

# COMMUNICATION SYSTEMS STOP CRIME IN ITS TRACKS

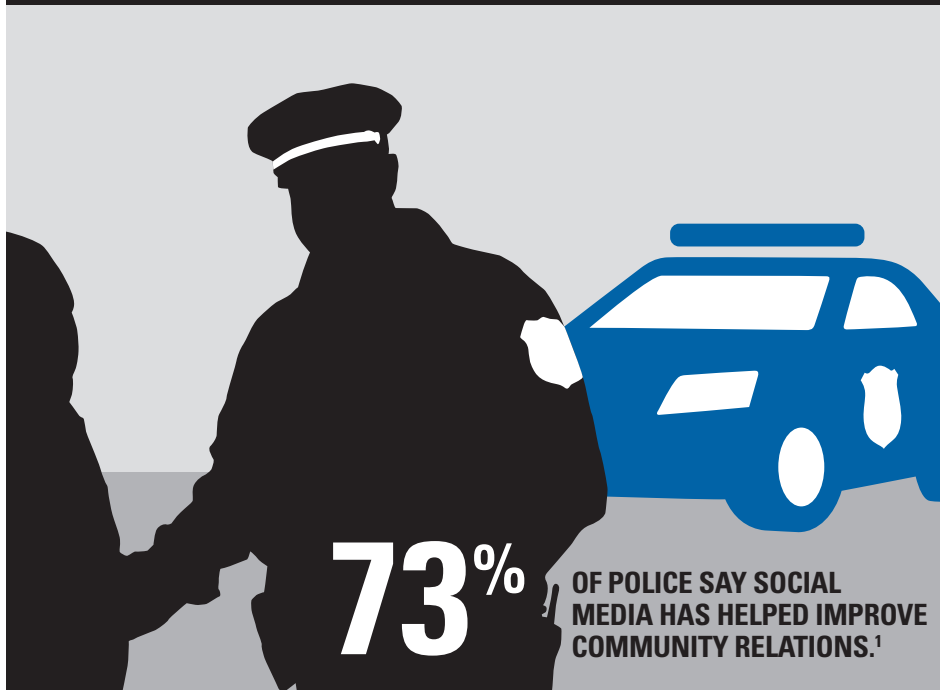
REAL TIME INTELLIGENCE TAKES POLICE BEYOND  
RESPONDING, TO PREDICTION AND PREVENTION



# A NEW WAY TO SERVE AND PROTECT

Almost half of the world's 7 billion people now live in cities, and 180,000 new residents move to cities every day...urbanization is driving demands for better public safety. To meet this challenge, law enforcement agencies need to improve services while keeping costs under control. Those that migrate now from react-and-respond policing to predict-and-prevent policing will be best equipped to fight crime tomorrow.

## SOCIAL MEDIA IS INTEGRAL TO PREDICTIVE POLICING



# WHAT IS PREDICT-AND-PREVENT POLICING?

Until recently, police communications were straightforward, and information was hard to come by. Radios transmitted calls for service, be-on-the-lookout warnings, and provided suspect descriptions all over P25 dedicated voice channels. Responders typically drove back to the station to look up paper records, perform database queries and annotate criminal reports; detracting from time they could spend on the ground solving crimes in their communities.

Today's police communications integrate ultra-reliable P25 and LTE mobile broadband networks to instantly deliver critical voice and high-speed data applications. Police officers often need immediate access to high-definition images and streaming high-definition video, sensors, floor plans, and GPS tracking of vehicles and people. Converging voice and broadband data improves their situation awareness, enhances tactical collaboration, and improves overall efficiency, empowering first responders to make the cities safer.

The technology for predictive policing is here today. A survey by the Police Executive Research Forum found that 38 percent of police departments already use predictive policing, and the rest expect they will implement this strategy within the next 2 to 5 years.<sup>2</sup> Incorporating predictive policing will increase the transparency of your operations, improve effectiveness and efficiency, and address specific crimes based on set priorities.

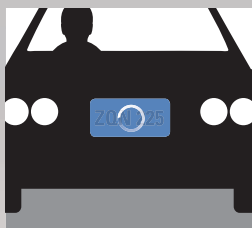
# MAKE LAW ENFORCEMENT DATA WORK FOR YOU

Some 90 percent of today's data didn't exist 3 years ago.<sup>3</sup> In 2013 alone, surveillance cameras around the world produced 413 million gigabytes.<sup>4</sup> That's eight times more data than the entire written works of mankind, from the beginning of recorded history, in all languages.

