



Scaling Connectivity for Multifamily Properties

IN PARTNERSHIP WITH:



Scaling Connectivity for Multifamily Properties

Fast, secure, reliable connectivity is now an expectation at multifamily residences. Residents need access to high-speed internet services to work, attend class, stream video and games, among other high-bandwidth activities. At the same time, properties need connectivity solutions that help them better manage operations, bring down costs, and reduce risk in an age of skyrocketing insurance costs.

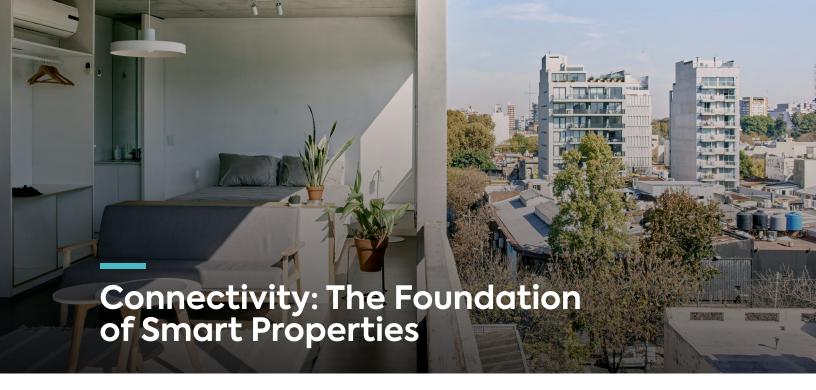
Multifamily properties are embracing transformative technologies and connected use cases to better meet the needs of residents and to improve their internal operations. Investments no longer need to be limited to new builds; older properties are often in the most urgent need of upgrading. Parks Associates research finds that 82% of properties 10 years old or older that offer WiFi have difficulty maintaining device connections on the network compared with just 13% of newer properties.

New solutions enable existing properties to leverage the investments they've made into their existing infrastructure to offer residents a smart living experience, control costs, and help property staff work more efficiently, and with a better understanding and control of the environment.

This white paper highlights the demand for WiFi and smart living at multifamily communities and the ways in which property owners and managers are improving operations starting at the network. It explores methods by which existing properties can make the most out of their existing infrastructure to gain access to smart building benefits and highlights key considerations for scaling connectivity upgrades to become a smart property quickly and cost-efficiently.

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Parks Associates estimates that there are nearly 29 million apartments and almost 10 million condos in the United States. Increasingly, property owners/operators are looking for technologies to attract and retain residents, enhance Net Operating Income (NOI), and protect their assets. Devices like smart locks, thermostats, leak detectors, and lights are becoming more common in multifamily spaces.

Internet services to the property and the property's network infrastructure are the critical foundation upon which smart property technologies are built.

There are 3.56M smart apartment residential units in the US market, and 2.7M smart condos, equating to 17% of residential MDUs.

Residents Expect Reliable, Instant-On Connectivity

Residents expect solid, reliable, connectivity and seek out properties that meet these requirements. During the COVID-19 pandemic, properties faced many pressures, including the need to support more remote and virtual interactions with residents and prospective renters. Now, over a third of apartment renters and over half of condo owners work remotely at least one day per week making reliable connectivity a critical amenity. In addition, 88% of MDU (multidwelling unit) residents subscribe to a streaming video service, creating more demand on the network.



88%

MDU Residents **Stream Video**



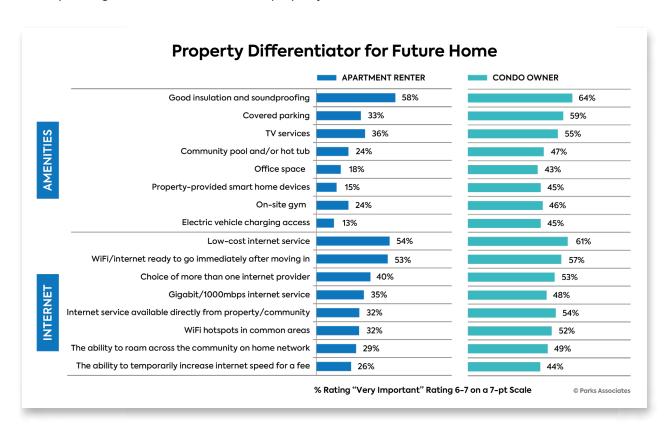
59% 36%

Condo Apartment Owners Renters

Work Remotely



Connectivity services must connect residents to experiences they care about: entertainment, work, safety, and smart living. And it must be ready at move-in. Parks Associates research reveals that the majority of MDU residents say having internet ready to go immediately after moving in is "very important" in their next home. This ranks #3 of 16 amenities tested, just after good insulation / soundproofing and low-cost internet as a property differentiator.



