

Community-Based Wi-Fi Solutions Critical in Affordable Housing to Increase Equity and Access

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CONTENTS

About the Author	2
Introduction	3
Health Care and the Internet	4
The Gap: Affordable Housing Lacks Community-Wide Access	6
Value of Community/Based Strategies Exceed the Challenges Faced	10
Federal Support Needed to Ensure Community-Wide Access in Affordable Housing	11
Conclusion	13

ABOUT THE AUTHOR

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Norris joined National Church Residences in 1993 as Director of Corporate Financial Services. She later became Chief Operating Officer of Housing Management, overseeing the management operations of the organization's affordable housing portfolio. She was later promoted to Chief Development Officer, overseeing the team that specialized in development of all new National Church Residences products, including HUD 202 and Low-Income Housing Tax Credit new construction, acquisitions and substantial rehabs. She served as President of National Church Residences Investment Corp. from 2014 to 2018.

Norris currently serves as chair of the board for the Corporation for Supportive Housing (CSH). She is immediate past chair of the Stewards of Affordable Housing for the Future (SAHF). Michelle has served on the boards of LeadingAge Ohio and of National Affordable Housing Trust (NAHT). She has also served as past president of the Ohio Housing Council and past president of the National Affordable Housing Management Association (NAHMA). Norris holds a bachelor's degree from Miami University in Oxford, Ohio. .

INTRODUCTION

In today's society, the internet is no longer a luxury or convenience, but rather an important resource that is integral to all aspects of every American's life. Data supports this idea. According to Pew Research, 95% of Americans reported using the internet daily.¹ We depend on easy, reliable access to the internet to conduct work meetings, book air travel, make restaurant reservations, educate our children and other major tasks.

Since the COVID pandemic, the internet has played an increasingly significant role in our health care. As more appointments have moved online, providers have shifted toward digital record keeping and treatment for chronic illnesses through at-home monitoring now offers improved outcomes for patients. As our institutions continue to embrace technology, they rely on the assumption that customers have access to Wi-Fi at home and elsewhere. It is critical that all Americans have equitable access to reliable, affordable internet service in their homes.

¹<https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>

The unfortunate reality is that not all homes have access to reliable internet. One significant example is in multifamily housing. Though the rental market is fast embracing all the value that comes with fully connected communities, many affordable housing communities have fallen behind their market-rate counterparts in the provision of internet service to residents. The reasons for this gap between market-rate and affordable housing are numerous and complex, including unique, structural challenges to the implementation of broadband in affordable communities, a lack of competition from Internet Service Providers (ISPs) to provide internet in affordable housing, inconsistent federal guidance and support and simple economic incentives for owners. Despite these challenges, there are steps to resolution. Community-based ideas that include bulk billing agreements and managed Wi-Fi solutions have the potential to bring faster, more affordable and less labor-intensive internet service to affordable housing communities in a way that is realistically scalable nationwide. To effectively address the digital divide between Americans of varying social and economic positions, challenges need to be identified and addressed. These include government policies that seek to leverage technological tools, not restrict their use.

HEALTH CARE AND THE INTERNET

One of the most compelling reasons to address the lack of connectivity in the world of affordable housing is the impact on access to health care. As the role of the internet grows in Americans' everyday lives, so, too, does its role in health care services. Today, the internet plays a key role in providing patients with the most effective and innovative treatment options. Health care policy experts have repeatedly emphasized the importance of dependable, at-home internet access to public health. Research from the National Institutes of Health has concluded that broadband access is the "super social determinant of health,"² while other experts have noted that access to the internet is now a prerequisite for full participation in the health care system.

² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7969595>

The adoption of new technologies by health care providers is a clear signifier of the importance of internet to patient care. For example, medical practices are shifting toward electronic medical record keeping as the basis of modern health care, with the CDC reporting in 2022 that nearly 60% of Americans had used the internet to access their records.³ Additionally, telehealth is growing in frequency and importance, particularly among mental health care providers. As of 2023, as many as 37% of mental health appointments were conducted virtually through telehealth platforms.⁴ Telehealth has also shown promise in improving management of chronic conditions, as technology can be used to expand patients' ability to monitor their condition at home, reduce dependency on visits to doctors' offices or hospitals, improve prescription compliance and provide more consistent care for patients in need.

