



MEMORANDUM

TO: Crystal Dyches, City Manager

FROM: Paul Marzocca, Police Chief

SUBJECT: Flock Safety- License Plate Reader and Gunshot Detection System

DATE: November 16, 2022

Proposal:

The purchase of a Flock Safety – License Plate Reader and Gunshot Detection System.

Background:

Gun violence in the United States has been rising significantly for several years, and according to the Center of Disease Control, in 2021, more than 45,000 people were killed in the United States due to gun violence. The 2021 statistics shattered the previous record in 2020 by more than 3,500 deaths. In 2021, Arizona, the rate of homicide deaths involving firearms increased 22% compared to the 18% nationwide average.

City Of El Mirage Data:

In 2021, there were 142 calls reporting shots fired in our city. As of August 2022, there have been a total of 72 reports of shots fired in our city, with one resulting in homicide, more than ten resulting in injuries to victims, and dozens resulting in damage to homes and vehicles. Statistical data reveals that on average, 80% of gunfire goes unreported to 9-1-1. The purchase of a Flock Safety – License Plate Reader and Gunshot Detection System will assist officers in combating violent gun crimes by allowing for gunshots to be detected and for officers to proactively respond. The system will also allow officers to further excel by identifying vehicles involved in the violent crimes. Vehicles are commonly used in a multitude of violent crimes including shots fired, drive by shootings, aggravated assaults, domestic violence, kidnappings and illegal drug activity.

At the close of 2021, a detection system (we will call **Brand X** to not reveal the company) similar to the Flock Safety – License Plate Reader and Gunshot Detection System was deployed in a complex

investigation involving a suspect who fired upon dozens of police officers in and around the city. Knowing the serious nature of the suspect's actions, the City of Phoenix loaned a number of their Brand X sensors which were deployed around the city. The system allowed officers to swiftly respond to the exact locations of the shootings, search for the suspect, any possible victims and evidence (shell casings). The use of the Brand X's sensors allowed for the EMPD to understand its capabilities, collect evidence of shootings, identify suspects, and make arrests. The Brand X system proved to increase officer safety using its mapping system, allowing officers to formulate the best approach to a shooting scene. The Brand X sensors detect shots fired and transmit the exact location of the shots fired to officers and dispatchers by cellular phone and mobile data computers in less than 60 seconds.

The Brand X system was solely a gunshot detection system. The Flock Safety – License Plate Reader and Gunshot Detection System is considered a more modern system which will allow officers to detect the almost exact location of gunshots and locate vehicles involved in the unfortunate common violent crimes. A system such as the Flock Safety – License Plate Reader and Gunshot Detection System used in the serial shooter investigation would have resulted in a more swift ending to the multiple shootings at police officers.

Request

On behalf of the EMPD, I am requesting the purchase of the Flock Safety – License Plate Reader and Gunshot Detection System. The system pinpoints the exact location of shooting events within two meters and in real time. With officers responding to more shooting scenes, more evidence and information will be collected. In terms of fired cartridge cases, more cases will be submitted for processing through the National Integrated Ballistic Information Network (NIBIN) in a timely manner. The more exhibits processed through NIBIN, the greater potential for generating actionable crime gun intelligence through the linking of crimes, guns and suspects. An example of this was seen in July of 2022, when EMPD officers responded to a shooting in the city. Several guns and shell casings were seized as evidence and were compared to NIBIN, linking two guns and shell casings to other shootings in the City of Phoenix, one resulting in a homicide. The system will further the EMPD's capabilities by allowing officers to quickly locate and identify vehicles involved or fleeing from the horrific crimes. Locating vehicles in a timely manner is paramount to the success of many violent crime investigations. The Flock Safety – License Plate Reader and Gunshot Detection System are integrated into streetlights or other fixtures and blend in well within our communities and are nearly unnoticeable.

Community Impact

The Flock Safety – License Plate Reader and Gunshot Detection System will have a positive impact within our community. The system will allow officers serving the community to respond safely to violent gun crimes. The system will allow officers to canvass areas where shootings occurred for victims, suspects and crucial evidence. With the Flock Safety – License Plate Reader and Gunshot Detection Systems deployed within our communities, officers will be able to serve the community more effectively and efficiently, serving those who have learned to live in area where violent crimes are a norm and gunshots are heard regularly.

System Overview

What makes Flock Safety's technology different:

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

Flock Safety's mission is to eliminate crime. This is possible with city-wide coverage of automatic license plate readers (ALPRs) for public safety organizations and private citizens. When a crime occurs, Flock Safety cameras deliver the actionable evidence needed to make an arrest. Flock Safety camera systems live in over 1500 cities in 40 states and over 1000 police departments. With an average of 120 Hot List notifications sent an hour with jurisdictions throughout the U.S., the Flock Safety's team is helping agencies solve and prevent crime every minute.

