



# REVOLUTIONIZING PUBLIC SAFETY COMMUNICATIONS **WITH T-PRIORITY.**

In partnership with **SAMSUNG**



## KEY TAKEAWAYS

- Public safety agencies face critical communication challenges, highlighting the need for modern, reliable solutions like T-Priority.
- T-Priority delivers reliable connectivity for first responders, even during heavy network congestion.
- Ready today for tomorrow's tools—T-Priority supports critical tools like drones and license plate readers.
- Built for public safety—T-Priority empowers law enforcement, fire, and EMS teams to respond faster and collaborate more effectively.

## Addressing the critical need for reliable public safety communications.

When seconds count and lives are on the line, communication is not just a tool for public safety personnel—it's a lifeline. Law enforcement, fire, and EMS agencies often operate in high-pressure environments where split-second decisions can make the difference between success and failure. Even day-to-day routine communications are often mission critical to field personnel. That's because routine tasks can quickly become dangerous. Despite advancements in mobile technology, many first responders still struggle with communication challenges caused by network congestion, outdated infrastructure, or interoperability issues. These obstacles can put first responders and the public at risk by impeding collaboration and delaying critical responses.

T-Priority, powered by the T-Mobile 5G Standalone (5G SA) network, is designed to address these challenges head-on. Offering the world's first dedicated 5G network slice for public safety, T-Priority provides reliable, high-speed connectivity for first responders with always-on priority access and, when necessary, preemption. By combining advanced technology with purpose-built features, T-Priority empowers public safety agencies to operate with greater efficiency, speed, and precision. In this article we examine current communication challenges and how T-Priority from T-Mobile addresses these challenges to help increase public safety.



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# Understanding the challenges in public safety communications.

To appreciate the transformative impact of T-Priority, it's important to recognize the obstacles faced by most public safety agencies.

## Network congestion.

Large-scale emergencies or high-density events can overwhelm communication networks, causing delays or even failures. If first responder communications compete with civilian traffic during crises, calls may drop or fail, data transfers can become bogged down, and connectivity could be disrupted at critical moments.

## Outdated infrastructure.

Many agencies rely on legacy communication systems such as land mobile radios (LMRs) or 4G LTE networks. While dependable for basic voice communication, these technologies don't support advanced 5G-era tools like real-time 5G video feeds, AI equipped Smartphones, Internet of Things (IoT) devices, and telemedicine platforms.

## Interagency coordination gaps.

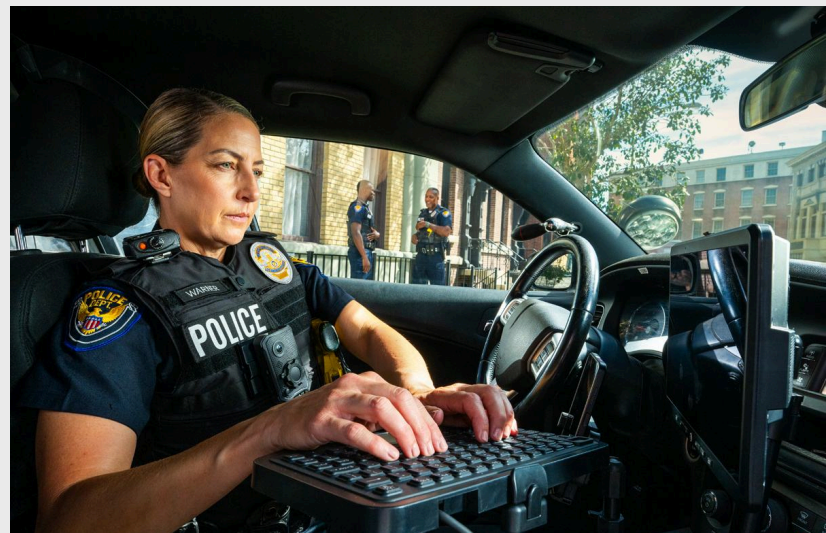
Public safety operations often require collaboration between police, fire, EMS, and critical infrastructure organizations. However, disparate communication systems and/or incompatible platforms create barriers that delay the exchange of vital information. This problem is exacerbated during large-scale mutual aid events, where supporting agencies come from outside the region or state.

## Dynamic and harsh environments.

Emergencies often occur in challenging settings—remote areas, wildfire zones, or disaster-stricken regions—where communication networks (LMR and cellular) may be compromised. Environmental interference, damaged infrastructure, and overcrowded urban settings can make reliable communication difficult.

## Demand for data-intensive tools.

Modern emergencies increasingly require tools that demand high-speed connectivity, such as drones, body cameras, IoT sensors, and augmented reality (AR) overlays. Legacy systems lack the speed and capacity to take full advantage of these technologies.



