Driving innovation: modern mobility in public safety

How mobile technology is creating a smarter, more connected future in public safety

OVERVIEW

Police leaders face a challenging mandate: do more with less. Despite tight or declining budgets, departments are expected to increase transparency, speed response times and adapt to evolving threats while prioritizing officer and community safety.

To meet this challenge, police departments across the U.S. are turning to a new generation of mobile and in-car technologies that safely and cost-effectively provide officers with advanced computing capabilities in the field. This includes the Chicago Police Department, which recently partnered with Samsung and Havis to re-imagine the mobile computing experience for its more than 10,000 sworn officers.

Public safety agencies explore mobile-first computing

Smartphones and tablets have long been supporting public safety. Increasingly, it is the devices that we all rely upon and enjoy using in our personal lives that we most want to use at work — our smartphones, our watches and our tablets. From supporting officer recruitment to enabling higher levels of community engagement, providing officers with the right mix of tools and technology is crucial to department success.

Smartphones and tablets are not only familiar devices that most of us use daily, but when used as part of an agency mobility program they also help improve communications, productivity, safety and real-time decision-making in dynamic and sometimes unpredictable environments. Enhanced mobile productivity also allows officers and other public safety personnel to spend less time behind their desks and more time engaging directly with the communities they serve.

Agencies recognize the value of mobile devices. However, while they see them as vital communications tools or accessories to a PC that provide some important functionality away from the station or office, they often assume that personnel will need to return to a laptop or desktop to complete many essential tasks. Depending on their role, this typically requires them to juggle a combination of devices such as a smartphone, tablet, laptop, desktop computer, voice recorder, radio or rugged in-vehicle computer. This is not only cumbersome and inconvenient for workers who must physically carry multiple devices,

transfer data between devices to complete tasks and manage multiple logins, etc., but it is also more devices for IT departments to track, manage and secure.

While mobile devices have traditionally been seen as a valuable extension of a PC-centric enterprise technology infrastructure, this is starting to change. The role of mobile devices in public safety operations has grown alongside important innovations across the mobile computing ecosystem that have blurred the lines between mobile device and PC performance. These include the increased processing power and advanced functionality of modern smartphones and tablets, the growing availability of enhanced network connectivity such as 5G, and the emergence of enterprise-friendly capabilities such as mobile device management and security.