The Flock Safety ALPR camera and devices are the only Law Enforcement Grade ALPR System to offer the following combination of proprietary features:

1. **Patented Vehicle Fingerprint Technology:** Patented proprietary machine vision to analyze vehicle license plate, state recognition, vehicle color, vehicle type, vehicle make and objects (roof rack, bumper stickers, etc.) based on image analytics (not car registration data). Machine vision to capture and identify characteristics of vehicles with a paper license plate and vehicles with the absence of a license plate. Ability to 'Save Search' based on description of vehicles using the company's patented Vehicle Fingerprint Technology without the need for a license plate and set up alerts based on vehicle description. The company is the only LPR provider with "Visual Search" which can transform digital images from any source into an investigative lead by finding matching vehicles based on the vehicle attributes in the uploaded photo
2. **Integrated Cloud-Software & Hardware Platform:** Ability to capture two (2+) lanes of traffic simultaneously with a single camera from a vertical mass. Best in class ability to capture and process up to 30,000 vehicles per day with a single camera powered exclusively by solar power. Wireless deployment of solar powered license plate reading cameras with integrated cellular communication weighing less than 5lbs and able to be powered solely by a solar panel of 60W or less. Web based footage retrieval tool with filtering capabilities such as vehicle color, vehicle type, vehicle manufacturer, partial or full license plate, state of license plate, and object detection. Utilizes motion capture to start and stop recording without the need for a reflective plate. Motion detection allows for unique cases such as bicycle capture, ATV, motorcycle, etc.
3. **Transparency & Ethical Product Design:** One-of-a-kind "Transparency Portal" public-facing dashboard that details the policies in place by the purchaser, as well as automatically updated metrics from the Flock system. Built-in integration with NCMEC to receive AMBER Alerts to find missing children. Privacy controls to enable certain vehicles to "opt-out" of being captured

4. Integrated Audio & Gunshot Detection: Natively integrated audio detection capabilities utilizing machine learning to recognize audio signatures typical of crimes in progress (e.g., gunshots)
5. Partnerships: Flock Safety is the only LPR provider to officially partner with Axon to be natively and directly integrated to be fully integrated into a dynamic network of Axon's Fleet 3 mobile ALPR cameras for patrol cars and Flock Safety's Falcon cameras. Access to additional cameras purchased by the company's HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost.

First year costs for the system to be purchased through Council approved Capital Improvements, Activity Code 62334 and subsequent years would have to be included in the yearly budget. The initial ask is for 24 LPR's at a cost of \$70,900.00. The cost to have four square miles of gun detection is \$100,000. Each square mile is approximately \$25,000 which consists of upwards of 50 devices for each square mile.

FireFly Gunshot Sensors

Overview

Submitted By	Paul Marzocca, Police Chief
Request Owner	Paul Marzocca, Police Chief
Department	Police
Type	Capital Equipment
Project Number	62334

Description

Installation and sustainment of 28 FireFLY-LE2 sensors. These sensors pinpoint the exact location of the shooting events within a defined area in real-time. With law enforcers responding to more crime scenes, more evidence and information will be collected. In terms of fired cartridge cases, more will be submitted for processing through the National Integrated Ballistic Information Network (NIBIN) in a timely manner. The more exhibits processed through NIBIN, the greater the potential for generating actionable crime gun intelligence through the linking of crimes, guns and suspects. The attached quote from CGIT includes a 2-year sensor system sustainment cost, including cellular communication, database storage, maintenance, and technical support.

In the past 23 months 211 shots fired calls were reported to EMPD. Statistical data reveals that 80% of gunfire goes unreported to 9-1-1 on average. Using this model an additional 168 shots fired calls went unreported. Statistical data also reveals that only 1% of the population is responsible for 2/3rd of all shootings. The goal is to improve community quality of life and reduce gun violence.

Gunfire sensors detect shots fired and transmit the data to officers in the field by cellular phone and mobile data computer in less than 60 seconds with an exact location of the shots fired. Officers are also provided with an audio file of the shots fired to help validate its gunfire. Officers can approach the area in safety as they now know exactly where the shots were fired. When citizens call 9-1-1 a general area of the shots fired is given. Officers approaching the area are at a much higher risk of not knowing where the shooting specifically occurred. With the data from the system, shell casings are more easily located as they know the exact location of the shooting to collect critical evidence.

Gunshot sensors are portable so they can be moved around the City of El Mirage as necessary to combat violent gun crimes. The sensors are integrated into streetlights to help blend into the environment.

This request is eligible for ARPA funding.

The 2021 National Community Survey found that 50% of El Mirage residents rate their overall feeling of safety favorably (67% report feeling safe from violent crime and 57% report feeling safe from property crime), 72% rank the quality of police services favorably, 52% rank the quality of crime prevention favorably, and 95% of residents feel it is important for the city to focus on the overall feeling of safety in the next 2 years.

