ALSO INSIDE:

New park coming soon
PAGE 2

Seniors getting new center
PAGE 3

Tree trimming in full swing
PAGE 7

Since 2015, Covina has deployed and expanded a network of over 100 live view video cameras.

Deployed through a variety of partnerships;
- City facilities (PD, City Hall, Parks, Senior Center)
- Downtown (partnerships with downtown businesses)
- Transit (partnerships with Foothill Transit, Metrolink)
- Three School Districts

Cameras can be viewed live by
- Watch Commanders
- Dispatchers
- Other PD Staff

Mix of camera for each application
- Fixed
- PTZ (pan, tilt and zoom)
- Infrared

6
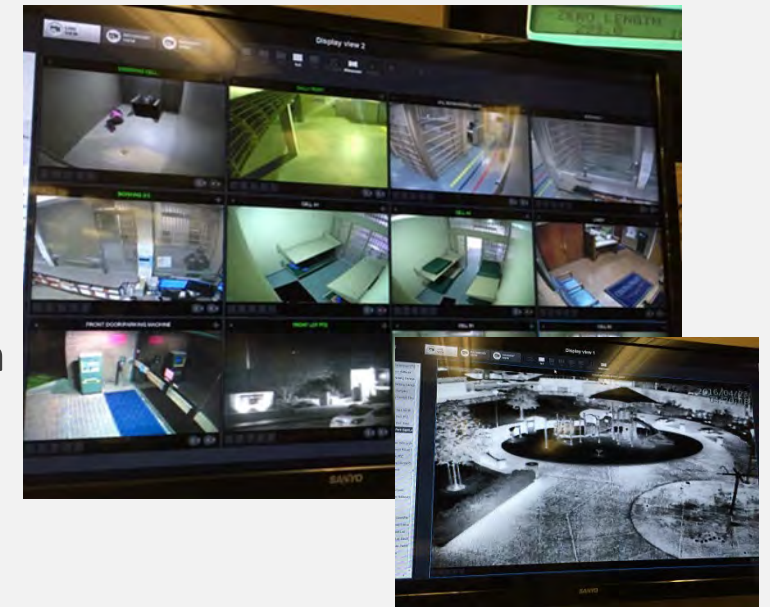
Addressing Privacy Concerns

When cameras were deployed in 2015, there was concern from some in the community regarding privacy.

- Consulted best practices to determine retention periods
  - 90 days downtown, 366 days in public facilities, 30 days at other locations as determined by partner (Covina PD experience = longer when watching us, shorter when watching public)
  - Public signage provides notice regarding camera use
  - Policy developed for official use only, not curiosity
  - No audio recording or monitoring of public
  - There is not expectation of privacy in a license plate because it is in plain view
  - ALPR's don't know who's driving or who's in the car

Cameras can be monitored live to provide eyes on before arrival
  - Improved use of resources and less need to over-deploy (*downtown bars at 2am)

Video can be used to roughly identify involved vehicles and paired with ALPR database to solve crimes, identify suspects, find victims

MAKING SMART DECISIONS ABOUT SURVEILLANCE

A GUIDE FOR COMMUNITY TRANSPARENCY, ACCOUNTABILITY & OVERSIGHT

THE ACLU OF CALIFORNIA APRIL 2016

PUBLIC SAFETY CAMERAS IN USE

Predictive Policing and Data Analysis

Collecting, recording and analyzing accurate data allows leaders to make informed decisions regarding staffing levels, shift deployments and areas in need of specialized police services.