For police departments and other public safety agencies, the increasing convergence between PC and mobile device capabilities creates an opportunity to better meet the needs of personnel and improve mission outcomes with a fully mobile ecosystem built around the way their work is done. With this approach, the mobile device becomes the primary computing device, eliminating the need for additional PCs and laptops, streamlining management and reducing the total cost of ownership. Samsung is at the forefront of building this fully mobile ecosystem with Samsung DeX, which creates a PC-like experience anywhere you can connect a mobile device to a monitor, keyboard and trackpad or mouse.[1]
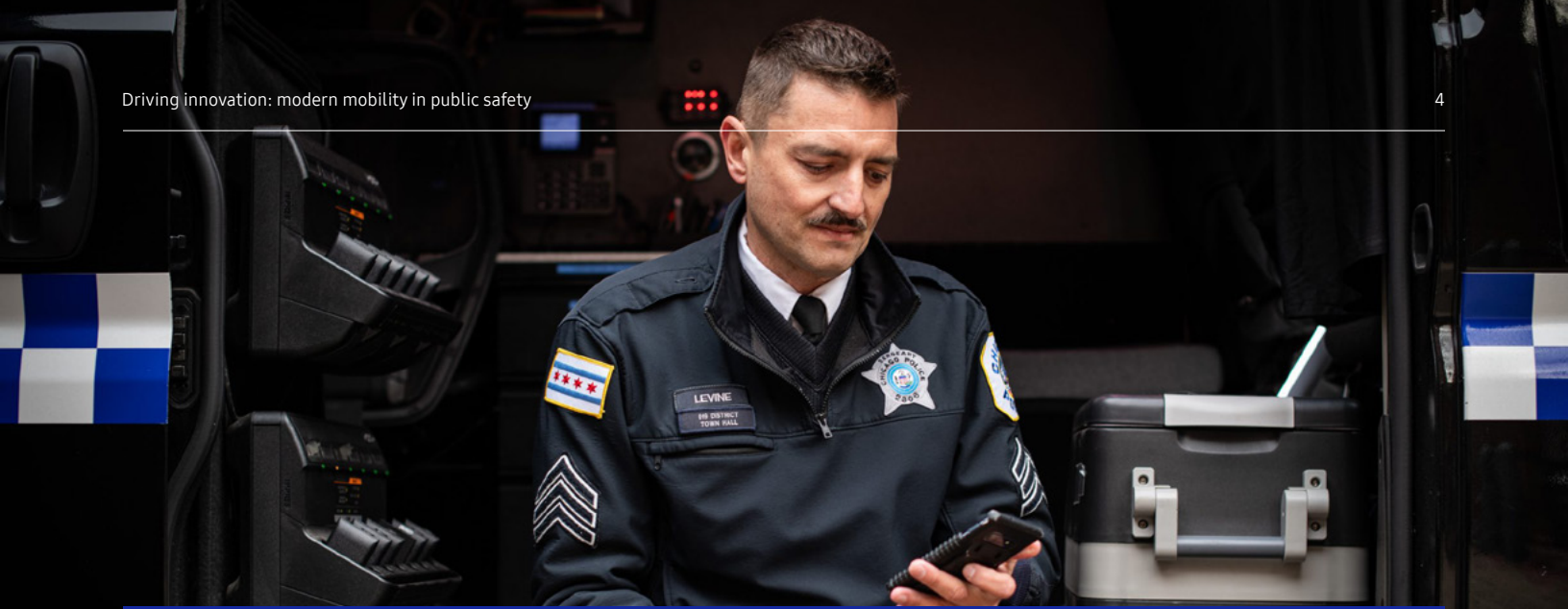
Take a closer look at Chicago PD

Giving public servants the modern mobile tools they need to serve the public

Chicago's mandate was to empower officers with technologies that enabled them to personally engage with the people in their neighborhoods.

"Since we started working with Samsung, we were tasked with getting officers out into their communities, and reducing their time spent at desks processing paperwork," said Dennis Baliga, Deputy Director of IT Infrastructure, City of Chicago's Office of Public Safety Administration.

Modernizing policing requires new mobile devices that thousands of officers can comfortably rely upon every day. Chicago's police department is one of the oldest police forces in the United States, and the second largest by sworn member size, representing a diverse range of user needs.

"We have officers of all ages and all levels of experience," noted Aaron Levine, Chicago Police Department Entertainment Venue Team Sergeant. "We needed very user-friendly technology, so everybody will be able to use the devices."

Paired with Havis vehicle-mounted docks, Samsung Galaxy smartphones and tablets proved to be the perfect solutions for today's officers. Moving from laptops to handheld devices enabled Chicago's police and firefighters to carry their tools everywhere, dramatically improving their ability to gather and access information in the field.

> "Thanks to Samsung DeX, we went from 3,000 vehicle-mounted laptops to around 10,000 Galaxy S-series phones that are now either assigned to officers or in a specific vehicle on a daily basis."
>
> **Dennis Baliga,** Deputy Director of IT Infrastructure, City of Chicago's Office of Public Safety Administration

The Chicago Fire Department chose Galaxy Tab tablets with unified mounts.

Watch video ›

Going fully mobile with Samsung DeX

By moving from a PC-centric to a fully mobile environment, public safety agencies can deliver a more streamlined mobile experience for personnel while also simplifying the infrastructure supporting their work to reduce the total cost of ownership. For police departments, mobile and in-car technologies enhance operational efficiency, officer safety and community engagement.

To meet this need, Samsung DeX creates a PC-like experience just by connecting a Galaxy smartphone or tablet to a monitor, keyboard and trackpad, thus eliminating the need to carry a separate PC or laptop.