Images



Firefly



Map

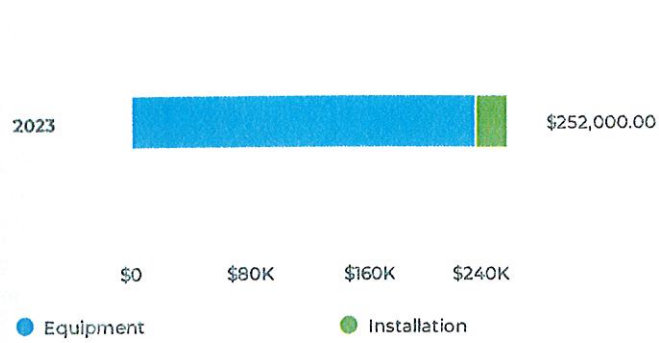
Details

Division	Police General
Project Amount	None
New Purchase or Replacement	New
Strategic Priority	Safe Community
Grant Funding	No
Bond Eligible	No
Project Status	New

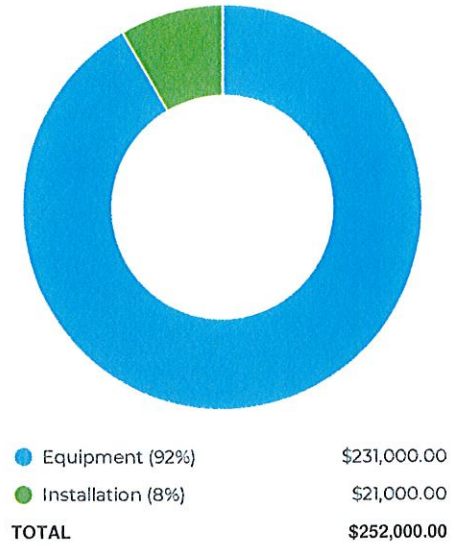
Capital Cost

FY2023 Budget **\$252,000**
 Total Budget (all years) **\$252K**

Capital Cost by Year



Capital Cost for Budgeted Years



Capital Cost Breakdown

Capital Cost	FY2023
Equipment	\$231,000
Installation	\$21,000
Total	\$252,000

flock safety

Created Date: 11/16/2022

Expiration Date: 12/31/2022

Quote Number: Q-06193

Prepared By: Kraig Gardner

Phone: 8017178299

Email: kraig.gardner@flocksafety.com

Address Information

Bill To:

12401 W Cinnabar Ave
El Mirage, Arizona 85335

Ship To:

12401 W Cinnabar Ave
El Mirage, Arizona 85335

Billing Company Name: AZ - El Mirage PD

Billing Contact Name:

Billing Email Address:

Billing Phone:

Billing Fax:

Terms and Conditions

Contract Start Date: 01/06/2023

Subscription Term: 12 Months

Billing Frequency: 50%/25%/25%

flock safety

Hardware and Software Products

Annual recurring amounts over subscription term

Products	Product Description	Product Sales Price	Product Quantity	Annual Product Price
Raven Audio Detection Device - 1mi	Raven Audio detection - 1 square mile of coverage. Number of units deployed depends on geography and density of area. Raven detection is license by coverage area, not number of units. Install included.	\$25,000.00	4	\$100,000.00

Subtotal Year 1: \$100,000.00

Annual Recurring Subtotal: \$100,000.00

Subscription Term: 12 Months

Estimated Tax: \$9,532.50

Contract Total: \$100,000.00

Prices shown above do not include any taxes that may apply. Any such taxes are the responsibility of Customer. This is not an invoice – this document is a non-binding proposal for providing informational purposes only. Pricing is subject to change. This proposal shall be valid until the documented expiration date.

flock safety

Created Date: 11/16/2022

Expiration Date: 12/31/2022

Quote Number: Q-05532

Prepared By: Kraig Gardner

Phone: 8017178299

Email: kraig.gardner@flocksafety.com

Address Information

Bill To:

12401 W Cinnabar Ave
El Mirage, Arizona 85335

Ship To:

12401 W Cinnabar Ave
El Mirage, Arizona 85335

Billing Company Name: AZ - El Mirage PD

Billing Contact Name:

Billing Email Address:

Billing Phone:

Billing Fax:

Terms and Conditions

Contract Start Date: 01/06/2023

Subscription Term: 12 Months

Billing Frequency: 50%/25%/25%

flock safety

Professional Services and One-Time Purchases

Services and One Time Fees	Service Description	Sales Price	Quantity	Total Price
Professional Services - Standard Implementation Fee	One-time Professional Services engagement. Includes site and safety assessment, camera setup and testing, and shipping and handling in accordance with the Flock Safety Standard Implementation Service Brief.	\$350.00	24.00	\$8,400.00

Hardware and Software Products

Annual recurring amounts over subscription term

Products	Product Description	Product Sales Price	Product Quantity	Annual Product Price
Falcon	Law enforcement grade infrastructure-free (solar power + LTE) license plate recognition camera with Vehicle Fingerprint™ technology (proprietary machine learning software) and real-time alerts for unlimited users.	\$2,500.00	24	\$60,000.00
Flock Safety Advanced Search	Advanced Search is an optional upgrade for Law Enforcement Grade Falcon cameras. Advanced Search includes Convoy Analysis, Multi Geo Search, and Visual Search.	\$2,500.00	24	\$2,500.00

