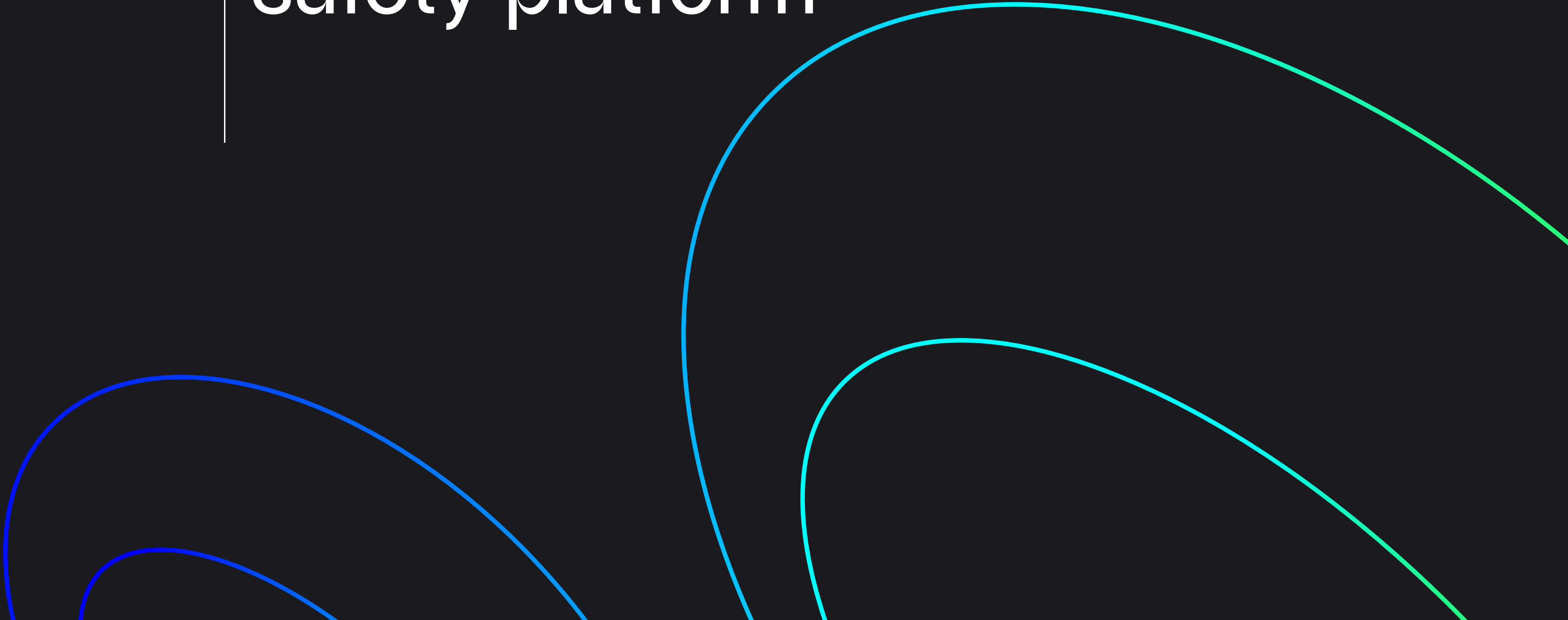




The power of a **next-gen** public safety platform

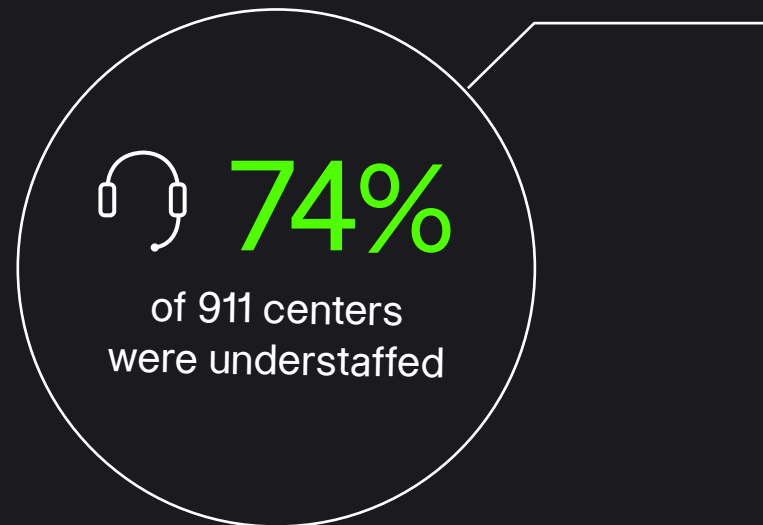
E-book



Contents

Unlocking and extending value	03
Journey to a full public safety platform	04
Transforming call-taking and dispatching	05
CAD	06
Public safety is going beyond CAD	07
RMS	08
Powerful real-time collaboration	09
DuPage County accelerates multiagency incident response	10
Video management	11
Springfield College Public Safety improves dispatch and incident response	12
Why the time to act is now	14
The future, together	15

Unlocking and extending value



Agencies around the world are transforming their approach to public safety, adapting to ever-growing demands and societal and regulatory changes, as well as the need to deliver more efficient services in the face of resource constraints.

But as we all know, change can be difficult.

Agencies struggle with digital transformation and the strategies to achieve it in a sustainable way. They are saddled with inflexible core legacy systems and fragmented solutions that limit innovation and their ability to improve workflows. And on top of that, significant staff shortages and "staff burnout" impede day-to-day operations and modernization goals, with [NENA reporting in June 2025](#) that 74% of 911 centers were understaffed and "high turnover, absenteeism and a 22% training failure rate underscore deep-rooted strains in ECCs)."

What they need is a flexible next-generation public safety platform that emphasizes real-time collaboration and interoperability and extends value beyond traditional dispatch centers.

*Public safety agencies seek **holistic solutions** that lay the foundation for **sustained operational excellence** and future-ready innovations.*

Journey to a full public safety platform

The public safety platform – a holistic bundle of solutions that allows agencies to digitally transform and get the most out of their technologies – is the central nervous system of emergency communications centers (ECCs), public safety answering points (PSAPs), public safety communication centers (PSCCs), emergency operations centers (EOCs), 911 centers and other public safety command centers.