These chronic care management opportunities are particularly important considering the demographic changes occurring across the United States. While in 2012 there were approximately 43 million adults over the age of 65 in the US, the Census Bureau projects that number to nearly double to over 82 million by 2050.⁵ As the population ages, ensuring that all Americans have access to all available health care options will become critical.

Importantly, though there remain concerns about education and adoption among seniors, data suggests that, if it is available, older adults in affordable housing actively use the internet to improve their health care. Research from National Church Residences, a nonprofit organization that owns and operates approximately 350 age- and income-restricted communities housing over 20,000 seniors, found that among their residents who have access to the internet, 55% used the internet to check medical records and 49% met with health care providers virtually. Further, 82% of these residents reported feeling less isolated, lonely or depressed, while 74% felt less dependent on others and 64% felt less worried for their health simply because they had access to the internet in their home. Data such as this further suggests that access to the internet brings increased access to health care no matter the demographic.

³ <https://www.cdc.gov/nchs/products/databriefs/db482.htm#:~:text=Key%20findings-,Data%20from%20the%20National%20Health%20Interview%20Survey,among%20women%20compared%20with%20men.>

⁴ <https://www.techtarget.com/virtualhealthcare/news/366596662/Telehealth-Use-Remains-High-in-Mental-Health-Infectious-Disease-Care>

⁵ <https://www.census.gov/library/publications/2014/demo/p25-1140.html#:~:text=In%202050%2C%20the%20population%20aged,over%20the%20age%20of%2085>

THE GAP: AFFORDABLE HOUSING LACKS COMMUNITY-WIDE ACCESS

Though there is clear and compelling value to having affordable and reliable internet access to bring health care and other services to the home, it is not yet a given. While the country has made considerable progress toward ensuring broadband access at home, affordable housing is one area that has struggled to keep up with its adoption. According to a study conducted by the Department of Housing and Urban Development (HUD), approximately one third of households living in federally subsidized affordable housing had high-speed internet service,⁶ compared to over three quarters of households nationally.⁷ The impact of this inequity of access was made particularly evident during the pandemic, when a lack of access to quality internet at home left low-income seniors isolated, forced low-income children to attend class from coffee shops or other Wi-Fi-equipped public places and generally meant that low-income communities lacked necessary infrastructure to participate in society.

Given the compelling value of bringing connectivity to homes, it is necessary to understand why affordable housing providers have struggled to implement community-wide internet strategies into their portfolios. To that end, N-Sights Consulting conducted a series of informational interviews with members of the Stewards of Affordable Housing for the Future (SAHF), a collective of nonprofit affordable housing providers. The SAHF members' combined portfolios include 150,000 affordable housing rental homes across the nation and focus on service-enriched housing for people of limited economic means, with 44% of their residents being seniors. The interviews suggest that despite a deep commitment to solving the digital divide in their communities and in turn increasing resident well-being, many of these providers shared similar obstacles to advancement.

⁶ <https://www.huduser.gov/portal/sites/default/files/pdf/ConnectHome-Brief.pdf>

⁷ <https://www.census.gov/programs-surveys/sis/resources/news/home-internet.html#:~:text=An%20estimated%2078.1%20percent%20of,various%20age%20and%20race%20groups>

A. INVESTMENT CHALLENGES TO BROADBAND IN AFFORDABLE COMMUNITIES

Solving the many complex challenges at the intersection of affordable housing and connectivity requires significant investment, both financially and in human talent. However, many of the typical drivers of such investments are not realized in the highly regulated environment of affordable housing. For instance, market-rate owners can pay for some or all of the cost to deploy and operate all-building Wi-Fi with a predictable return on investment due to higher occupancy. However, given the reality that there are only 34 available, affordable homes for every 100 extremely low-income renters,⁸ affordable housing will likely stay “full” with or without internet as an amenity, and therefore providers cannot demonstrate returns on investment sufficient to account for the significant capital expenditures required for deployment. The reality is that while residents of market-rate housing may simply “vote with their feet” and walk out of a building that does not provide superior connectivity or Wi-Fi as an amenity, affordable housing residents must prioritize getting into any safe, affordable home, even if it lacks a critical amenity like internet service. This forces residents either to pay higher out-of-pocket costs for their own internet service or to go without home internet entirely. This complicates the economics of deployment and adoption of broadband in affordable housing communities.