Subtotal Year 1:	\$70,900.00
Annual Recurring Subtotal:	\$62,500.00
Subscription Term:	12 Months
Estimated Tax:	\$5,812.50
Contract Total:	\$70,900.00

f^ock safety

Prices shown above do not include any taxes that may apply. Any such taxes are the responsibility of Customer. This is not an invoice – this document is a non-binding proposal for providing informational purposes only. Pricing is subject to change. This proposal shall be valid until the documented expiration date.

flock safety

Sole Source Letter for Flock Safety ALPR Cameras and Solution

Flock Safety is the sole manufacturer and developer of the Flock Safety ALPR Camera. Flock Safety is also the sole provider of the comprehensive monitoring, processing, and machine vision services which integrate with the Flock Safety ALPR Camera.

The Flock Safety ALPR camera and devices are the only Law Enforcement Grade ALPR System to offer the following combination of proprietary features:

1. Patented Vehicle Fingerprint Technology:
 - Patented proprietary machine vision to analyze vehicle license plate, state recognition, vehicle color, vehicle type, vehicle make and objects (roof rack, bumper stickers, etc.) based on image analytics (not car registration data)
 - Machine vision to capture and identify characteristics of vehicles with a paper license plate and vehicles with the absence of a license plate
 - Ability to 'Save Search' based on description of vehicles using our patented Vehicle Fingerprint Technology without the need for a license plate, and set up alerts based on vehicle description
 - Only LPR provider with "Visual Search" which can transform digital images from any source into an investigative lead by finding matching vehicles based on the vehicle attributes in the uploaded photo

2. Integrated Cloud-Software & Hardware Platform:
 - Ability to capture two (2+) lanes of traffic simultaneously with a single camera from a vertical mass
 - Best in class ability to capture and process up to 30,000 vehicles per day with a single camera powered exclusively by solar power
 - Wireless deployment of solar powered license plate reading cameras with integrated cellular communication weighing less than 5lbs and able to be powered solely by a solar panel of 60W or less
 - Web based footage retrieval tool with filtering capabilities such as vehicle color, vehicle type, vehicle manufacturer, partial or full license plate, state of license plate, and object detection
 - Utilizes motion capture to start and stop recording without the need for a reflective plate
 - Motion detection allows for unique cases such as bicycle capture, ATV, motorcycle, etc.
 - On device machine processing to limit LTE bandwidth consumption
 - Cloud storage of footage

flock safety

- Covert industrial design for minimizing visual pollution
3. Transparency & Ethical Product Design:
- One-of-a-kind “Transparency Portal” public-facing dashboard that details the policies in place by the purchaser, as well as automatically updated metrics from the Flock system
 - Built-in integration with NCMEC to receive AMBER Alerts to find missing children
 - Privacy controls to enable certain vehicles to “opt-out” of being captured
4. Integrated Audio & Gunshot Detection:
- Natively integrated audio detection capabilities utilizing machine learning to recognize audio signatures typical of crimes in progress (e.g., gunshots)
5. Partnerships:
- Flock Safety is the only LPR provider to officially partner with AXON to be natively and directly integrated into Evidence.com
 - Flock Safety is the only LPR provider to be fully integrated into a dynamic network of Axon’s Fleet 3 mobile ALPR cameras for patrol cars and Flock Safety’s Falcon cameras
 - Access to additional cameras purchased by our HOA and private business partners, means an ever-increasing amount of cameras and data at no additional cost
6. Warranty & Service:
- Lifetime maintenance and support included in subscription price
 - Flock Safety is the only fully integrated ALPR one-stop solution from production of the camera to delivery and installation
 - Performance monitoring software to predict potential failures, obstructions, tilts, and other critical or minor issues

Thank you,



Garrett Langley CEO, Flock Safety



February 2, 2022

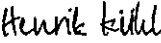
Flock Group, Inc., dba Flock Safety
Attn: Garrett Langley, CEO
1170 Howell Mill Road NW, Suite 210
Atlanta, Georgia 30318

Re: Unified search capabilities

Dear Garrett,

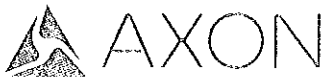
This letter is to confirm that, as of the date of this letter, Flock Group, Inc. ("Flock") and Axon Enterprise, Inc. ("Axon") maintain a strategic relationship that allows Flock to operate the only third-party unified search solution that searches automated license plate recognition information stored and managed across Axon's and Flock's systems.

Sincerely,

DocuSigned by:

819F4A56441C491...

Henrik Kuhl
VP, Strategy and Corporate Development





1700 N 34TH STREET
SCOTTSDALE, ARIZONA 85258

AXON.COM

November 30, 2021

To: Irving Police Department

Re: Sole source letter for Axon Evidence digital evidence management services and Flock automated license plate recognition technology

A sole source justification exists because Axon Enterprise, Inc. ("Axon") is the only digital evidence management system with the express right to integrate Flock's automated license plate recognition technology with Axon Evidence services.