## T-Priority delivers unprecedented communication and data capabilities.

T-Priority is a transformative communication solution built exclusively for first responders and critical infrastructure organizations. Powered by the T-Mobile 5G SA network, T-Priority combines priority access, enhanced reliability, and advanced performance to meet the dynamic needs of public safety operations.

T-Priority is purpose-built to support public safety operations, utilizing the full breadth of T-Mobile's industry-leading commercial 5G network by giving first responders unprecedented access and priority. T-Priority empowers agencies to operate more effectively with a greater level of situational awareness.

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## 5G SA: The technology behind T-Priority.

The T-Mobile 5G Standalone (5G SA) network is the technological backbone of T-Priority. Unlike 5G non-standalone (5G NSA), which relies on legacy 4G cores, 5G SA operates on a dedicated 5G core, unlocking the full potential of next-generation mobile connectivity.

Agencies that want to take advantage of 5G technologies must move to devices that are 5G capable. They should also make sure that their mobile devices are compatible with 5G SA technology. The latest Samsung mobile devices, for example, are fully compatible. To determine if your device works with T-Priority, T-Mobile maintains an [updated list of compatible devices](#).

**T-Priority creates a dedicated “emergency lane” on the 5G network for first responders, ensuring their traffic is prioritized over all other users during emergencies.**

### How 5G SA benefits public safety.



#### Higher speed and capacity.

The T-Mobile 5G network delivers data speeds faster than every competing networks, enabling more seamless transmission of high-resolution video and large data files.



#### Ultra-low latency.

With ultra-low latency, 5G SA supports real-time tools like telemedicine, AR overlays, and drone operations.



#### Dynamic network slicing.

T-Priority creates a dedicated “emergency lane” on the 5G network for first responders, ensuring their traffic is prioritized over all other users during emergencies. This feature dynamically adjusts to accommodate extreme surges in demand, such as during natural disasters or large-scale public events.

# T-Priority's transformative capabilities are best illustrated through real-world scenarios.

## Active shooter response.

Law enforcement personnel responding to an active shooter in a crowded mall can rely on T-Priority to better coordinate operations by leveraging emerging technology. Live drone feeds can provide real-time visuals of a suspect's location and movements, streamed seamlessly over the network. Floor plans and evacuation routes can be quickly and easily shared with field personnel. Mission Critical Push-to-Talk (MCPTT) Samsung devices can be used to augment existing LMR systems, helping facilitate rapid, coordinated action during multi-agency responses.

## Wildfire management.

Firefighters battling a fast-moving wildfire can receive real-time weather updates, fire spread projection and perform team tracking using tablets or smartphones equipped with the Android Team Awareness Kit (ATAK) application. Fire agencies nationwide report that ATAK is an invaluable tool for coordinating ground and air operations, including live drone feeds. ATAK can help facilitate a quicker and better-coordinated response, which is crucial for wildfire containment.

## Hurricane disaster recovery.

In the aftermath of a large hurricane, communication infrastructure is often compromised. T-Priority's dedicated network slice supports public safety operations in a rare period of extreme congestion by helping make virtually all available network resources available for public safety use. It's important to note that the T-Mobile Emergency Response Team (ERT) has decades of experience in restoring service after major disasters. No network is impervious to the power of a major storm, but the T-Mobile ERT has proven incredibly adept at disaster response with a wide range of deployable assets capable of restoring connectivity in the most challenging situations. T-Priority helps ensure public safety operations are given priority access and preemption on the network, even as thousands of residents reconnect to the network.

## Large-scale public events.

During a citywide marathon or major concert, T-Priority allows for better crowd control coordination by helping to ensure safety personnel have real-time actionable information. Instead of a vague description delivered on a radio in a noisy environment, first responders can receive video of a specific person acting suspiciously or photos of a questionable package. In the event of a medical incident, paramedics can use T-Priority-enabled devices to share diagnostic data, including images, from the scene or during transport. This helps hospital personnel prepare for patient arrival and improves patient outcomes.

## Proactive emergency response using IoT sensors.

As a major storm rages across a large city, emergency management teams receive real-time data from IoT sensors monitoring water levels in flood-prone areas. Alerts from these sensors allow public safety officials to dispatch crews to shut down roadways, change routing for emergency responses, and notify residents who may need to move to higher ground. This scenario is possible with the prioritized data traffic and minimal latency T-Priority provides.



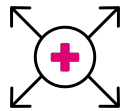
# How T-Priority stands out from other networks.

T-Priority offers features that distinguish it from other providers, including:



### Unmatched performance.

Offers 40% more 5G capacity than other providers, faster 5G speeds, and provides 5G coverage to 98% of the U.S. population, including many rural areas.



### The world's first dedicated 5G network slice for first responders.

Helps ensure that first responders have the network resources they need 24/7, even during the rare event of extreme network congestion. Unlike Band 14, which will continue to operate on 4G for several years, T-Priority's 5G network slice provides the 5G capacity and speed to support emerging technologies now.