The mission-critical heart of a public safety platform – the computer-aided dispatch (CAD) system – was pioneered in the 1960s to help police departments respond to resident requests for assistance. For a long time, the concept of a standalone, on-premises CAD system remained relatively unchanged – until now.

The world has changed dramatically in the past 60 years, and the pressure is on for agencies to adapt and deliver more – to go beyond dispatch capabilities.



Transforming call-taking and dispatching

A next-gen public safety platform is the **central nervous system** for public safety agencies globally. At the core of such an open and fully integrated enterprise-level platform is the CAD system.



“Typically, we’ve had 20 years of public sector coming to IJIS and saying, ‘Could you get your RMS providers or CAD providers or analytics providers together because we want to ask them some questions.’”

Maria Cardiellos
Executive Director,
IJIS Institute

[*Public Safety Now: The evolution of RMS*](#)

CAD

The CAD of today bears little resemblance to the earliest systems introduced by police departments in the 1960s and fire services in the 1980s. The latest CAD systems introduce advanced call-handling capabilities, workflow rules engines, process automation and assistive AI to **improve situational awareness and decision-making, multiagency collaboration and enhanced emergency response.**

In addition to this new functionality, agencies have greater choice regarding how they deploy the system, whether on-premises, in a hosted environment or in the cloud.



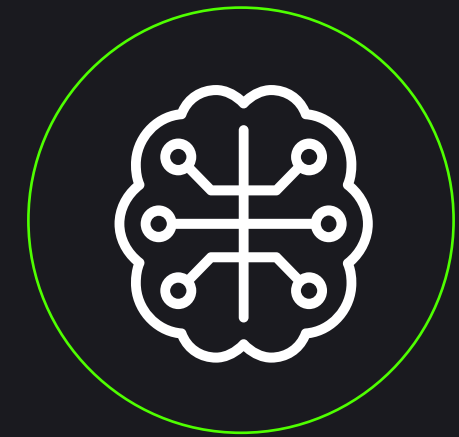
Advanced call-handling



Workflow rules engines



Process automation



Assistive AI

Public safety is going beyond CAD

To be the central nervous system (or brain) of a consistently fast, efficient and effective emergency response takes CAD and more. Such a modern system uses a robust, ideally cloud-based platform capable of **receiving, processing and responding to information (from an expanding array of sources)** to a consistently high standard in a timely manner.