B. AGING PORTFOLIOS LEAD TO HIGHER IMPLEMENTATION COSTS

On average, the portfolios of affordable housing providers tend to be significantly older than their market-rate counterparts. For example, research from the Urban Institute found that 51% of public housing units are at least 50 years old.⁹ This means that installing effective internet that meets the modern standards for broadband service requires significant renovations. With renovations come costs, and considering the capital-intensive nature of broadband implementation, these further handicap affordable housing owners from feasibility of portfolio-wide implementation strategies.

⁸ https://nlihc.org/sites/default/files/gap/Gap-Report_2021.pdf

⁹ https://www.urban.org/sites/default/files/publication/101482/the_future_of_public_housing_public_housing_fact_sheet_1.pdf

C. LACK OF COMPETITION IN BROADBAND PROVIDERS

Another major challenge to broadband adoption in affordable housing is that affordable housing may encounter fewer ISPs in their geographic areas compared to market-rate housing. Research conducted by scholars at UT San Antonio has demonstrated that ISPs are most likely to decline to offer service based on low profitability in areas with higher concentrations of low-income and minority households.¹⁰ The result is that historically marginalized communities often are forced to pay more money for worse-quality service or go without service entirely. In addition to these challenges, many affordable housing providers face existing agreements with legacy cable or telephone providers that limit their options for internet service. As a result, finding ISPs who are both willing and able to provide reliable and affordable internet solutions can be uniquely challenging for affordable housing providers.

D. LACK OF FEDERAL HOUSING POLICY FOCUS ON INTERNET

There is also a harmful reluctance to prioritize internet within federal housing policy. For instance, certain existing HUD regulations were written before the internet was fully mature and well before Wi-Fi networks were a common part of American life. While HUD has made certain minor updates, the regulations themselves lag significantly behind technological progress. This has resulted in major areas of confusion surrounding how affordable housing providers can improve building infrastructure and support internet service. In addition to vague and antiquated regulations from the housing regulators, there are also potential new regulatory barriers proposed from the Federal Communications Commission (FCC) that could further impede progress in broadband deployment for affordable housing providers. HUD could address this situation with two main solutions.

¹⁰ <https://www.sciencedirect.com/science/article/pii/S026427512031252X>

E. POTENTIAL NEW REGULATORY BARRIERS

Despite the potential demonstrated by community-based and managed Wi-Fi strategies, there is a new regulatory challenge. Ironically, this is not from the housing regulators but from the FCC. In particular, the FCC has announced its intention to restrict the ability of multifamily housing providers to enter into bulk internet billing agreements. The proposed ban was announced as part of the administration's efforts to address "junk fees," arguing that by providing Wi-Fi at the building level, bulk billing agreements restrict consumer choice and limit competition. If this ban were to be implemented, it would seriously hinder the ability of multifamily housing providers, including affordable housing providers, to ensure adequate internet service to renters. As discussed above, rather than limiting consumer choice and competition, the certainty provided to ISPs results in greater competition in the multifamily and affordable internet market. This, combined with leveraging a building's purchasing power, offers multifamily residents better and more affordable internet access than would be possible under traditional billing arrangements.

In response to these criticisms, the FCC has considered scaling back the proposed regulation from outright banning bulk billing to mandating a consumer opt-out in bulk agreements. However, this policy fundamentally misunderstands the mechanics of bulk billing and would effectively block them from being implemented. This is for three reasons. First, opt-outs may not be technically feasible, as having specific units opt out could undercut an entire building's network. Second, the main reason that bulk billing agreements have increased choice and competition in multifamily broadband is through the increased certainty of revenue provided to ISPs. Allowing an opt-out would reintroduce that uncertainty, which would ultimately drive smaller broadband providers out of the market. Finally, if residents were to opt out, they would be forced into direct relationships with telecommunications providers. By losing their ability to negotiate collectively with their fellow renters, these consumers would likely face much higher costs to access broadband.

VALUE OF COMMUNITY-BASED STRATEGIES EXCEED THE CHALLENGES FACED

While challenges above pose difficulties for providing reliable internet service in affordable housing communities, strategies exist that increase access for residents in a simpler and more economically valuable approach. For instance, community-based approaches to Wi-Fi service, such as bulk internet billing and managed Wi-Fi solutions, have proven capable of breaking down barriers to broadband deployment, access and adoption in affordable housing communities. Under bulk internet billing agreements, building owners can enter an agreement with an ISP to provide internet for the entire building rather than at the unit level as in traditional consumer broadband policies. Managed Wi-Fi solutions allow buildings to contract with third-party companies to oversee the day-to-day maintenance of building-wide networks.