Axon's relevant SKUs for this justification include the following:

1. **74300** Flock Safety ALPR Camera System
2. **74302** Flock Safety ALPR Camera System Installation

Sincerely,

A handwritten signature in black ink, appearing to read 'Josh Isner', written over a white background.

Josh Isner
Chief Revenue Officer
Axon Enterprise, Inc.

Flock is a trademark of Flock Group, Inc., dba Flock Safety.

The Axon + Delta Logo Axon, and Axon Enterprise are trademarks of Axon Enterprise, Inc., some of which are registered in the US and other countries. For more information visit www.axon.com/legal. All rights reserved. © 2021 Axon Enterprise, Inc.

Increase response time and case clearance with integrated audio and ALPR evidence capture

Flock Safety Raven™ Audio Crime Sensor

Raven integrates directly with the Falcon™ ALPR camera. The device recognizes audio signatures typical of crimes in progress like gunshots, screeching tires, breaking glass, and consolidates that evidence with Falcon ALPR data into one streamlined system.

Detect gunshots and other crimes in progress anywhere you deploy LPR

Gunfire
Breaking glass
Screeching tires



Homicide
Burglary / Vandalism
Street racing

Uncover real-time, actionable leads:

- Raven detects gunfire and alerts the nearest camera.
- Falcon captures the Vehicle Fingerprint for the suspect vehicle.
- Dispatch verifies the call for service in FlockOS, deploys first responders, and sets up a Hot List alert.
- Patrol Officers receive a hit from another Falcon camera and pursue the suspect vehicle to make an arrest.



flock safety

Let's defeat crime together

Your partner in fighting crime



Protecting your jurisdiction is of the utmost importance. Thank you for considering Flock Safety's technology system as part of your comprehensive strategy to promote the safety of your city, citizens, and officers. We are more than just a camera company - we are a crime-fighting technology company with a mission to eliminate crime in the United States.

What makes Flock Safety's technology different

Public & private partnerships

Thousands of communities use privately-funded Flock Safety cameras throughout the country, which provides a huge benefit to local law enforcement as they can have access to those cameras without having to pay for them.

Infrastructure free

Use cameras that are solar powered and include LTE internet connectivity (unlimited use included in cost), so they can be rapidly deployed virtually anywhere.

Vehicle fingerprint™ technology

Capture far more than just license plates. Allow your investigators to search footage by vehicle type, make, color, and other unique attributes; identify the state of a license plate; capture temporary plates, paper plates, and vehicles without plates. Our cameras also capture two (2) lanes of traffic traveling up to 100 MPH.

Simple & affordable

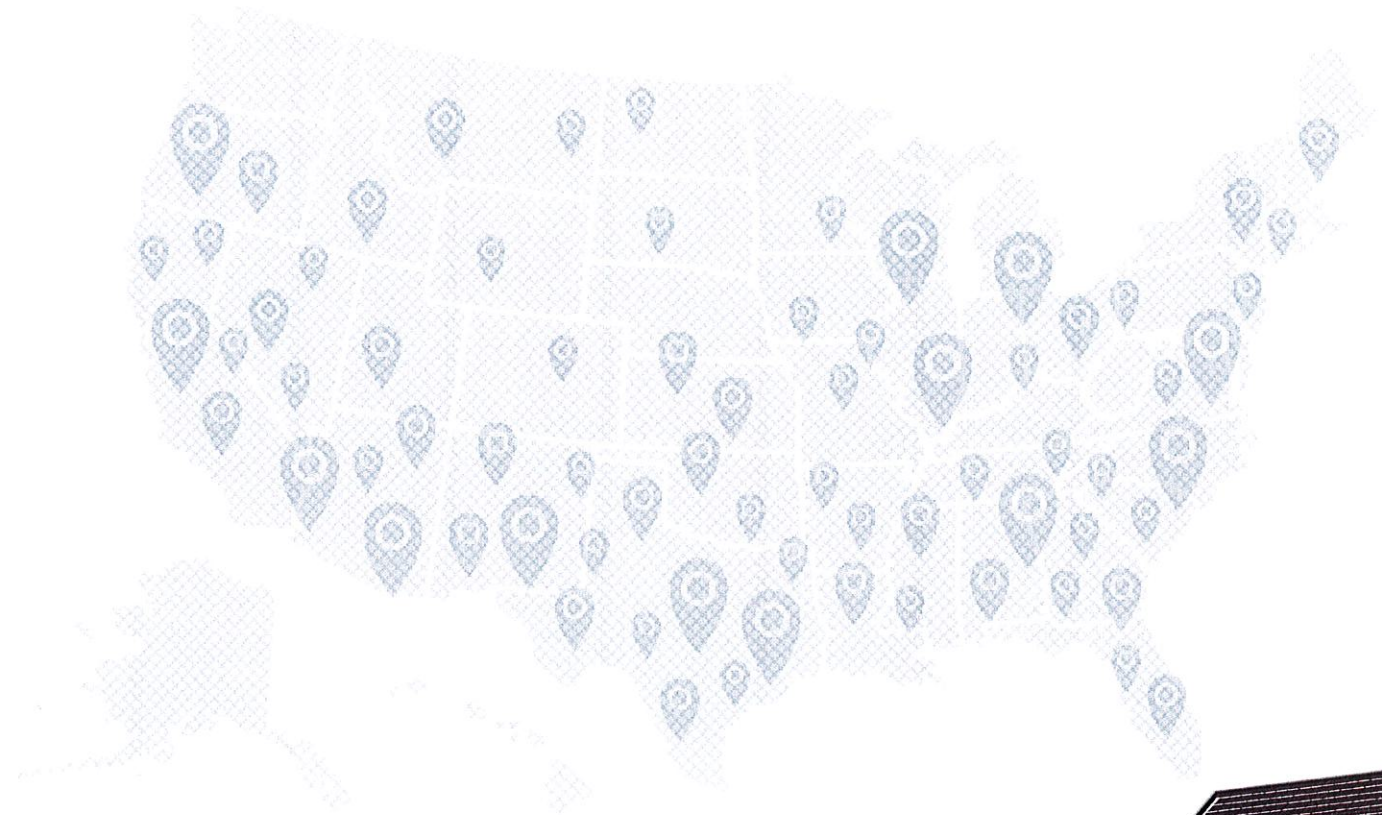
Our cameras cost \$2,500 per camera per year which includes hardware, software, solar power, LTE connectivity, unlimited users, and unlimited data storage.