It is for this reason a next-gen public safety platform integrates systems including CAD, records management system (RMS) and video management, as well as powerful collaboration, mobile and analytics tools.

Together, these elements allow police, fire, ambulance and EMS, border security and other emergency services go beyond dispatch, enabling data sharing, collaboration and real-time situational awareness. This extends value across an agency's entire ecosystem, positively impacting stakeholders and residents, building trust and, ultimately, making communities safer.





Public safety

RMS

An RMS allows agencies to quickly capture and harness information about people, places and incidents, whether in the field, the station or the dispatch center, to better coordinate incident response and investigations and provide real-time alerts.

These robust enterprise-grade systems also optimize efficiency, streamlining administration and reducing paperwork and manual duplicative tasks. When the RMS is **fully integrated with CAD, it enables important data and information to be quickly and securely accessed** and shared where and when it is needed (whether internally or interagency), for informed, faster decision-making and effective single or multiagency incident response.

The latest systems also promote stronger community engagement through the provision of a portal through which residents can disclose information, file preliminary minor incident reports, leave anonymous information and request services.

Powerful real-time collaboration

By fusing information from traditionally siloed sources such as CAD and RMS, real-time collaboration solutions give dispatchers and others a clearer picture of incidents as they unfold.

This situational awareness, when coupled with **the agility of assistive AI and the cloud, has the power to transform a dispatch center into a real-time incident center (RTIC).**

These tools promote far greater collaboration with internal and external stakeholders through faster, more efficient sharing of data and insights.



"Service providers now offer real-time incident management as a service. Jurisdictions with earlier crime-focused capabilities will seek next-generation full incident management capability. Jurisdictions lacking resources for a command center have opportunities with as-a-service offerings."

Gartner® Hype Cycle™ for Public Safety and Law Enforcement
2023, Published 25 July 2023, By Michael Brown and Bill Finnerty

DuPage County accelerates multiagency incident response

[Read the case study](#)

Located in the Chicago metropolitan area, DuPage County is Illinois' second-most populous county with nearly 1 million residents, and DuPage County call-takers and dispatchers handle around 600,000 911 calls every year. This large call volume used to be spread across 18 PSAPs with four different CAD systems. These PSAPs were consolidated into two: DuPage Public Safety Communications (DU-COMM) and Addison Consolidated Dispatch Center (ACDC), to serve 62 police and fire agencies.

The County wanted the two consolidated PSAPs to operate on a shared system to reduce transfers and create a smoother workflow for dispatching calls. DuPage County State's Attorney Robert Berlin's vision was a seamless system that efficiently handled 911 calls from event initiation to court case disposition. DuPage County selected Octave's CAD, RMS, analytics and mobile solutions to meet these goals.



"We have 62 agencies, which can mean 62 different operational ways to do something. We asked ourselves, 'How do we standardize the systems to make the dispatching process successful and get somebody dispatched to the event in 12 seconds?'"

Linda Zerwin

Executive Director

Emergency Telephone Systems Board of DuPage County

Video management

High-quality and timely CCTV video footage is one of the most important sources of information for real-time incident handling and post-event investigation. A trend is emerging that gives public safety organizations direct access to, or ownership of, public space surveillance. As a result, video management, coupled with incident management capabilities, is rapidly becoming a core component of the public safety platform.

In doing so, call-takers and dispatchers have the **ability to see what happened and monitor the live situation in real time**, helping them coordinate the appropriate incident response and share footage with front-line resources, en route or on-site, as part of a multiagency incident response.



Springfield College Public Safety improves dispatch and incident response

[Read the case study](#)

The Springfield College Police Department (Springfield College Public Safety) is a dedicated on-site service that strives to keep students, staff, visitors, buildings and grounds safe. The backbone of the department is its dispatch center, where teams respond to calls from **26 blue light emergency phones** located around the campus, as well as 911 calls forwarded to the center.

A network of **300 video surveillance cameras situated indoors and outdoors** provides dispatchers and officers with visibility of the campus. These cameras enable the team to monitor areas and view situations in real time to coordinate an appropriate response. The camera system is managed and operated through a video management system.



Octave Coda Video (formerly HxGN dC3 Video) is central to the center's operations, whether using a live video feed to coordinate a response to a road traffic incident at an intersection or monitoring suspicious activity on campus.