Community-based Wi-Fi solutions solve several of the main problems facing the affordable housing market in providing internet to residents. Because the payments are made at the building level and cover all units regardless of vacancy, bulk billing agreements address the revenue inconsistency of affordable housing that concerns ISPs. This results in more ISPs being willing to provide service, and thereby increases competition for internet service in affordable housing. Additionally, by leveraging the collective purchasing power of the building, bulk internet agreements can offer lower costs for residents while providing the same or better quality of service that is available in the broader consumer market. At the same time, managed Wi-Fi solutions take the burden of network maintenance off the strained workforce in affordable housing providers, making providing internet service to residents less labor-intensive. Lastly, bulk billing and managed Wi-Fi address the problem at the building level rather than the individual level, making them far more scalable solutions to expanding internet service than past programs like the Affordable Connectivity Program (ACP). Indeed, this scalability is demonstrated in the fact that bulk internet agreements are already common practice throughout the multifamily housing industry.

FEDERAL SUPPORT NEEDED TO ENSURE COMMUNITY-WIDE ACCESS IN AFFORDABLE HOUSING

While the federal government has made significant attempts to encourage broadband deployment to the underserved and the unserved, a targeted strategy to support the digital transformation in affordable housing has not been a focused priority. For instance, the Infrastructure Investment and Jobs Act (IIJA) of 2022 allocated over \$65 billion toward a variety of programs aimed at closing the income divide in access to reliable broadband. However, these funds are spread across multiple different agencies and jurisdictions, which has created an extremely complex process for applicants to navigate to receive funding.

Further, other programs aimed at providing support to low-income families have expired entirely. The ACP, for instance, helped accelerate broadband adoption by providing low-income households a monthly subsidy to be used toward their internet bill. This program had been quite helpful, but its funding has now expired. Additionally, while the ACP did provide a crucial lifeline to families struggling to pay for broadband, its time-consuming application process and the fact that it addressed broadband one household at a time meant that it is not a scalable solution to the broadband divide in and of itself.

The federal government needs to use these historic investments to expand its efforts to spur broadband adoption in affordable housing. As demonstrated by the table on the next page, the relevant agencies (with the support of Congress) could greatly influence the speed of adoption of community-wide strategies in affordable housing.

AGENCY	HOW THEY COULD SUPPORT BROADBAND EQUITY
National Telecommunications and Information Administration (NTIA)	<ul style="list-style-type: none"> • Reauthorize the ACP or a similar program aimed at providing relief to households struggling with internet service costs. Improve the ACP program to be easily deployed in affordable housing settings. • Ensure programs like Broadband Equity, Access, and Deployment (BEAD) and the more recent Digital Equity Competitive Grant Program prioritize affordable housing community-based broadband solutions that have proven capable of providing quality service at affordable cost.
HUD	<ul style="list-style-type: none"> • Write new regulations on internet service as a utility so that housing providers and regulators are operating under a framework that aligns with the current state of internet use and service. • Create an office within the Department focused on addressing the digital divide and issues related to broadband deployment. The internet is critical enough to residents and their well-being that it ought to be a priority for HUD, and establishing such an office would be a major step to ensuring that it is one.
FCC	<ul style="list-style-type: none"> • Discontinue promotion of any rules that would ban or severely restrict the use of bulk billing approaches to multifamily communities.

CONCLUSION

In the world of multifamily housing, affordable housing has lagged in the critical task of providing residents with effective and affordable internet access. The impact of having internet access in one's home is not merely one of convenience, but rather one of ensuring access to tools in health care, education and other fields that ensure the highest standards of well-being, regardless of social or economic position. While there are barriers to broadband deployment in affordable housing, such as structural challenges with the affordable housing market, aging portfolios with high up-front costs, a lack of ISPs willing and able to enter the market, and a low prioritization of the issue in federal housing policy, there are private sector and public sector solutions that can overcome these challenges. It is a critical time for all of us to work to reduce barriers to these solutions before the most unserved or underserved populations are those who live in affordable housing communities.