Integrated Audio Detection

Uncover more than shell casings; get from "shots fired" to a suspect vehicle in real-time with the Raven™ audio detection device, an accessory for your ALPR that identifies crimes in progress before 911 is called.



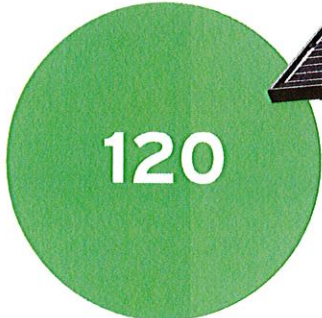
Flock Safety's technology includes fixed license plate reading cameras, audio detection devices, and software for unlimited users to access footage and receive Hot List notifications.



Law Enforcement Agencies



U.S. Cities



Stolen vehicle reads/hr



What makes Flock Safety's technology different

Police departments need a scalable solution to increase clearance rates and deter crime. Flock Safety's 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. We deliver this detail through Machine Learning technology that scans each image for distinguishing features instead of traditional metal plates. This means we can also detect vehicles with no plates, temporary plates, dirty/covered plates, and even get accurate state detection.



Our solution captures 30% more plates than our leading competitor, according to a side-by-side study done by LASD in 2019, largely due to using AI and Machine Learning to analyze the entire vehicle profile instead of legacy Infrared based technology.



In April 2019, Marietta Police Department released a study that shows they experienced a 34% reduction in calls for service by targeting crime hot spots throughout the city with Flock Safety cameras.



In October 2019, Cobb County Police Department released a study based on their installation of 13 Flock Safety cameras in March. Over the six-month period, Cobb police reported a 60% reduction in overall crime by focusing on the beat with the highest crime levels.

Company Overview

Flock Safety's mission is to eliminate crime. This is possible with city-wide coverage of automatic license plate readers (ALPRs) for public safety organizations and private citizens. When a crime occurs, Flock Safety cameras deliver the actionable evidence you need to make an arrest. Flock Safety camera systems live in over 1500 cities in 40 states and over 1000 police departments. With an average of 120 Hot List notifications sent an hour with jurisdictions throughout the U.S., our team is helping agencies solve and prevent crime every minute.



Customer Results



Jersey Village, Texas:

A camera on every street to create a virtual gate

Within one week, Flock Safety cameras notified officers of two vehicles on the NCIC Hot List. During the seizure of one of the vehicles, a wanted murderer in the state of Louisiana was arrested. Both vehicles were returned to their owners.

- Location: Houston suburb
- Flock Cameras: 50+
- Residents: 8,000
- Installation: Two months from purchase

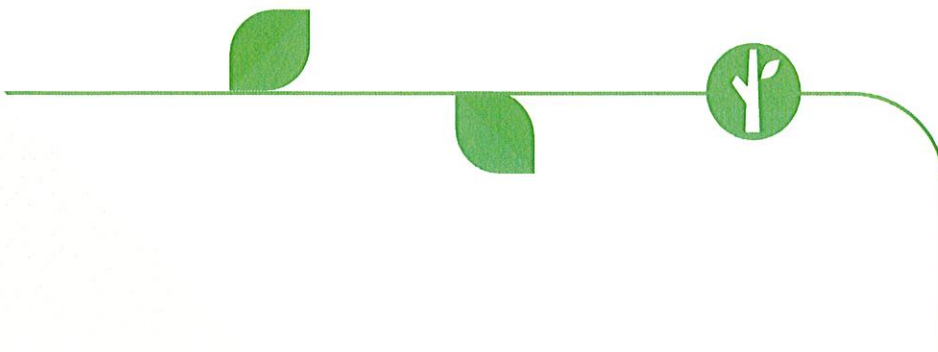


Marietta, Georgia:

34% reduction in calls for service in targeted hotspots

Cameras within the city led to the arrest of a suspect who allegedly brutally attacked a woman. Officers were able to locate and arrest the suspect using Flock cameras after weeks of the suspect being on-the-run.