"We realized an instant improvement in the ability of our surveillance system to support the day-to-day activities of our dispatchers, officers and CSOs to be more effective in their police work. It is quicker for us to share video footage with Springfield Police, the Massachusetts State Police and the district attorney's office."

Joseph P. Tiraboschi

Chief of Police and Executive Director of Public Safety
Springfield College Police Department

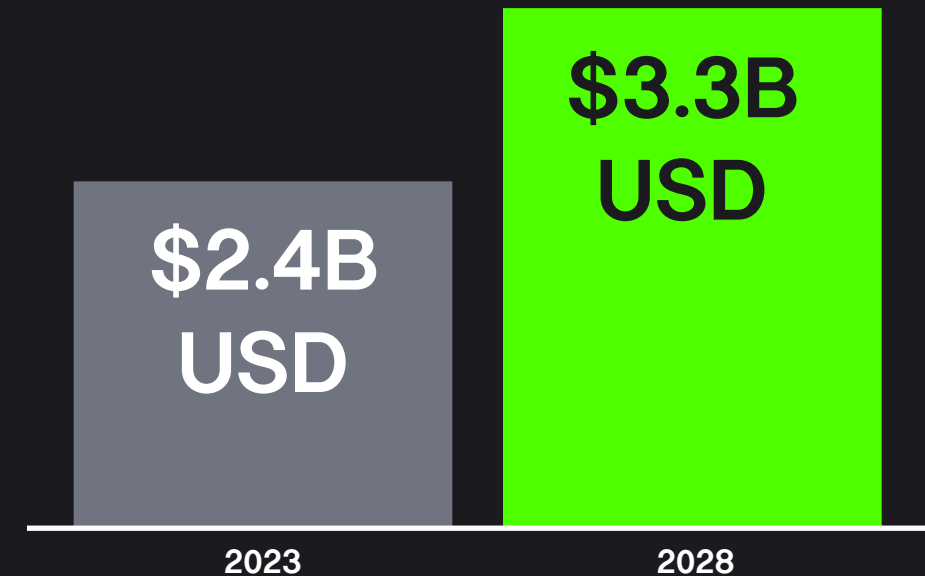
Read the [case study](#)



Why the time to **act** is *now*

Next-generation call handling is gaining momentum around the world, thanks to national and regional initiatives such as **NG911 (U.S. and Canada)**, **NG112 (EU)**, **NG999 (UK)** and **NG000 (Australia and New Zealand)**. These initiatives are revolutionary steps forward for the public safety industry, which will enable citizens and emergency services to share more information (voice, text, video, images, audio, etc.) using mobile technology that is now ubiquitous in society. **It has been said that in just three years a third of all calls will be automatically generated by handheld devices, cell phones and wearable devices.**

This generational shift will require new workflows and dispatch models to be introduced. However, many organizations and agencies are reliant on inflexible, often custom-built legacy systems. These entrenched, monolithic and fragmented systems are unable to adapt and embrace the rapid pace of technological innovation, societal change and opportunities that public safety agencies are facing.



*"The next generation emergency response system market size is projected to **grow from USD 2.4 billion in 2023 to USD 3.3 billion by 2028**, at a CAGR of 7.0% during the forecast period."*

(according to [MarketsandMarkets](#))

Public safety

What's more, these systems are also vulnerable to cyberattacks, with command centers representing high-profile targets. This was highlighted in early 2024, when it was [widely reported](#) that the **Bucks County Department of Emergency Communications in Pennsylvania** was investigating an incident that affected its dispatch system.

The modern public safety platform is at the heart of this digital transformation, replacing inflexible and disparate systems with a single resilient, secure and agile ecosystem. It has intuitive and intelligent workflows that facilitate real-time collaboration beyond traditional dispatch centers, for a faster, more effective response during any type of crisis.