- CPD reports on each Service Area monthly
- Supervisors report on trends and on efforts to lower crime in each area
- Analytics, heat maps and bar charts are good ways to display information; however, a skilled crime analyst is key to maintaining a quality program
- Data entry standards must be tight to be useful
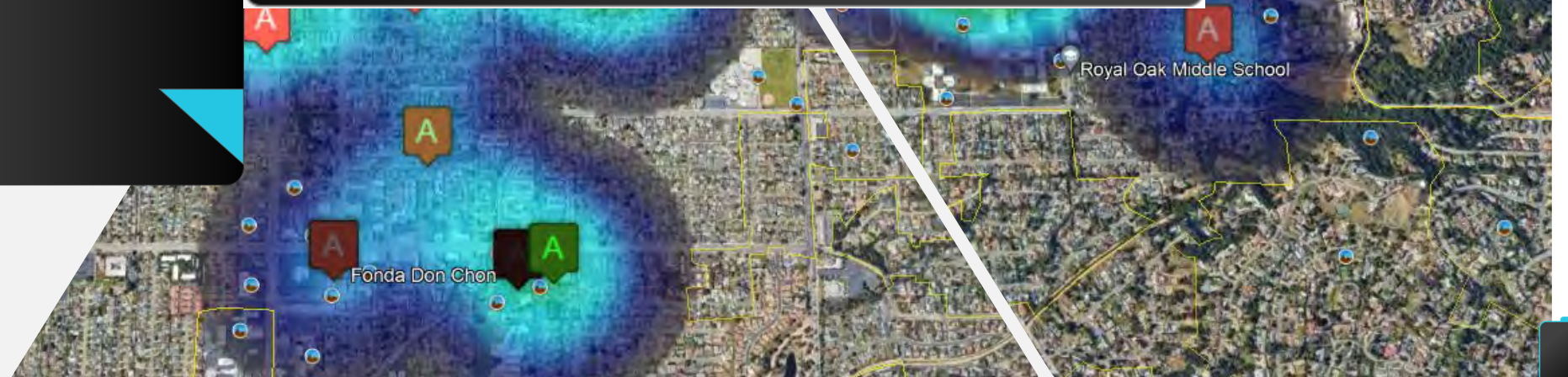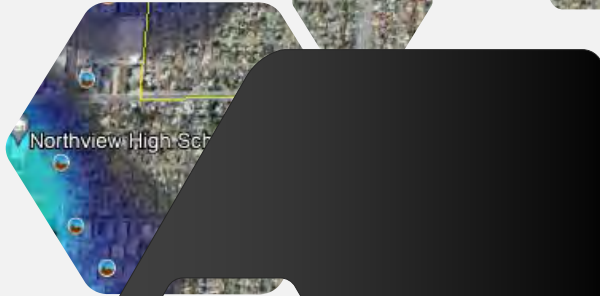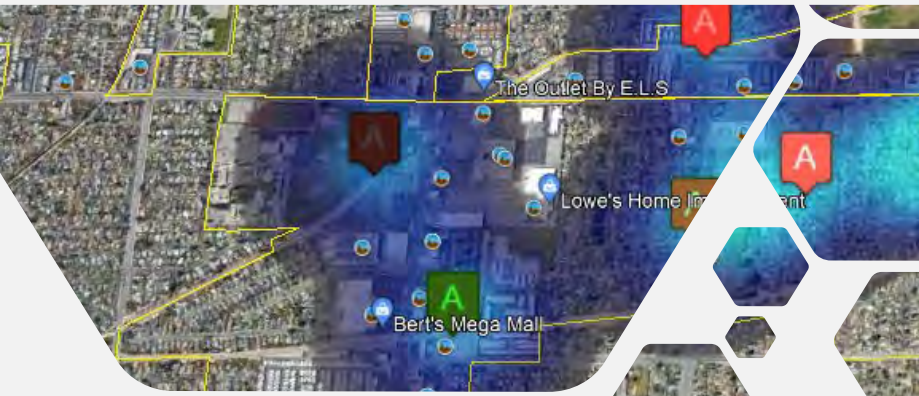
Biometric Data

Using biometric data often requires a deeper level of justification as an investigative aid. The public does expect that modern police agencies are using these devices (CSI effect) but also demands they be used responsibly.