Additionally, more and more MDU residents are using smart home tech, acquired themselves and from their properties. 22% of apartment renters and 58% of condo owners use smart home devices today, and these residents need modern networking services to support them. In fact, many properties are offering smart home devices as a differentiator to attract and retain residents.

Parks Associates research indicates that this resident benefit is well perceived: **79% of those with** property-provided smart home devices and services are satisfied with them.





Connectivity at the Core of Property Management

Multifamily properties and MDUs are increasingly embracing transformative technologies and connected use cases to better meet the needs of their residents and to improve their own internal operations. These companies are investing in solutions that reduce the need for manual labor, cut costs associated with repairs or utility use, and introduce new amenities and experiences for residents, among other use cases. As connectivity is increasingly integrated into property management, it boosts operational efficiency while making properties more attractive to prospective and current residents.



Staffing

Virtual experience platforms enable properties to show units remotely to prospective residents. This reduces the need for staff to be present and addresses the widespread staffing shortages that resulted from COVID-19. Additionally, access control systems enable self-guided tours for properties. Digital applications can help streamline the entire resident turnover process, from managing lease terminations to preparing units for new residents. Automated systems can schedule cleanings, inspections, and repairs, reducing the downtime between tenants. Additionally, access control systems avoid the need to rekey locks or change codes during resident turnover.

By using connected devices and management platforms, maintenance requests can be prioritized and scheduled more efficiently, optimizing maintenance staff's time to quickly address any urgent issues. These platforms also enable better package management, including notifying residents of package arrivals, storing them until pickup, and preventing theft.



Energy

Smart thermostats and smart appliances appeal to both residents and to properties, serving both as an amenity and as cost-cutting tools. For example, properties are using connectivity to control the thermostat and lighting in vacant units. Connectivity also helps save energy in common areas and helps residents save on energy with smart thermostats.

For full operational benefits, smart thermostats must be deployed in a managed WiFi or building wide WiFi scenario. Relying on resident networks for connectivity introduces operational difficulties such as needing to manually reset the thermostat during resident turnover.

Approximately 11% of MDU residents use a smart thermostat

Properties also incorporate connectivity to manage major energy-related systems: HVAC, solar/storage, generators, and EV charging. Total EV penetration in the US market is low, with 6% of MDU households reporting owning an EV. Even so, EV charger availability is on residents' minds, with 36% claiming they are valuable in a prospective home. Many renters, particularly in urban areas, anticipate owning an EV in the coming years and are looking for apartments that can offer charging on-site if needed. This will become



an increasingly important competitive factor for MDUs as EV adoption grows in the coming years. EV charger rollout represents an opportunity to upgrade property networks, deploying WiFi to parking lots and running conduit between buildings in garden-style communities.



Insurance

The multifamily market is struggling with skyrocketing insurance costs. According to TBM Multifamily, property insurance rates went up 10% to 40% for multifamily property owners. Properties are seeing the benefits in deploying risk mitigation solutions in order to reduce the damages caused by catastrophic events such as leaks and floods, which damage multiple units. These solutions are not typically resident-facing but have a strong ROI when implemented on a large-scale, through reductions in insurance rate increases and preventing small leaks from becoming large incidents.

Water leak detectors with shut-off are an example of how smart building management can manage risk by also identifying leaks that drive up water consumption costs. Water leak detectors are being deployed on all property types, but they are particularly valuable in high and mid-rises, where leaks are capable of doing a greater degree of damage. There is a growing trend towards insurance discounts for properties with these solutions. However, this is still at an early stage, and properties may need to negotiate rates or change providers to see the full benefits.