*"We'll continue to look to integrate the latest technologies into our public safety platform. Incident management has been our core capability, but as we move forward, we'll continue to innovate with things like **assistive AI and cloud-based collaboration, citizen reporting portals** ... things that make your residents and your jurisdictions safer."*

Bill Campbell

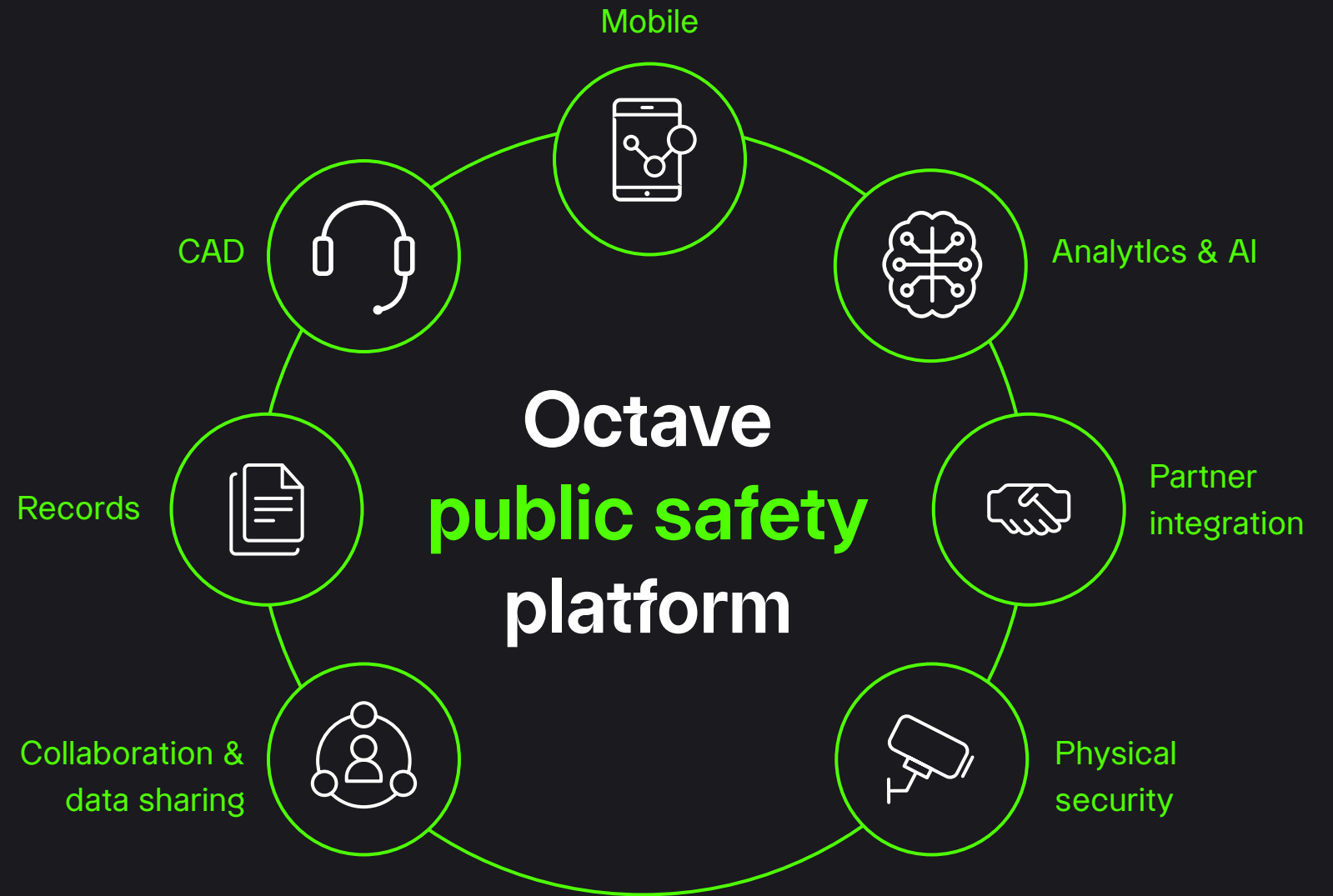
Senior Vice President, Public Safety & North America

Octave

The future, together

With more than **30 years'** experience and more than **420 active public safety customers** in more than **40 countries**, Octave helps **protect 1 billion people worldwide**. This, coupled with its modern, integrated, flexible public safety platform – available on-premises or in the cloud – can empower your agency to extend value seamlessly across your ecosystem, optimizing resources while fostering responsible innovation.

Together, we can forge a path toward a more secure, technologically advanced and resilient future for public safety.



Integrated, flexible and proven public safety platform for the cloud and on-premise

Discover Octave's **full public safety platform**

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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