With Samsung DeX, mobile applications are optimized for desktop use, not just cast to a larger display. DeX provides the same functionality users expect from a PC experience, like multiple resizable windows, keyboard shortcuts and drag-and-drop editing, without requiring any additional user configuration or specialized app versions for an intuitive user experience.[2]

With productivity-friendly features, such as Galaxy AI and Microsoft integration, as well as rugged options for more demanding environments, Samsung Galaxy devices are as well suited for the office as they are for the harsh conditions of mobile fieldwork. This versatility enables agencies to confidently use DeX across a wide number of use cases and environments.

Taking DeX on the road

While DeX can be used anywhere you have a monitor, the need for in-vehicle computing to support the public safety mission has driven increased interest in Samsung DeX in Vehicle. The solution has rapidly gained popularity with police departments across the U.S., including the Chicago PD and Santa Barbara Police Department.

Samsung DeX in Vehicle pairs most Galaxy smartphones or tablets with a rugged mounted display and dedicated keyboard specially designed for in-vehicle safety, reliability and comfort. The solution integrates with computer aided dispatch (CAD), situational awareness, records management, GPS and other productivity software to deliver a PC-like experience in a far more convenient form factor. DeX in Vehicle eliminates the need for additional expensive hardware, such as rugged tablets and bulky dedicated in-vehicle laptops, without sacrificing connectivity or functionality.

Eric Augusto, sales lead for DeX in Vehicle solutions and partnerships at Samsung Electronics America, explains how DeX emerged as an in-vehicle solution.

> "We started by providing DeX stations to several of the leading in-vehicle hardware companies and told them they had complete flexibility in the initial prototype designs, including repurposing the DeX motherboard. There was a lot of feedback and collaboration, and the approaches varied, primarily on the positioning of the USB-C hub."
>
> **Eric Augusto,** sales lead for DeX in Vehicle solutions and partnerships at Samsung Electronics America

The compactness of the DeX solution is popular, according to Augusto. "Ergonomics is key, and the positioning of the dock, keyboard and touchscreen is important to the user's comfort and productivity," he said. "It's also critical that the installation doesn't interfere with proper airbag deployment or become a projectile."

One of Samsung's key public safety partners is Havis, Inc., a leading global provider of end-to-end technology mounting and mobility solutions. Havis plays a central role in enabling DeX in Vehicle, delivering rugged, mission-ready docking and mounting solutions that bring the DeX experience to life for police and public safety professionals. Havis solutions enable mobile field personnel to transform their Galaxy devices into a desktop-like workstation, streamlining operations without sacrificing reliability. The fully integrated 12.5" Touch Screen Display provides direct DeX compatibility — no hub required — and features glove-friendly touch, night mode and high brightness for optimal visibility in any environment. Rugged phone docks and IP68-rated cases support Samsung Galaxy XCover6 Pro, S24, and S24FE devices, ensuring secure mounting, charging and data transfer even under harsh conditions. Paired with rugged keyboards featuring emergency keys, red backlighting and sealed designs, Havis components deliver a complete, vehicle-ready DeX solution. Each product is designed for ease of installation, one-handed operation and long-term durability, creating a streamlined in-vehicle workspace that supports efficient workflows, rapid response, and persistent connectivity across demanding law enforcement and field service applications.

Simplify connectivity and information access from field to vehicle to station

The Samsung-Havis partnership streamlines the purchase, deployment and maintenance experience for customers, delivering an end-to-end solution for an agency's mobility program. Here is how it works:

In the field

Galaxy smartphones and tablets are powerful tools for connectivity and productivity in the field. For example, a police officer can use their Galaxy smartphone to collect evidence by taking photos and recording interviews at an investigation site.

