

www.securitymagazine.com/articles/102468-modern-wireless-first-security-solutions-deliver-multiple-benefits-for-mixed-use-properties



Luke van Zyl via Unsplash

Modern Wireless-First Security Solutions Deliver Multiple Benefits for Mixed-Use Properties

[Kim Garcia](#)

August 10, 2026

Mixed-use properties have unique security challenges by their very nature. They typically house numerous occupants that require access to common areas and individual spaces that all need to be secured 24/7/365 — sometimes under a single roof and often across properties or campuses with multiple buildings. Add into the equation multi-tenant, mixed-use properties that combine residential and business spaces, and the logistical challenges of implementing modern security solutions increase exponentially.

The most common longstanding security and safety challenges of mixed-use properties generally fall into four categories: 1) the need to isolate private and public internal and exterior spaces; 2) manage physical credentials and access privileges; 3) prevent unauthorized access and intrusion; and 4) maintain security in common areas.

Fortunately, modern wireless-first security solutions can help property owners/managers overcome longstanding challenges related to system flexibility, performance, range, and scalability while increasing security and safety, deterring and detecting criminal activity, enhancing operations, and providing a positive user experience.

Wireless-First Infrastructure Makes the Impossible Possible

One of the principal tenets of modern physical security is the need for layered solutions. There's a long list of technologies that can be deployed to better secure mixed-use properties, but not all are appropriate for every application. The secret to success lies in the ability to combine the best possible solutions into an integrated security solution that starts at a mixed-use property's perimeter — be it the fence line of a stand-alone property in the suburbs or the front doors of a multi-tenant skyscraper in a major metro city — and moves inward to critical interior areas that require additional layers of security.

Effective Security Demands Efficient Infrastructure

Protecting mixed-use properties on any scale requires robust security infrastructure to integrate otherwise disparate system technologies.

For the purposes of this article and area of expertise, let's focus on two distinct security system applications: intrusion detection and duress notification.

One of the fastest trending infrastructure solutions continues to be wireless technology. First deployed for security applications some 40 years ago, wireless technology has continued to evolve from simple door and window intrusion sensors to advanced access, video surveillance, and sensor applications. Transitioning from wired to new modern wireless security infrastructure provides more economical and effective ways to extend the scale, reach, and effectiveness of security system deployments faster and with greater cost efficiency. Eliminating the need for long cable runs from independent distribution frame (IDF) closets to endpoint devices located throughout a mixed-use property saves time and money during installation and over the course of the system's lifetime. And as the scale and complexity of a hard-wired installation increases, so do the economies of scale, yielding even greater return on investment (ROI) and lower total cost of ownership (TCO) over time.

More Sensors Make More Sense

Mixed-use properties increasingly rely upon a wide selection of sensors for intrusion detection, environmental control, occupancy monitoring, motion detection, traffic monitoring, smoke/CO detection, and more. In addition to performing their primary functions to detect specific types of activity, modern sensors can be integrated into many intrusion, access, or video management platforms to trigger specific sequences of events. These can include full-frame video recording, lockdowns, fire alarm activation and numerous building automation events including HVAC activation, lighting management, and even elevator control.

The level and scale of integrating advanced wireless sensors is virtually limitless with continued growth and expansion driven by customers' needs and demands to proactively prevent and mitigate new and emerging threats. Additionally, wireless infrastructure also best supports modern wearable panic notification devices that can activate different alarm levels and provide location services to best assist first responders.

New advancements in intrusion detection system wireless technology allow any mixed-use property to easily accommodate changes resulting from tenant turnover, physical layout changes to various secured areas, and expansion — from the perimeter to innermost protected spaces. This holds true even when deployed at large mixed-use properties or campuses, and older facilities that often present installation and operational challenges caused by thick walls, dense materials, and complex environments. Modern wireless-first infrastructure also provides the added convenience of mobile control, allowing system admins to manage, monitor and respond to system activity from anywhere using an app on their smartphones. All these value propositions are not collectively possible utilizing dated wired infrastructure.

Why 900 MHz Wireless-First Infrastructure Excels

- Frequency Hopping Spread Spectrum (FHSS) technology helps reduce susceptibility to interference and jamming attempts
- Always-on communication even with dense physical obstacles like concrete, brick, and heavy walls
- High resistance to other wireless interference
- Quick, reliable installations with minimal structural impact on facilities

Wireless-First Infrastructure Can Improve Operations

Beyond security and safety, wireless-first infrastructure can help improve daily operations at mixed-use properties by providing new sources of business intelligence. For example, wireless intrusion devices can help property management identify activity at key access points and restricted areas, allowing them to better plan staffing, maintenance, and occupancy restrictions with historical data for future planning. Wearable duress cards or panic devices can support staff safety for leasing teams, maintenance workers, property managers, and security officers with location services to pinpoint exactly where a potential threat or emergency is occurring in real time.

Wireless environmental sensors can also help monitor conditions such as water, temperature in pools, data rooms, trash areas, or other facility areas that may otherwise not be monitored on a consistent basis. These and various other types of specialty

sensors can be easily and cost-efficiently deployed to provide valuable data points to help improve operations.

Let's Not Overlook Personal Privacy and System Integrity

Modern wireless-first infrastructure delivers the reliability and resilience required for critical security applications. The use of 900 MHz wireless transmission technology has proven to be highly secure and exceptionally reliable in thousands of mission-critical deployments, earning a reputation as an industry standard for professionally installed commercial security systems and critical infrastructure.

The New Era of Wireless-First Infrastructure

Making the transition from traditional wired infrastructure to wireless-first infrastructure allows mixed-use properties to extend sensors and duress/panic devices to areas that are difficult, expensive, or too disruptive to wire. It also allows the integration of new and emerging wireless sensor solutions to expand the overall capabilities of existing integrated video, access, and intrusion system platforms with centralized, remote management and control. Wireless-first infrastructure provides property managers with a highly versatile, effective and cost-efficient means to heighten security, safety and overall operations.

Kim Garcia is Director of Marketing & Communications at Inovonics.