

VIDEO

SECURITY AND ANALYTICS
BUYING GUIDE



MOTOROLA
SOLUTIONS



BETTER TOGETHER,

A ONE-PLATFORM APPROACH SETS A NEW STANDARD.

For law enforcement, reducing crime is priority number one. Video evidence has long been a way to corroborate policing, a second set of eyes. But time and resources are always factors, and the demands for high intelligence in video systems continue. Modern agencies look for automated video systems that improve speed and accuracy, that can detect objects and generate fast and accurate search results, and that can evolve as the agencies and communities grow.

This is where Motorola Solutions' integrated approach to fixed and mobile video security and analytics thrives. Our cellular uploading gets on-site evidence back to headquarters when command staff needs it. Intelligent cameras with ALPR and advanced video analytics helps you identify threats quickly. Our high-definition cameras combined with self-learning algorithms recognize people, vehicles, weapons, license plates, faces, and activities.

Likewise, any ONVIF compliant cameras you currently have can be used with our video systems to get the most return on investment. Our open platform design means that video can also be streamed or sent to third-party applications.

This guide is intended to show you how intelligent deployment of video can not only improve your close case rate but can also speed up processes, eliminate human error, reinvigorate trust from the community, and keep officers on the street, doing their jobs. We'll walk you through scenarios so you can envision what investment in your agency's video solutions will bring you.





SMART MOBILE VIDEO

CELLULAR UPLOADING FROM A BODY-WORN AND IN-CAR VIDEO SYSTEM

Body-worn and in-car cameras are critical to law enforcement. But for agencies operating over widespread or rural areas, driving back to the station to dock cameras and upload footage can be tedious and time-consuming. We solved this problem with wireless cellular uploading. Our in-car and body-worn cameras work together as a singular network, with automatic activation. When a recording has ended, all evidence is packaged and uploaded over the cellular network. And efficiency isn't the only improvement with our police video system. Tied in with real-time alerting analytics like license plate recognition (LPR), officers can proactively deter in-progress crimes while supplying the station with the evidence it needs, anytime, anywhere.

Looking to secure funds for police technology initiatives, in-car video, and body cameras? [Download our 2020 Grant Funding Guide.](#)



PANORAMIC



ALPR HOTLIST



LTE



LIGHTS ON, CAMERAS TRIGGERED

A deputy begins to pursue a speeding white sedan in a remote location. His lights automatically activate the body-worn and in-car cameras.



9:35 AM



PLATE SCAN: POSITIVE ID

As he pulls the sedan over, the dashcam scans the plate against the agency's hotlist. A positive match is identified: The sedan was reported stolen the previous day.



9:36 AM



ARREST

The deputy orders the driver out of the sedan. He complies and is arrested. Conducting a search, the deputy finds illegal drugs



9:41 AM



BACKUP DISPATCHED, TALKGROUP INITIATED

Dispatch locates the deputy's GPS and assigns a unit to assist, patching together a talkgroup. When the second unit arrives, her cameras automatically activate.



9:37 AM



EVIDENCE UPLOAD VIA CELLULAR





The officers upload the video via cellular signal. Command staff reviews the footage and shares a clip for the media via the cloud.



9:50 AM

RURAL TRAFFIC STOP

UPLOAD EVIDENCE FROM ANYWHERE

-  WATCHGUARD IN-CAR AND BODY-WORN VIDEO SYSTEM
-  EVIDENCE LIBRARY MANAGEMENT SYSTEM
-  VIGILANT PLATESEARCH
-  TALKGROUP



CREATE A VIRTUAL PUBLIC SAFETY FENCE

ANALYTICS & FIXED LICENCE PLATE RECOGNITION AS A FORCE MULTIPLIER

Case closure rate is one of the most tracked metrics to build support from the community. But scarce resources can lag in tracking down persons of interest.

In the field, license plate recognition (LPR) provides the necessary support you need to locate vehicles. By capitalizing on license plate hotlists and custom alerts, your officers have the information they need before they get out of the car.

At the station, our LPR solution lets you create and manage your hotlists of vehicles of interest, and share them with other agencies that access the database. You can conduct vehicle canvasses for immediate analysis, giving you rapid deployment.

