Hawk Networks Transforms Wireless Connectivity at Casa View Apartments with CBRS Private LTE and Innovative Billing



Access to reliable and affordable broadband internet is a necessity in today's world. At Casa View Apartments, a 75-unit community in Mesquite, Texas, many residents faced significant connectivity challenges that limited their access to essential work, education, healthcare, and daily life services.

Traditional internet service providers often struggle to offer affordable solutions that meet multi-dwelling unit (MDU) residents' unique needs. The result is frequently a connectivity desert that exacerbates existing socioeconomic inequalities and limits opportunities for personal and community growth. Hawk Networks addressed this challenge by implementing an innovative solution at Casa View Apartments, leveraging its innovative technology with the Citizens Broadband Radio Service (CBRS) spectrum to provide reliable cellular connectivity throughout the property.

Challenge

Casa View Apartments presented several unique challenges. The property owner was dissatisfied with the existing infrastructure and hesitant to permit another large-scale deployment, necessitating a solution that could work within the existing setup. Additionally, the area's frequent blackouts added a layer of complexity. The existing cable provider's network was in disrepair and unaffordable for many residents. This situation exemplified the digital divide, with many residents lacking reliable and accessible internet services.

The challenge was to implement a solution that would:



Provide reliable and highquality internet access



Eliminate the need for long-term contracts



Offer an affordable option using flexible payment technology



Adapt to power grid instabilities and infrastructure limitations



Ensure immediate connectivity for new residents

Solution

Hawk Networks implemented a comprehensive solution at Casa View Apartments, leveraging its innovative payment and routing technology to address the complex connectivity challenges. The cornerstone of this solution was the deployment of a new Private LTE network using the 3.5 GHz Citizens Broadband Radio Service (CBRS) spectrum, which provided robust and reliable connectivity throughout the property.

Hawk utilized Airspan eNodeBs and Blinq Customer Premise Equipment (CPE) to ensure strong signal coverage and easy installation. Hawk's proprietary KeyLTE core formed the backbone of the system. Integrating the innovative Althea Protocol enabled a flexible, blockchain-based rollover billing system ideally suited to the diverse financial situations of the residents.

Understanding the critical need for basic internet connectivity, Hawk established an always-connected tier, ensuring that all residents had access to essential internet services regardless of their ability to pay. Hawk integrated Stripe into their system to facilitate easy payments, allowing residents to load funds as they become available without the burden of fixed monthly bills or long-term equipment contracts.

To address power reliability issues, Hawk Networks also incorporated battery backup solutions into their design, ensuring uninterrupted service during blackouts.

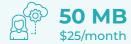
A vital aspect of the solution was the management of CPE equipment. By keeping the equipment with the apartments, Hawk ensured that new residents could enjoy day-one connectivity, significantly simplifying the move-in process and eliminating gaps in service.

The site deployment was completed in less than a month, and the minimal footprint of the CBRS radios meant that construction was only minimally disruptive to the residents and staff.

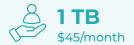
46 At Hawk Networks, we believe that affordable, reliable internet access is a cornerstone of modern life. Our solution at Casa View Apartments demonstrates how innovative technology can break down barriers to connectivity. By combining our **CBRS-based LTE** network with flexible billing, we're not just providing internet we're empowering communities. 77

Deborah Simpler CEO, Hawk Networks

The new system dramatically reduced costs for residents compared to the previous cable provider:



Low-level users consuming only 50 MB/month now pay approximately \$25/month.



High-level users consuming 1 TB/month pay about \$45/month.

The change represents a significant saving compared to the previous flat rate of about \$80/month that most tenants were paying.

The flexible rollover billing allows residents to pay only for what they use, making the service more accessible across all income levels. The elimination of long-term contracts further reduces barriers to access. Additionally, apartment-based equipment management means the customer premises equipment remains with the apartment when tenants move out, ensuring new residents can access the internet immediately upon moving in without waiting for equipment installation or transfer.

Conclusion

Hawk Networks' implementation at Casa View
Apartments showcases the potential of innovative
telecom technologies in addressing real-world
connectivity challenges. By deploying a CBRS-based
Private LTE network, Hawk successfully tackled the critical
issues low-income residents face. The solution provides
stable, high-quality internet access with a flexible rollover
billing system, making connectivity accessible across
all income levels. The success at Casa View Apartments
is a replicable model for addressing connectivity issues
in low-income housing across the United States,
demonstrating how technology-driven solutions can
create more inclusive and connected communities.