- Location: Atlanta suburb, in Cobb County, Georgia
- Flock Cameras: 70 and growing within the county (30 police and 40 private cameras)
- Residents: 65,000 in Marietta
- Installation: Two months from purchase for first hotspot created



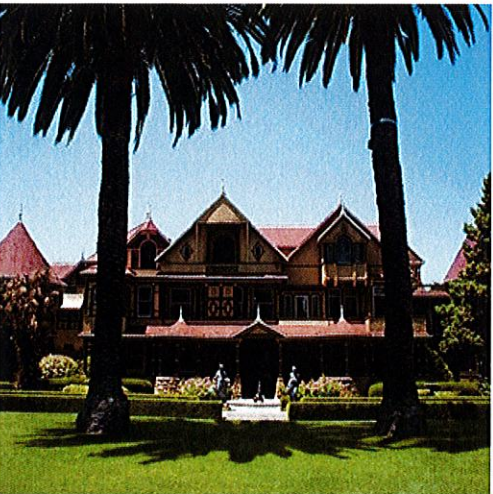
Customer Results



Cobb County, Georgia: **Containment strategy in highest crime beat of the county**

Cobb County Police Department utilized 35 Flock cameras in 2 containment zones in their highest crime beats to reduce crime by over 60%.

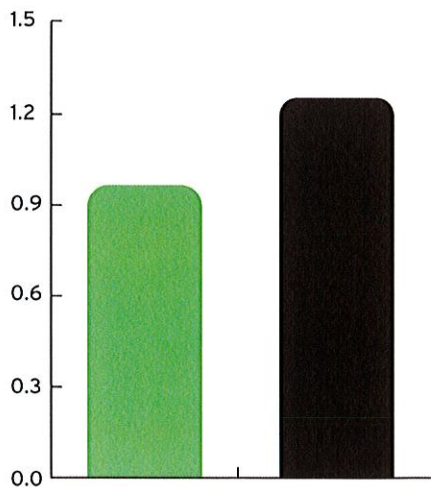
- Location: Cobb County, GA is just outside of Atlanta
- Flock Cameras: 35 for PD, over 100 including private sector cameras
- Residents: 750,000 in Cobb County
- Installation: Phased approach
- Contact: Deputy Chief Stuart Vanhoozer at stuart.vanhoozer@cobbcounty.org or (404) 375-1926



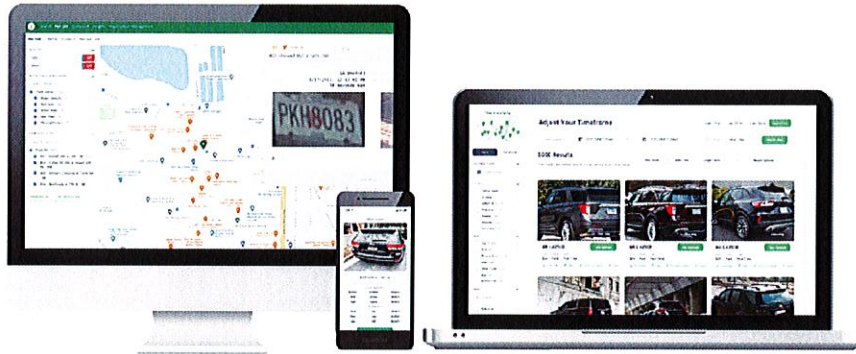
Los Angeles, California: **Sheriff's Department performs detection accuracy test**

Los Angeles Sheriff's Department performed a head-to-head test of the Flock Safety camera versus a legacy ALPR solution.

- The results showed that the Flock Safety camera captures 30% more vehicle images and provides more accurate reads than traditional cameras triggered by infrared technology.
- Conducted in limited lighting from 2:00 AM to 8:00 AM, and from 11:00 PM to 6:00 AM.
- Causes for missed vehicles and/or misread plates were associated with the amount of reflectivity of the plate (older/dirtier tags, and dealer provided paper plates).



FlockOS



Software user interface

Flock Safety Automatic License Plate Reading (ALPR) cameras do not just identify the plate seen but all the objects within the frame. Even if the vehicle does not have a tag, the image can be captured for review. The user interface provides has unlimited user licenses. Within the software component, law enforcement can receive hotlist alerts and create custom alerts for plates under your investigation.