But we go a step further to put more data at your fingertips than you can find anywhere else. We created a unified network of detection data that comes from across jurisdictions and even industries. We designed our LPR solutions for flexibility. Now, you can more strategically deploy mobile and fixed cameras to proactively prevent, detect, and respond to crime in real time.

Want to accelerate your investigations? [See how Vigilant Solutions leads the way.](#)



LEARN DATABASE








VIRTUAL FENCE



ALPR HOTLIST

RESIDENTIAL FLEEING BURGLAR

CREATE A VIRTUAL FENCE WITH ALPR

-  VIGILANT PLATESEARCH
-  COMMANDCENTRAL SOFTWARE
-  VIGILANT CRIMESEARCH
-  VIGILANT FIXED LPR CAMERAS
-  WATCHGUARD BODY WORN AND IN-CAR CAMERA SYSTEM



WITNESS: PARTIAL PLATE

Julie sees a burglar at an out-of-town neighbor's. She calls 9-1-1 as the burglar flees by car. Julie captures part of the license plate and reports it to the arriving officers

11:13 PM



ALERTS & ANALYTICS

Within minutes, the analyst receives an alert. She notifies the officers who begin pursuit. The analyst tracks further vehicle hits and researches historical LEARN database locations to coordinate the officers."

11:18 PM



VIRTUAL FENCE CREATED

Officers search this virtual fence determined by the analyst. As in-car and mobile LPR cameras scan, they quickly locate the vehicle in question.

11:22 PM



CAMERAS TRIGGERED

As they exit their vehicles, their body-worn and in-car cameras begin recording. They take the suspect into custody successfully.

12:21 PM



SUSPECT ARRESTED

The officers upload the video via cellular signal. Command staff reviews the footage and shares a clip for the media via the cloud.

12:23 PM



MATCH IDENTIFIED

At HQ, an analyst cross-references the partial plate with the described vehicle. She identifies a probable match and adds the vehicle to the agency's hot list.



EXPAND CITYWIDE VIDEO SURVEILLANCE

PUBLIC/PRIVATE PARTNERSHIP THROUGH AVIGILON CAMERAS
& COMMANDCENTRAL AWARE

For many communities, proactively reducing crime truly requires a partnership among police departments, businesses, and citizens. Nowhere is this more effective than with video surveillance. By creating a public-private partnership for high-quality video system deployment and sharing, you gain access to a much larger network of cameras while providing your community peace of mind. And by leveraging purpose-built, real-time intelligence operations software, you can federate disparate video feeds into a unified view. Go beyond video as an investigative tool, and be well on your way to building a real-time crime center for virtual patrolling and operational support to those in the field.

[Discover Avigilon's next-generation analytics for perimeter and crowded environments.](#)



AUTOMATED ALERTS



REAL-TIME MONITORING



SAFER RESPONSES

SAFER CITY STORE VANDALISM

FIXED VIDEO PUBLIC-PRIVATE PARTNERSHIP

- AVIGILON CAMERAS (EXCEPT H4 PRO 24MP AND 30MP) & ANALYTICS
- AVIGILON CONTROL CENTER
- COMMANDCENTRAL AWARE
- AVIGILON CLOUD SERVICES



FIXED VIDEO ALERT

One evening an analyst receives an alert from a gas station video system indicating there is unusual loitering after hours.

11:13 PM



OFFICERS DISPATCHED

She alerts dispatch who assigns two units to respond. Upon continued monitoring she sees a group spray painting the store front.

11:18 PM



SITUATIONAL INTELLIGENCE RELAYED

Officers are sent images from the scene to prepare them for what to expect.

11:22 PM



SUSPECTS ARRESTED

The officers arrive on the scene and they successfully identify and arrest the suspects.

12:21 AM



EVIDENCE UPLOADED

All video from the event is saved to a single incident record that officers can add their reports to. The file is immediately sent to prosecutors.

12:23 AM



MATCH IDENTIFIED

She alerts dispatch who assigns two units to respond. Upon continued monitoring she sees a group spray painting the store front.