Today, nearly all public safety organizations admit that they could do much more with their data. They are striving for more information, while at the same time, they are grappling for better ways to extrapolate the most relevant data, and turn it into actionable intelligence. Success means that police officers will not only respond more effectively to crimes, but also anticipate and prevent crimes before they happen by leveraging the data they have available today tomorrow and into the future.

## TAKE FOR EXAMPLE: ANATOMY OF AN INTELLIGENT TRAFFIC STOP

As a police officer is pulling over a car, the dashboard camera scans the vehicle's license plate and Motorola Solutions advanced technologies automatically sends the data to a statewide database, revealing that the owner has a long history of traffic offenses. Before the officer leaves the vehicle, a computer alerts him that 20 minutes ago the driver was involved in a domestic assault and should be presumed armed and dangerous. The officer calls for backup and checks his vehicle workstation, which shows how far away backup officers are and when they will arrive. Within minutes, a team of officers has the suspect in custody. Having an integrated network of intelligent devices that operate on redundant and secured infrastructure enables the dispatcher and command personnel to have the officer's back as they monitor all of the arrest activities in real-time.





# CONNECTING POLICE OFFICERS TO THE COMMUNITIES THEY SERVE...

Safer cities are thriving cities. Statistics indicate that a dollar invested in public safety returns 5 dollars in economic growth.<sup>5</sup> On the flip side, they suggest that a homicide can cause 70 citizens to move away.<sup>6</sup> Every time technology helps prevent a crime, it profoundly improves community relations and police safety.

Community-based data also help law enforcement organizations better connect with the citizens they protect. Police receive information from remote sensors, text messages, and posts on social media like Facebook, Twitter, Instagram, and YouTube. Another source is video citizens send from their cell phones, as well as video from street and parking lot cameras operated by businesses and municipal organizations.

The challenge, of course, is how to aggregate and analyze all these data streams, turning them into intelligence that command centers can immediately send to officers on the street and use later for post-incident analysis.

# ...AND HELPING THEM FOCUS ON THEIR MISSION

Even as public safety networks are becoming more complex, advanced intelligent solutions are simplifying data management across multiple agencies that operate in multiple jurisdictions in our communities. Network operators have visibility and control across unified communication networks, applications, and fleets of devices. This can lead to insights and investigative leads that can solve crimes.

Network complexity also creates security challenges. Ransomware viruses infect computers and demand ransoms to unlock data. And that is just one example. The reality is that cyber criminals create more than 60 million malware programs every year, and law enforcement agencies must protect themselves from all of them.<sup>7</sup>

As police agencies rely more on technology to protect communities and first responders, many are turning to Motorola Solutions to help plan, deploy, protect, and manage their systems. Partnering with a trusted leader gives forces confidence to focus less on their technology and more on their mission.

## THE PUBLIC WANTS POLICE OFFICERS TO WEAR CAMERAS

85%

BELIEVE THAT BODY WORN CAMERAS REDUCE FALSE CLAIMS OF POLICE MISCONDUCT AND REDUCE THE LIKELIHOOD OF LITIGATION<sup>8</sup>



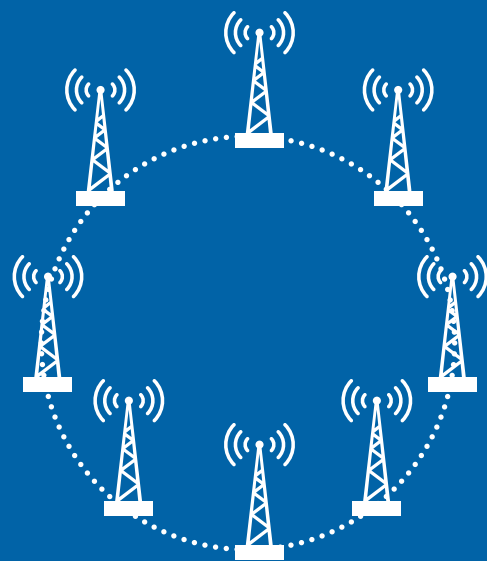
88%

DECLINE IN THE NUMBER OF COMPLAINTS FILED BY THE PUBLIC AGAINST THE POLICE<sup>9</sup>



4 BILLION

HOURS OF SURVEILLANCE VIDEO CAPTURED IN 2013<sup>1</sup>



## THE RIGHT INFORMATION AT THE RIGHT TIME

Motorola Solutions designs public safety solutions specifically to deliver mission-critical intelligence to the right person at the right time. Think of our solutions as a virtual partner that keeps your officers focused on preventing and stopping crime.