If using a device compatible with Galaxy AI, productivity-enhancing AI features make these tasks even more effortless.[3] For example, officers can document and record witness interviews instantly using Voice Recorder with Galaxy AI for hands-free recording and transcript/summary creation. One feature of growing interest is the ability to use Samsung Galaxy smartphones with Galaxy AI to overcome language barriers in the field. Unlike traditional translation apps, Samsung's Live Translate with Galaxy AI and Interpreter with Galaxy AI translate conversations in real time without the need to toggle back and forth between languages manually or navigate delayed responses, ensuring conversations remain natural and fluid.[4,5] Live Translate with Galaxy AI seamlessly translates voice calls and text messages as they happen. For in- person conversations, Interpreter with Galaxy AI can both audibly translate and display a transcript of the conversation all on the phone. If needed language packs are downloaded in advance, Interpreter can be used without an internet connection, which is extremely useful for public safety personnel who often find themselves working in environments with unpredictable network availability or who prefer to keep information processed locally on the device.

In the vehicle

When the police officer returns to their vehicle, rather than sitting down and logging into a bulky laptop to type up a report while referencing the phone or tablet in their hand, they simply dock their device into the Havis rugged phone dock, connecting to a Havis touch screen display and keyboard to continue their work. They can review the interview transcripts, add additional notes with the keyboard, and use features like Note Assist with Galaxy AI to help finalize reports for sharing or filing.[6] They can review and analyze collected images, transcripts and video links on the larger screen and share findings with agency or inter-agency colleagues. If using an eCitation app, they can quickly complete the report using their scan of the driver's license/registration, print a citation for the motorist and send a digital copy to the courthouse.[7] By giving them all the PC-like functionality they need to perform their duties right in their vehicle, they can avoid unnecessary trips back to the station, headquarters or office and optimize their time with the communities they serve.

In the station

When they return to the station, headquarters or office, they can dock their smartphone or tablet with a desktop monitor and keyboard and input any additional information needed to complete their work. This entire experience is absolutely seamless to the officer, even more so than docking a phone into a traditional PC or laptop, because DeX does not ask them to move between mobile and desktop app versions. Instead, the apps and data they work with on the phone are the same when docked in DeX mode, but with the advantages of a full-size keyboard, the real estate of a monitor and the precision of a trackpad or mouse.

For agencies with tighter budgets, temporary hires or reduced need for personnel in the office, a few DeX workstations are often sufficient for in-office or in-station computing needs, reducing costs and streamlining provisioning and security requirements. Samsung advanced mobility solutions provide the foundation for a fully mobile ecosystem ideal for government fieldwork.

Havis' Commitment to Public Safety

For over 80 years, Havis has been dedicated to supporting the mobile workforce, ensuring technology is both secure and accessible in demanding environments. Recognizing the critical need for reliable technology that enhances safety and productivity, Havis designs mounting and docking solutions built to withstand the toughest conditions. From public safety professionals to workers in a wide range of industries, Havis provides robust, rugged and secure solutions that keep essential technology operational in the field. Havis' commitment to quality, innovation and customer satisfaction drives the delivery of products that empower workers and keep businesses moving forward — wherever work happens. Havis is the trusted partner for reliable, fully integrated mobility solutions in public safety and beyond.

Learn more ›

Prioritize security, privacy and safety

Samsung prioritizes security in design and across its supply chain to promote trust, ensure product integrity and deliver the industry's most advanced hardware-backed security protections from the chip up. This is done with Samsung Knox, which combines the protection of a defense-grade security platform built into every Galaxy device with a comprehensive set of cloud-based security and management solutions from Knox Suite.[8] This provides agencies all the tools they need to ensure private and sensitive data remains protected and compliant with Criminal Justice Information Services (CJIS) and Health Insurance Portability and Accountability Act (HIPAA) requirements. [9]

Security-aware design features include leveraging the security of Samsung Knox Suite to enable the controlled and confident operation of its Galaxy AI tools. Two of the primary

ways Samsung accomplished this include designing a number of Galaxy AI features to run only on the device and ensuring centralized enterprise control of Galaxy AI usage. Select Galaxy AI features, including both Live Translate and Interpreter, are processed completely within an on-device AI engine. This engine neither places the data in the device's storage nor delivers it to, or allows it to be accessed by, any unauthorized applications or services. No data is ever shared for training purposes.