11:16 PM



IDENTIFY WITH FACIAL RECOGNITION

COMPREHENSIVE, POLICY-BASED FACIAL RECOGNITION
FOR STRONGER LEADS

You review hundreds, thousands, of mugshots to review suspects manually. It can take weeks, months, even years to identify and verify suspect matches, leaving criminals out on the streets.

By leveraging our facial recognition technology, you can automate and expedite this entire process. Using a simple probe image of even marginal quality, investigators can accurately enhance and compare it against a nationwide database of known offender booking images and develop strong investigative leads. This speeds investigations while keeping the human in the loop, allowing the analyst to retain final decisions.

If a match doesn't exist within the database, you can apply facial recognition analytics to real-time video. Using biometric algorithms that analyze more than 350 facial landmarks, this technology delivers accurate results to more quickly identify and track down suspects.

[See how facial recognition works with Vigilant FaceSearch™.](#)



FACIAL RECOGNITION







VIDEO ANALYTICS



HUMAN IN THE LOOP

SAFER CITY HOMICIDE INVESTIGATION

POLICY-BASED FACIAL RECOGNITION FOR STRONGER LEADS

-  VIGILANT FACESEARCH
-  COMMANDCENTRAL ANALYTICS
-  VIGILANT PLATESEARCH
-  WATCHGUARD ALPR CARDETECTOR



A SINGLE IMAGE

A homicide occurs and an investigation quickly ensues. The best lead you have is a single frame of a suspect from a video camera nearby.

8:10 PM



FACIAL ANALYSIS

The low quality image is enhanced, preserving identifying characteristics so it can be facially analyzed. The analyst produces several suspects.

8:11 PM



NATIONWIDE DATA-SHARING

Using nationwide law enforcement data cross-referenced with public records, the analyst reports suspect addresses and vehicles.

8:12 PM



PLATE HOTLIST

With the suspect plates on the agency's hotlist, within hours, the license plate is detected in a nearby city.

10:50 PM



SUSPECT APPREHENDED

Command staff coordinates with local law enforcement to successfully apprehend the suspect.

10:55 PM



DEPLOY AN INTELLIGENT SURVEILLANCE NETWORK

ADVANCED CAPTURE, MANAGEMENT & ANALYSIS OF FIXED SECURITY VIDEO

From traffic stops to domestic terrorism, law enforcement has come to depend on video footage as part of the investigative process. To keep critical incidents from worsening, they need to be captured and investigated in real-time. It's time to end the endless hours of live security footage.

By deploying an integrated approach to fixed video, security operators no longer need to monitor live feeds. Intelligent cameras and video management capabilities embedded with advanced video analytics enables automated threat detection.

Our high-definition cameras can recognize people, vehicles, weapons, license plates, and faces. Unprecedented detail combines with self-learning algorithms. You can set alerts for activities like loitering and historically unusual behavior. Beyond the real-time application of these analytics, the video is simply faster to search.

[Discover the smarter way to monitor video with Avigilon Control Center.](#)



AUTOMATED ALERTS



VIDEO ANALYTICS



HUMAN IN THE LOOP

SAFER CITY SUSPICIOUS PACKAGE

AUTOMATED ALERTS WITH FIXED SECURITY VIDEO

- AVIGILON CAMERAS, HARDWARE NETWORKS, & ANALYTICS
- AVIGILON CONTROL CENTER
- COMMANDCENTRAL AWARE
- VIGILANT FIXED & MOBILE LPR



SET FOR INTELLIGENCE

Your city unifies intelligent video surveillance with a focus on crowded spaces. Analytic rules are set to alert to certain behaviors and unusual activity.



ALERT: SUSPICIOUS PACKAGE

At a train station, your system identifies and alerts to a suspicious package. The analyst notifies dispatch to assign units to investigate.



9:32 AM



COORDINATED RESPONSE

Bomb squad is deployed to control the package.

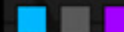


9:45 AM



SUSPECT APPREHENDED

Surveillance has placed the suspect in his vehicle in the parking lot. Officers approach and arrest the suspect without incident.



10:01 AM



REVIEWING FROM ANALYTICS

The analyst reviews recorded footage and identifies the individual responsible for the package and tracks his movement. The suspect is identified and is discovered to be on the No Fly list.



9:38 AM



MOTOROLA SOLUTIONS

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