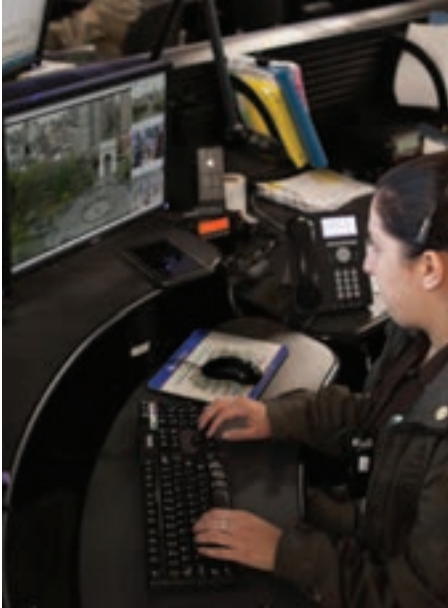
Motorola also integrates communications between different networks and devices. Our innovative WAVE work-group application, for example, enables inter-operable group communications so first responders can push-to-talk (PTT) with anyone, on any network, on any device. Eliminating the barriers that law enforcement agencies face when trying to collaborate and share information in real time.



## ASTRO® 25 BRINGS EVERYONE TOGETHER

With more than 2 million users worldwide, Motorola Solutions ASTRO® 25 land mobile radios (LMRs) are law enforcement's first choice for mission-critical communications. These Project 25 standards-based radios support seamless, interoperable communications between multiple agencies and neighboring communities, a top priority for public safety agencies.

In addition, more and more agencies are using LMRs to transmit data, such as vehicle locations and field queries of local, state, or federal databases. This allows them to reserve their LTE networks for higher bandwidth applications, such as high definition video and photos.