Detect Crime

- Connected to the NCIC Hot List & CJIS compliant
- State detection to ensure quality alerts
- Hotlist alerts (includes privately owned cameras in your jurisdiction)
- Create custom alerts for tags under investigation with your organization
- Filter notifications by reason codes (exclude sex offenders, include stolen plates, etc.)
- Email and SMS alerts to users
- Audible and visual alerts

Access Evidence

- Filter search by specific camera location
- Capture vehicles regardless of plate type (paper, no plate, etc.)
- Search results with vehicle summary in multiple formats
- Filter by Vehicle Fingerprint™
- Date and time
- Vehicle Characteristics
- Plate (partial/full)
- Plate Type (in state, out of state, temporary tag)
- Build & Color
- Resident status
- Location/Date/Time



Insights

Give city council an ROI report

- Discover crime and traffic patterns
- Prioritize changes by greatest impact
- Change your community for the better

National and Local Sharing

A new way to solve cross-jurisdiction crimes

- New privacy setting (National + State search)
- 1B+ monthly reads
- Attached to "Lookup" experience

Lookup

Search plates across your jurisdiction

- "I have the plate where is the car?"
- Designed to search all cameras, all time
- Get a full view of all activity tied to one vehicle in your network

Flock on Patrol Mobile App

Scan license plates from the convenience of your mobile device

- Instantly search the FBI's NCIC Hot List and custom Hot Lists for a license plate match
- Maximize law enforcement efforts in-the-field with unlimited users
- Apply Vehicle Fingerprint™ technology to images captured on your phone



Performance

Temporary Plate



Daytime Footage



Covered Plate



Nighttime Footage



No Plate



Two Lanes of Traffic



Camera Specifications

Design

Dimensions: 8.75" x 3"

Weight: 3 lbs

IP65 Waterproof

Power

14Ah Battery

30W Solar Panel (14" x 21")

AC Power (5 ft. range)

Data

16GB local storage, ~2 weeks

Motion

Passive Infrared Motion Detection

Connectivity

Embedded Cellular LTE Connection

Cellular service provider depends on area

Production

Designed & manufactured in the U.S.

Night Vision

850nm Custom IR Array

Cloud Storage

30 days storage (Amazon Web Services)

Accessible via secure website

Images can be downloaded and stored by department



Camera Performance

Motion

NCIC and Custom Alert Notifications

Average of 10-15 seconds

Includes time, location, plate, and vehicle image

Includes state specific alerts based on image

Power Source

100-240 VAC <1 amp

60 W Solar

11-14 Volt

Processing Power

1.4GHz

64-bit quad-core CPU

Image Capture

30-50 ft from vehicles

Up to 2 lanes of traffic per camera

Date and time with camera location

Plate (state, partial, paper, and none)

Vehicle details (Make, type, and color)

Training, Ongoing Support & Timeline

New customers will first get connected with an On boarding Specialist who will spearhead the installation project to completion. Once cameras are successfully capturing footage, customers get introduced to their dedicated Customer Success Manager. This person serves as the main point of reference for all things Flock Safety (training, setup questions, etc). In addition, the Flock Safety Support team monitors the support@flocksafety.com inbox Monday through Friday, 8:00 AM to 5:00 PM EST.

Safety-As-A-Service

- Regular software updates at no additional cost
- Camera maintenance is included in the subscription
- Unlimited users for hotlist integration and alerts, and camera footage search

Installation & camera locations

The average installation is to 6-8 weeks. Camera locations and installation timing is coordinated by the Flock Safety Customer Support team.



**City intersection
Solar & existing pole**

**Entrance to Hotel Solar
& Flock 14 foot pole**

**City Foot Traffic Street
Electric & existing pole**



Details

Terms, Conditions, & Service Level Agreement Information

For the complete list of Terms & Service, please visit

<https://www.flocksafety.com/legal>.

Warranty

- All Flock products are under warranty for the duration of the Customer's contract.
- Flock cameras have built-in alarms to alert us if a camera is not performing at optimal standards. In the event of a camera performance issues, maintenance teams will be deployed at no additional cost.
- In the event the Flock camera is physically damaged or stolen, the first camera replacement will be made by Flock at not additional cost. A reassessment of camera location will be made at that time to deter further issues.
- In the unlikely case that an additional replacement camera is needed, the customer will be responsible for the \$500 cost.
- Flock reserves the right to refuse or delay replacement or its choice of remedy for a defect until after it has inspected and tested the affected Unit; provided that such inspection and test shall occur within 72 hours after the Agency notifies the Flock of defect.



Pricing

\$2,500 per camera, per year + \$350 one-time implementation fee

Camera Hardware:

- ✓ Automatic license plate reader
- ✓ Solar or DC Power
- ✓ Mounting equipment
- ✓ Maintenance Warranty

Hosting & Analytics:

- ✓ Cloud hosting
- ✓ Unlimited user licenses
- ✓ Hot list integration & alerts
- ✓ Ongoing software enhancements

Flock Safety does not provide electrical services. Electrical work not included in the price. Flock Safety's open API platform will allow neighboring agencies to pull read data into their platform at no extra cost. Flock Safety is not responsible for building this integration but it would be fully supported to export camera images from Flock Safety's ALPR Cameras.