### 5G core.

Operates on a 5G SA core, unlike competitors that rely on hybrid 4G/5G systems with 4G cores.



### Comprehensive security.

Sensitive communications can be protected by a Secure Access Service Edge (SASE) architecture. A security slice can keep sensitive data separate from general network traffic using the power of the 5G SA network. SASE leverages zero-trust network access principles to safeguard against online threats.

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# Preparing for tomorrow's challenges: future-ready technology.

T-Priority is built for today and ready for tomorrow. Its advanced infrastructure supports or complements emerging technologies that are defining the next generation of public safety operations. Some powerful examples of emerging applications and capabilities:

## Mission Critical Push-to-Talk.

Available today, Mission Critical Push-to-Talk (MCPTT) is redefining public safety communication by combining the immediacy of two-way communications with the flexibility of a smartphone. MCPTT can augment conventional LMR systems by extending two-way communication capability to support personnel, fostering better coordination and response during emergencies.

A rugged mobile device like the Samsung Galaxy XCover6 Pro is ideal for MCPTT operations, offering a dedicated side button for a familiar user experience while providing the full utility of a modern smartphone. Having MCPTT in addition to T-Priority's high-speed, low-latency network—along with priority access and preemption—provides two routes for critical communications get through, even during network congestion.

## Augmented Reality (AR).

AR overlays during search-and-rescue missions can provide responders with live environmental data, such as building layouts or heat maps. Firefighters equipped with AR-enabled helmets can "see through" smoke using thermal imaging overlaid on their visors, providing a new level of situational awareness and the ability to navigate hazardous environments more effectively. This technology saves lives by allowing responders to identify escape routes, locate individuals in danger, and avoid structural hazards with unparalleled precision.

## Global connectivity.

Through its partnership with SpaceX, T-Mobile will extend coverage to more remote areas, providing capabilities to previously underserved locations where reliable communication has been a significant challenge. This unprecedented partnership will help ensure first responders remain connected when it matters most, empowering agencies to respond more effectively, even in the most challenging environments.

## Smartphones as the primary computer in public safety vehicles.

Public safety vehicles are evolving into mobile command centers, powered by smartphones like the Samsung Galaxy S24, integrated with Samsung DeX. This innovative solution transforms a mobile device into a versatile workstation, eliminating the need for traditional laptops while enhancing efficiency.

With T-Priority's high-bandwidth, low-latency connectivity, officers can manage in-car video systems, draft reports, and access live updates from computer-aided dispatch systems—all directly from their smartphone. A keyboard and mounted display provide a user experience that replicates the conventional patrol car laptop. The Samsung DeX seamlessly integrates advanced tools such as license plate readers, real-time evidence management, and in-car video.

This solution allows the smartphone to be removed from the patrol vehicle, ensuring full access to public safety data on the go. Powered by T-Priority, first responders stay connected for faster responses, efficient data processing, and seamless coordination. By adopting smartphones as their primary computing devices, agencies simplify operations, modernize workflows, and optimize resources for future challenges.

## IoT devices.

Environmental IoT sensors can detect hazardous conditions, such as rising CO2 levels, toxic gases, or structural instability, and immediately send alerts to responders, helping them avoid danger zones and strategize safer approaches. For example, during a chemical spill, IoT sensors can pinpoint areas of highest contamination, enabling teams to deploy resources more effectively and minimize exposure risks. By integrating these devices with the T-Mobile high-bandwidth, low-latency 5G network, responders can receive instant updates, improving safety and enabling faster, data-driven decisions in life-threatening scenarios. T-Priority helps ensure this critical data always has priority.



# Empowering first responders with reliable connectivity.

T-Priority represents a transformative step forward in public safety communications. By combining cutting-edge 5G technology with features and capabilities designed for first responders, it addresses today's critical challenges while paving the way for future innovations. With T-Priority, public safety agencies can respond faster, collaborate seamlessly, and save more lives—because in emergencies, every second counts.

**This is enhanced public safety with T-Mobile.**

Explore solutions at [T-Priority.com](https://www.t-mobile.com/priority) and see how we empower essential operations.



T-Priority available for qualifying organizations on eligible rate plans. WPS enrollment with USDHS required. Features available on our network; not available while roaming. Some T-Priority features only available in areas of Ultra Capacity 5G coverage with capable device and 5G Standalone settings; see [T-Mobile.com/5Glayers](https://www.t-mobile.com/5Glayers). Coverage not available in some areas and may be impacted by emergencies; check your response area. Fastest 5G Network based on analysis by Ookla® of Speedtest Intelligence® data of national Speed Score results incorporating 5G download and upload speeds for Q1–Q2 2024. Ookla trademarks used under license and reprinted with permission.

Photos in this paper contain T-Priority compatible Samsung devices including the Samsung Galaxy XCover6 Pro, Galaxy Tab A9+ 5G, and Samsung DeX.