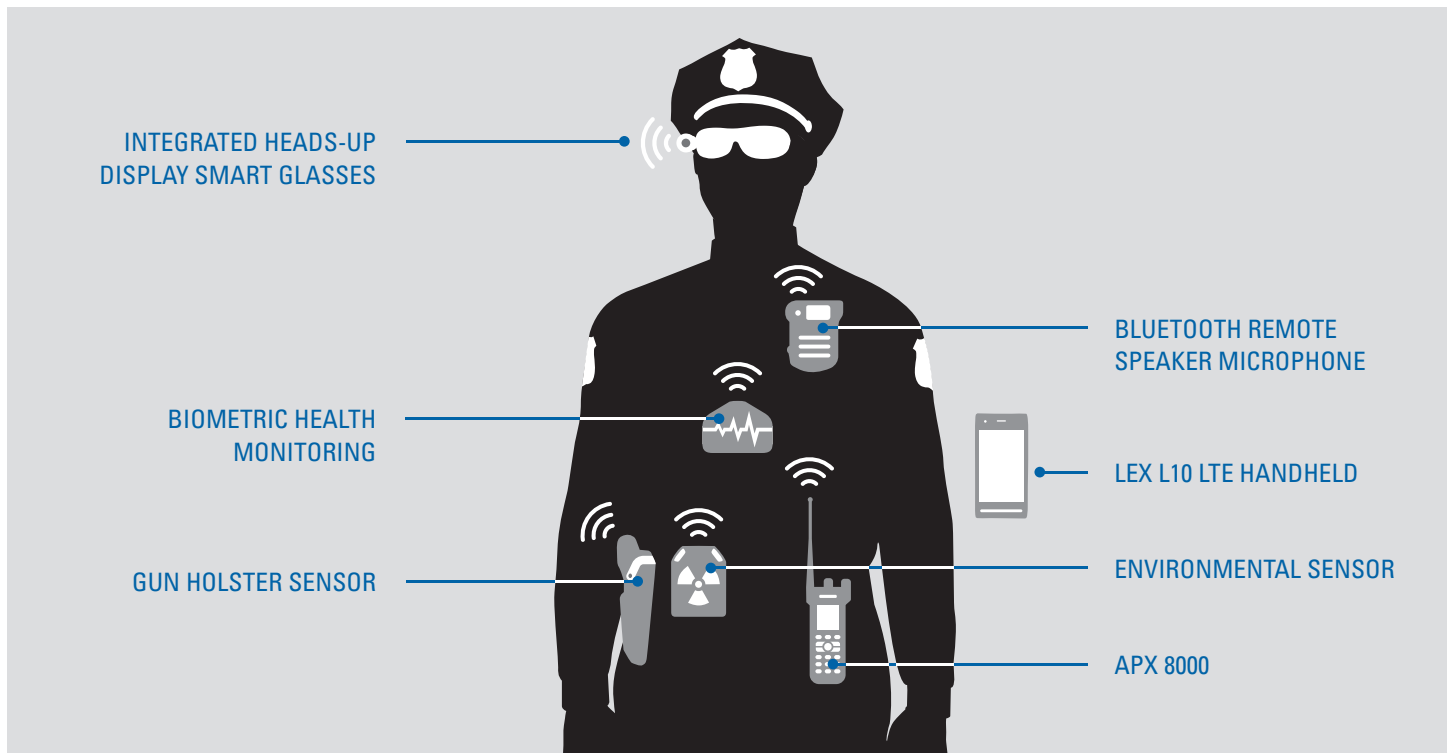
# PUBLIC SAFETY LTE AND INTELLIGENCE-LED PUBLIC SAFETY SYSTEMS **SAVE LIVES**

Motorola Solutions Public Safety LTE networks deliver real-time mission-critical intelligence and transform interactions between law enforcement agencies and their communities they serve. This technology also enables collaboration by providing a single operating view based on common locations, tracking, police presence, video feeds, and other data.

Our Intelligence-Led Public Safety Solutions (ILPS) integrate multiple data streams into a single platform, apply advanced analytics, and produce actionable intelligence. They instantly transmit life-saving alerts to both command centers and officers on the street. ILPS planning tools also allow agencies to analyze historical work, set objectives and metrics, and build execution plans. Scorecards and dashboards highlight issues that managers need to resolve quickly.

## CONNECTED POLICE OFFICERS **ACHIEVE BETTER OUTCOMES**

Motorola Solutions empowers police officers to respond and change the trajectory of a single moment while still in that moment. They can do this with our advanced devices that seamlessly work together and share information. Our future-ready systems include such innovations as Bluetooth™ proximity pairing and technology that streamlines exchanges between all users and devices. The LEX L10 Mission Critical LTE handheld, for example, can securely pair with APX™ radios to remotely manage radio zones, channels, volumes, and battery strengths, as well as provide backup routes for emergency signals during undercover missions.



# END-TO-END SERVICES MAKE MOTOROLA YOUR OPERATIONAL PARTNER

Motorola Solutions is your partner for comprehensive voice and data communications, including services that encompass the full technology lifecycle. Our experts help you assess, plan, and design your network. Motorola technicians monitor and maintain your equipment, ensuring its reliability and availability. Our strategic, integration, and optimization teams bring order to complex, interoperable communication systems. We also manage cloud services, lowering costs and eliminating the challenge of operating your own network while at the same time freeing resources so you can concentrate on your mission at hand. Motorola Solutions commitment includes meeting all your customer-defined service-level agreements (SLAs) and key performance indicators (KPIs).



## SERVING AND PROTECTING LAS VEGAS RESIDENTS AND VISITORS

The Las Vegas Metropolitan Police Department protects more than 42 million residents and tourists. After struggling with dropped calls and blackout zones that repeatedly placed officers lives at risk, the department turned to a state-of-the-art ASTRO® 25 network from Motorola Solutions. A Motorola Solutions team worked through challenging technical issues – including interference mitigation, radio configuration, system optimization, and coverage testing – and completed the network on budget and 6 months ahead of schedule. The new P25 system now delivers clear and reliable radio communications in any environment, whether it is rugged canyon areas of Clark County, geographically dispersed residential neighborhoods, loud and crowded casinos, or any of the city's 150,000 guest rooms.



## STOPPING CRIME IN ILLINOIS

Elgin, the eighth largest city in Illinois, is working with residents, businesses, and civic organizations to make neighborhoods safer. It asked a trusted partner, Motorola Solutions, to integrate all the community's disjointed data, video, and multimedia in a central location, providing a common operating picture for all police activities. Our systems now deliver actionable, real-time intelligence when and where officers need it most. Elgin's new approaches to policing and community focus have dropped crime in the city to a 40-year low.