Havis is committed to maximizing productivity, quality and safety by offering solutions with the highest manufacturing standards. Havis considers the safety of the driver at every turn with locking mechanisms to prevent projectiles, testing protocol for the total solution, and defined airbag zones in every vehicle.

Take a closer look at Chicago PD

Officials trust Samsung as business partner – and with sensitive data

Samsung's work with the Chicago Police Department has given the city a trustworthy partner to efficiently advance its digital transformation strategy.

> "They are really a multi-faceted agency, utilizing our Galaxy devices, Knox Suite, and Samsung DeX to really increase efficiency and improve their cost savings."

Todd Maxwell, Director of Regulated Business Development & Innovation, Samsung Electronics America

"Trust is immensely important for what we're doing in public safety IT," Baliga added. "We need the vendors to be there for us as a 24/7 business that needs stability at all times in their products. Samsung's been there for us every step of the way, helping address issues we've had as we've come up in this ecosystem, which we've grown to 10,000 devices. We've given them ideas, and they've given us ideas on how to improve their products and our operations, to make things better for both of us."

The partnership enables Chicago Police Department officers to quickly access a wealth of specialized information directly from the field. "Our Galaxy apps allow us access to state and local databases, city licensing and permitting, so at a special event, I'm able to check the parameters of a special event permit. We also have access to specific applications, like the Department of Transportation hazmat guide – instead of carrying a big book, I have an app on my phone. And I can access city service requests, so if I want to report a pothole, traffic lights out, or something like that, I can do it right from the phone," said Levine.

Samsung Knox offers unparalleled device security – a must-have for officers who routinely handle sensitive data in the field.

"We trust the partnership we have with Samsung," explained Sullivan. "As officers run people's names, run their license plates, and are also logging into their systems, we have to worry about security things like data leaks and HIPAA information. We feel really good about Knox security. It ensures that they can do their job safely and securely."

Watch video ›
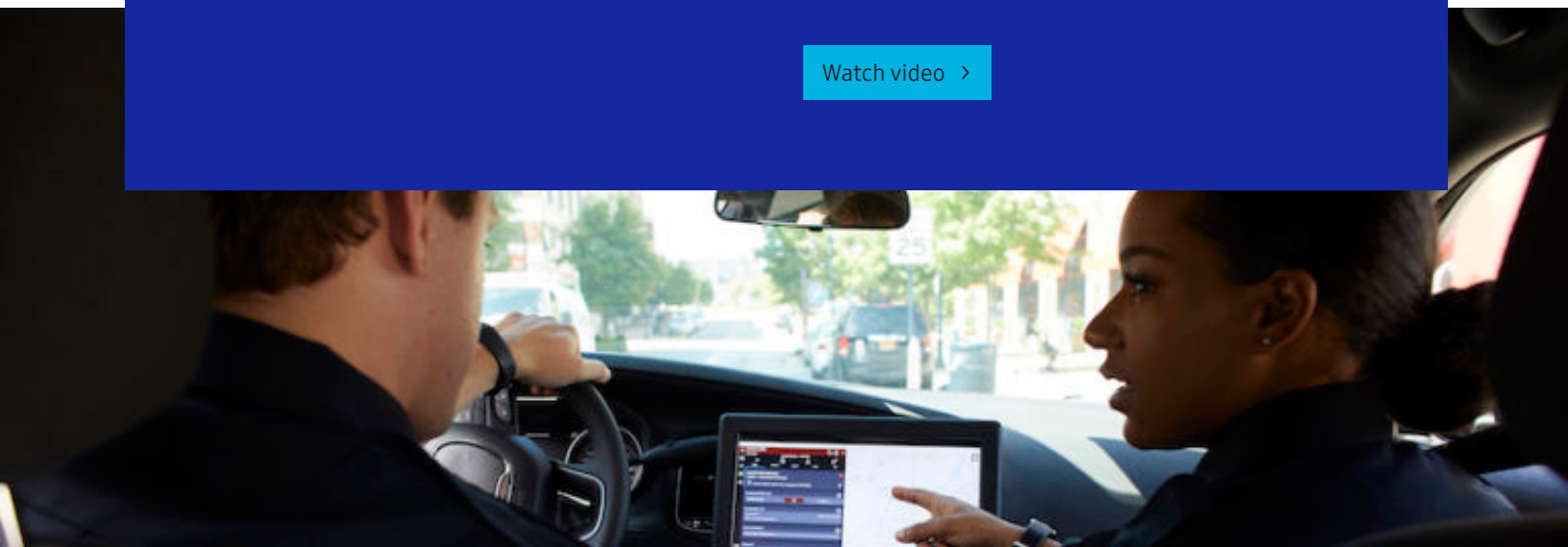
Lower total cost of ownership