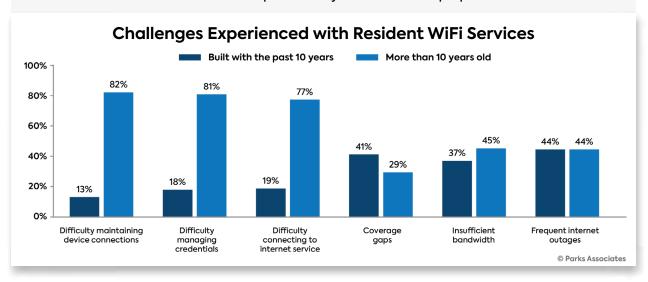


Existing Properties: Get More Out of Your Connected Infrastructure

Owners and operators are widely deploying managed WiFi into new construction and new builds. Existing properties face more challenging deployment decisions. Many new units have come online in recent years after a boom in construction during the pandemic. This has increased competition, putting pressure on the rents and occupancy rates of older properties. To keep up, existing properties need to upgrade while managing costs.

However, a lack of suitable pre-existing networking infrastructure is a top barrier holding MDUs back from widely deploying IoT. Many existing properties were created without suitable wiring or the infrastructure to run new wiring. Additionally, many properties do not own the wiring infrastructure, making new connectivity deployments costly or not feasible. As a result, older properties are far less likely to offer smart amenities and have worse experiences with their existing infrastructure.

82% of properties 10 years old or older that offer WiFi have difficulty maintaining device connections on the network compared with just 13% of newer properties.



Integration, fragmentation, and data silos are also common frustrations for multifamily properties. They impact operational efficiency, add unexpected costs and workload to staff, and diminish the usefulness of solutions and resulting data. The complexities and costs associated with upgrading connectivity and network systems require careful evaluation and strategic planning to ensure that investments are both sustainable and effective.



Overcoming Challenges: Resistance to Change and Proving ROI

Parks Associates interviews with multifamily stakeholders reveals that resistance to change is a top barrier to technology adoption in many organizations. This occurs throughout all levels of the company, from decision makers at the top to the staff members and workers who use solutions every day. There is a risk in changing processes away from what is currently being done that works. This risk needs to be understood and mitigated, the benefits of new solutions need to be clearly explained and understood, and a deployment and maintenance process created and streamlined.

A key additional pain point for owners and operators is uncertainty around ROI and benefits. Tech purchasers find it difficult to conceptualize and communicate abstract benefits of a product to stakeholders. It is easier to understand and communicate the benefits of solutions, particularly solutions with case studies. Purchasers additional need the ability to run beta tests, as well as pilot programs.

Properties are looking to better understand the demographics that want and are willing to pay for smart apartment packages, seeing that this may not be of interest to everyone. As they seek to strengthen their connected infrastructure, MDU providers can take several measures to boost their competitiveness and improve the connected living experience for their residents:

- Leverage existing equipment and wiring to modernize their networks quickly and cost effectively.
 This can include enhanced routers and mesh network technologies to improve coverage and service quality.
- Make sure staff and property technology have a dedicated network separate from that used by residents and guests, ensuring greater operational efficiency and security.
- Create a concierge portal to have better insight into their network operation and easily access customer support.
- Choose vendors who give proactive support, insights, and tools to quickly identify and address
 problems. This is especially important, since 32% of properties offering WiFi say they have
 difficulty maintaining device connections and 30% have difficulty managing credentials.



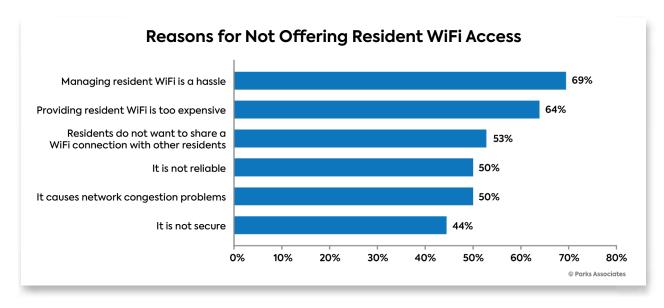
Connected Building

Get your property future-ready and give your residents a powerful connection today, while building toward a faster, more reliable tomorrow. Connected Building from Xfinity includes a 24/7 proactively monitored network dedicated for your staff and smart technology, as well as a customized concierge portal that is integrated with your property management system. Plus, offer instant internet access to your residents with an Xfinity Gateway built right into their home.





Change is hard, and with high staff turnover at every level, deployments can be delayed or take longer than planned. Sixty-nine percent of properties that do not offer WiFi access to residents today say managing resident WiFi is a hassle, the top reason for not offering it. This highlights the operational challenges MDUs face when adapting to new technologies, especially with frequent changes in staffing.