A woman with dark hair is shown in profile, looking intently at a computer monitor. The monitor displays a blurred interface with a yellow and blue logo. In the foreground, a silver gooseneck microphone is positioned. The background is softly blurred, suggesting an office or control room environment.

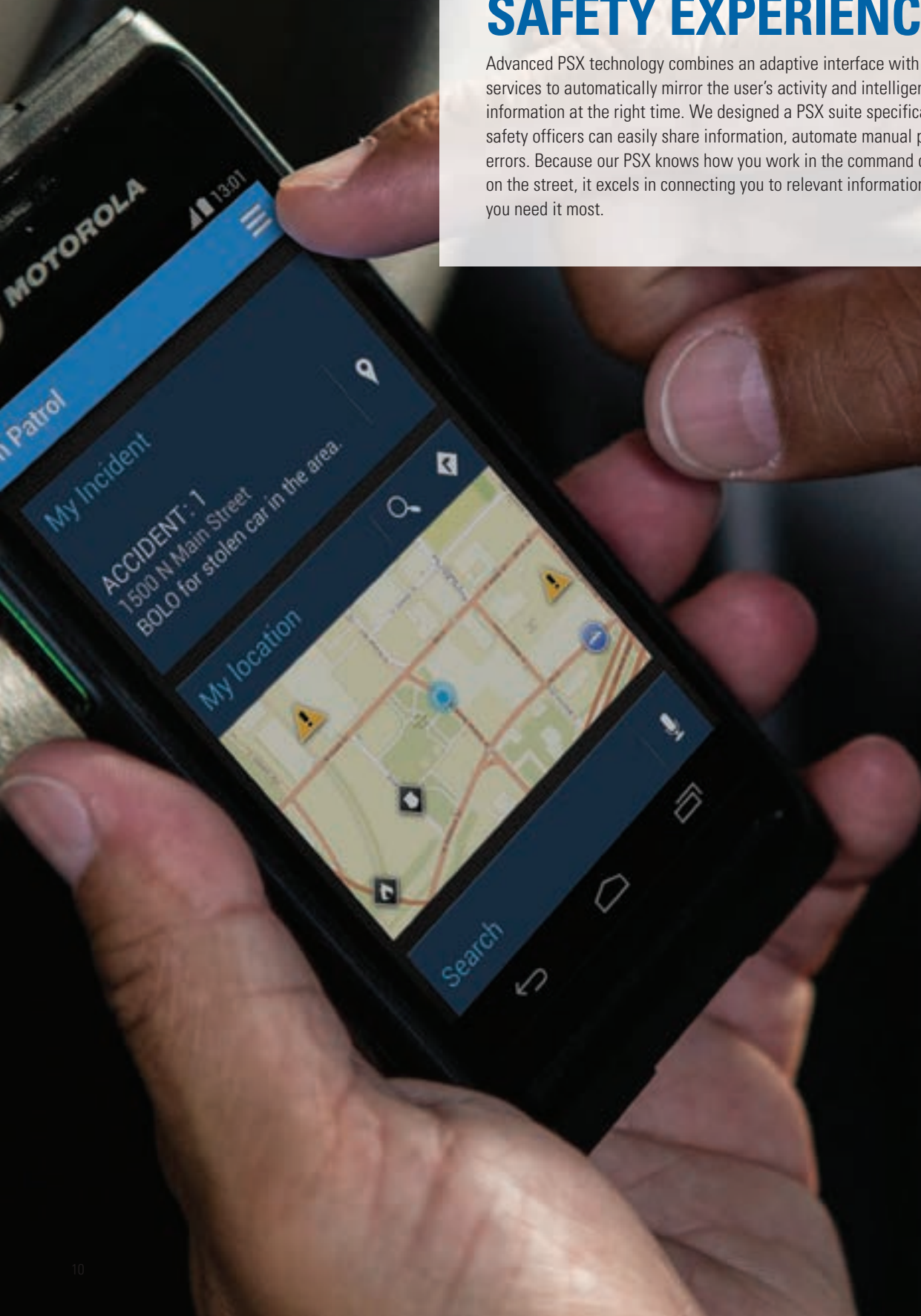
# STAY AHEAD OF WHAT'S NEXT WITH **INTELLIGENCE-LED** **PUBLIC SAFETY SOLUTIONS**

Today's law enforcement agencies must manage endless flows of data that can either overwhelm them or help them better serve and protect their communities. Analyzing information and turning it into actionable intelligence is critical, but it's equally critical to distribute this intelligence to everyone who needs it, exactly where and when they need it.