Mobile Fingerprint Reading Devices

The ability to confidently identify someone in the field allows for:

- More suspects to be cited in the field

- The ability to locate missing persons or trafficking victims

- The ability to return officer back to service without time for transportation, booking and fingerprinting

- Only queries databases, does not store information to address privacy concerns

- CPD requires the same legal standing required to perform a warrant check over the radio, be satisfied when using a fingerprint reader

Facial Recognition Devices

Like fingerprints, facial recognition devices allow for a quick and accurate identification.

- FR can be used when a photo/video of suspect is present but the persons identity is unknown

- CPD requires that facial recognition only be used for an active investigation, imminent safety threat, or to identify deceased or uncommunicative persons.

- FR technology continues to improve

- S/ with Felony warrants and fake ID rented an RV and was ID'd using FR

COVINA POLICE DEPARTMENT
444 N. CITRUS AVE. COVINA, CA 91723

CHIEF OF POLICE

CRIME INFORMATION   DAVID POVERO CHIEF OF POLICE

August 12, 2022
WANTED

Kathleen Hana Gibbons

Case #: 22-10571; WANTCOV0448
CRIME(S): 530.5 PC, 503 PC,
LOCATION: 1101 N. Langham Ave, Covina
SUSPECT: Kathleen Hana Gibbons **AKA:** N/A **DOB:** 10/02/1994 **CDL:** Y3428125 **DESC:** Female White, 5'8 / 140lbs, Bro / Bro, Tattoo on the upper left arm, bull nose piercing, upper chin piercing.
VEHICLE:CA-**65032G2** white 2017 Ram1500 w/ attached Lance 650 Camper STOLEN/OUTSTANDING
LKA: 719 Copeland Court, Santa Monica / 1415 W. North St #319 Anaheim

On April 13, 2022 Kathleen Gibbons used a fake California License (CA-D2531482, Nelly Karina Mora Roiz) to rent a white 2017 Ram 1500 w/ camper attached from the victim using the Outdoorsy RV rental application. S/Gibbons was due to return the truck and camper by April 16 but did not return it and has stopped all communications with the victim. S/Gibbons frequents the areas of Anaheim, and Santa Monica. S/Gibbons is identifying herself as Nelly Mora and is in possession of a counterfeit California Driver's License (D2531482). Gibbons is arrestable for 530.5 PC, 503 PC per 836 PC

S/Gibbons has a **NO BAIL** warrant for drug sales/transport 19WF1402, and a $100,000 **FELONY** warrant for Felon in Possession of a Firearm LAXSA10012601
Please confirm all warrant/criminal/arrestable information prior to attempting service.

Covina Police Department 444 N Citrus Ave, Covina, CA 91723 24-HR Dispatch (626) 384-5808 | Watch Commander (626) 384-5665 / 5667

LAW ENFORCEMENT USE ONLY

Comprehensive Fair and Bias-Free Policing

- **Leadership –** Leaders must convey a strong commitment to personnel and the community regarding bias-free policing.

- **Recruitment and Hiring –** In addition to recruiting for diversity, leaders must maintain positive community-police relations to guard against human biases.

- **Training –** Police agencies should provide training regarding recognition, reduction, and management of bias.

- **Supervision and Accountability –** Supervises must also be trained and must ensure accountability regarding bias, including documentation through evals, early intervention systems, complaints and work reviews.

Comprehensive Fair and Bias-Free Policing

- **Measurement and Assessment** – Like crime statistics, measuring bias can be difficult and must be evaluated not only by numbers but by other human beings. These efforts; however, are worthwhile in determining where changes are needed.

- **Operations** – Leaders should replace "unfocused enforcement efforts" with focused information-led strategies.

- **Community Outreach** – Outreach should occur to the many diverse communities we serve. Outreach also includes every interaction between and officer and a community member.

- **Future Orientation** – With community involvement, continue advancing the proper use of new technologies to combat crime in the safest, most efficient, transparent and cost effective manner.

ThankYou

👤 Walter Allen

📱 (626) 384-5410

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🔗 covinaca.gov