With fewer devices to purchase, manage and maintain, a Samsung DeX-enabled mobile infrastructure offers the flexibility and security that public safety agencies need at a lower total cost of ownership. One analysis estimated that a transition to the DeX mobile infrastructure could result in a 20% reduction in costs when aggregated over a three-year lifecycle.[10]

DeX's popularity across public safety agencies of all sizes is largely due to its ability to simplify IT operations and reduce the need for dedicated IT staff. Both small, rural police departments and larger, urban ones are successfully adapting DeX to their unique needs. Management features of Samsung Knox streamline remote device deployment and maintenance.

For example ,when paired with a mobile device management platform, Knox Configure allows IT administrators to control and customize almost every device aspect, even before it comes out of the box. Administrators can upload a list of deployed devices using the Knox Configure portal and assign them predefined profiles, tailoring the devices to specific agency requirements. When employees receive a new mobile device, it is automatically provisioned and configured as soon as it is powered on and connected to a network.With Knox E-FOTA IT administrators can remotely control OS versions on Samsung mobile devices. This allows them to test updates before real-world deployment to ensure compatibility with in-house apps and remotely deploy forced updates to keep all enterprise devices running the latest validated OS version.

Take a closer look at Chicago PD

Simplifying onboarding and streamlining user experiences

Streamlined, secure software experiences are the other key to equipping public servants with modern technology. Using Samsung Knox Suite – Samsung's enterprise-grad security platform, technology teams can design the mobile and desktop interfaces they want users to see on their devices, streamlining access to critical and secure applications.

"Samsung's Knox Suite gives us a centralized management tool for user experience and for security that we need," said Dan Sullivan, Electrical Mechanic, City of Chicago's Office of Public Safety Administration. "Knox Configure helps us give every user a unified desktop experience with DeX in Vehicle – when an officer docks their phone in the car for the first time, it's going to look exactly like the screen full of apps we set up."

"Chicago firefighters can rely on the same consistent desktop experience when docking tablets," Sullivan added. "If they get a fire truck on the South Side, on the North Side, no matter what, that's what it's going to look like."

> "We prepare the phones knowing that they're going to work reliably in the vehicles because of the process we've developed," Sullivan noted, and best of all, the setup process is fast. "I'd say the amount of time it takes us to provision a phone now, compared with three years ago, is down 75%."

Dan Sullivan, Electrical Mechanic, City of Chicago's Office of Public Safety Administration

Watch video ›

Toward a smarter, more connected future in public safety

From real-time situational awareness to streamlined access to public records and databases, modern public safety operations increasingly rely on secure access to vast amounts of data in the field. Samsung and Havis are working together to ensure police officers, firefighters and other public safety personnel can not only access the information they need when they need it, but can also quickly and safely pivot from a mobile to a desktop experience inside their vehicles — all without needing to return to their stations or headquarters. With DeX and DeX in Vehicle, agencies can securely and cost-effectively transition their PC-centric IT environment to a streamlined mobile ecosystem to support public safety personnel with connectivity, information access and functionality wherever they are needed most.

For complete product information and accessories, visit samsung.com/government insights.samsung.com
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