Integrating WiFi and other smart technologies isn't just a matter of installation but also involves managing the change to ensure sustainable operation and use. Deploying into MDUs is a complex, multistakeholder process. MDUs are oftentimes not equipped to take on a "foreman" role managing these different companies. A single vendor or an aggregator taking on this role tends to dramatically simplify and streamline not just deployments, but also operations and customer support.

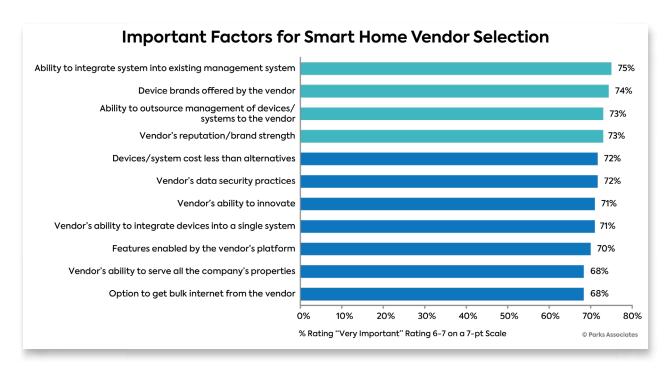
Many properties expect solutions to last through a 5-to-10-year replacement cycle.

Solutions need to be supported during this time and kept compatible with companies' internal technology infrastructures. Not all vendors will be capable of this long-term support, and MDUs must take this into account when evaluating potential partners.



Properties may also change ownership several times throughout their lifetimes — requiring in-place solutions either be integrated into the technology platforms of new owners or replaced by ones that are. This can be highly disruptive to tenants, especially in the case of access control systems and highly automated properties.

MDUs are looking to reduce fragmentation and simplify operations, through integrating solutions into their property management systems, consolidating vendors when possible, and standardizing across their entire portfolios. They look to strong brands and reputations that speak to a company's staying power and customer service.



When selecting vendors to partner with, property managers should look for vendors with the following characteristics:

- Consultative partners The ideal vendor should understand the specific opportunities and challenges associated with property management, offering customized advice and solutions.
 They should also be experienced in guiding property managers through the entire process, from initial ideation to the final stages of implementation.
- Supports the long-term needs of residents and staff This will help to minimize disruptions and enhance the value provided by connected systems and solutions.
- Have experience in change management Vendors with expertise in this area can help identify
 and anticipate potential problems and roadblocks, offering winning strategies and solutions that
 effectively manage change.

Many key decision makers learn about industry solutions and top players at conferences and industry events, with top events including OPTECH, NAA, and Parks Associates Smart Spaces event. These events represent a key opportunity for vendors and MDU decision makers to engage with each other.





All properties need to invest in modern, reliable, fast internet now — residents demand it, and it creates efficiencies in property management. More recently, MDUs have begun to deploy a managed WiFi solution in properties:

- · To improve resident experiences with internet throughout the property
- · To improve overall ROI and NOI
- · To enable smart apartment and IoT use cases
- · To reduce the need for Distributed Antenna Systems (DAS) & other expensive cellular equipment

Next-gen managed WiFi solutions are key enablers for transformation, representing a top amenity, revenue source, and a foundation for IoT rollout. Next-gen WiFi systems are also designed to be scalable, allowing properties to easily expand services as technology advances and residents' technology needs evolve. This scalability is particularly advantageous, as the ability to future-proof infrastructure is a selling point.

Investment in a robust internet infrastructure is crucial for remaining competitive and appealing in the rental market. Existing properties can upgrade now, leveraging the infrastructure they have and see immediate benefits, particularly for property management operations. To attract long-term residents, properties must be prepared to offer the amenities and features their tenants value—connected systems and solutions that deliver a premium living experience.



About Xfinity Communities



Xfinity Communities provides owners, developers, property managers, and residents with a powerful connection today, while building toward a faster, more reliable tomorrow. With our customized solutions, Xfinity Communities helps owners and operators of multifamily properties, senior communities, and student dwellings connect their residents to more of what they love. Xfinity Communities is transforming more than 189,000 properties and 14.7 million units across the country.

For more information visit Xfinity Communities or follow us on LinkedIn.

About Parks Associates



www.parksassociates.com info@parksassociates.com 972.490.1113 Parks Associates, a woman-founded and certified business, is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services. Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

The company's expertise includes new media, digital entertainment and gaming, home networks, internet and television services, digital health, mobile applications and services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security.

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ATTRIBUTION

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