Motorola's ILPS solutions integrate disparate data, systems, and technologies to turn noise into intelligent, actionable information.

# AUTOMATE THE PUBLIC SAFETY EXPERIENCE (PSX)

Advanced PSX technology combines an adaptive interface with powerful back-end services to automatically mirror the user's activity and intelligently present the right information at the right time. We designed a PSX suite specifically so that public safety officers can easily share information, automate manual processes, and reduce errors. Because our PSX knows how you work in the command center, in vehicles, and on the street, it excels in connecting you to relevant information in real-time when you need it most.





**APX 8000**  
**THE PORTABLE RADIO FOR ANY ENVIRONMENT**

With four RF bands and multi-mode system access in one radio, the APX 8000 offers unlimited mobility and uncompromising performance. Its adaptive audio and ultra-loud speaker bring clarity to every conversation, even in the most noisy and challenging situations. With WiFi access, the APX 8000 can receive new codeplugs, firmware, and software updates in seconds, allowing you to redeploy the radio fleet with ease while users keep talking without interruption.



**APX™ XP**  
**THE REMOTE SPEAKER MICROPHONE THAT WORKS EVEN AMID CHAOS**



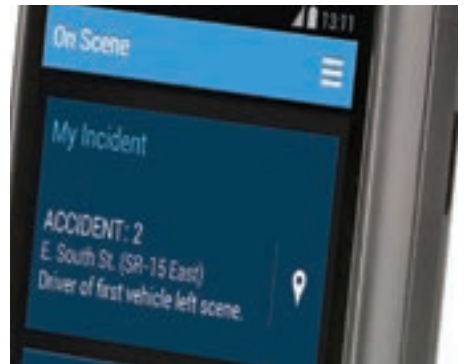
Designed with exceptional noise suppressing capabilities, the APX XP remote speaker excels in noisy, chaotic situations. Its unique dual-microphone design tracks your voice so you can keep your eyes on what's happening in front of you while still talking on the microphone. Its thin design and optimized ergonomics are ideal for police officers in the field. The APX XP performs exceptionally well in the rain; when it gets dirty, you just wash the microphone to ensure your communications are not compromised.



**LEX L10 MISSION CRITICAL LTE DEVICE**  
**THE LTE HANDHELD FOR LAW ENFORCEMENT**



The LEX L10 is a mission-critical handheld device that, unlike consumer-grade smartphones, addresses the unique needs of law enforcement. With a customizable, role-based user interface, it intelligently aggregates and prioritizes data, presenting only critical information based on the user's current status or activity. Designed for the streets, the LEX L10 features dual 1-Watt front-facing speakers for optimized audio performance, a Gorilla Glass display, and a textured push-to-talk button.



**PREMIERONE™ SUITE**  
**THE 360-DEGREE VIEW OF YOUR ENTIRE OPERATIONS**

Our dynamic, intuitive PremierOne suite gives you a unified real-time operational view. PremierOne and its applications – CAD, NG911 Call Control, Mobile, Handheld, Records, and Jail – transform the way your agency operates, collaborates, and shares information to keep first responders and citizens safe.



# MOTOROLA SOLUTIONS WORLD-LEADING TECHNOLOGY WORKS FOR YOU

Motorola introduced its first police radio in 1930 and has partnered with police departments ever since. Today, we support more than 100,000 public safety and commercial customers in over 100 countries. We work with law enforcement agencies of all types and sizes and manage over 20 full-scale networks around the world. With our leading-edge technology and comprehensive solutions, your agency will have faster responses, better resource allocations, and exceptional outcomes.



#### Sources:

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8. PoliceOne, "Survey: Police officers want body-worn cameras," October 23, 2012
9. The Wall Street Journal, Mims, Christopher, "What Happens When Police Officers Wear Body Cameras," August 18, 2014

To learn more about how Motorola can make your community safer, visit us on the web at [motorolasolutions.com/lawenforcement](http://motorolasolutions.com/lawenforcement).

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