

Lumos Finds Success in MDU Strategy Inside and Outside Its ILEC Footprint

Before building out new properties, the telco secures commitments from developers and homeowners associations.

By Sean Buckley / *Broadband Communities*

As Lumos Networks advances its fiber-to-the-home (FTTH) rollout, the service provider is targeting new multiple-dwelling-unit developments (MDUs) inside and outside its ILEC footprint. For smaller providers such as Lumos, the MDU drive is about achieving a simple goal: diversifying its revenue streams.

Lumos has captured many MDUs, commercial businesses and mixed-use developments and now presents itself as a service provider prior to a new development's breaking ground.

MDU construction is on an upswing. According to "A Boon for Network Deployers: MDU Construction Reaches New Heights" (page 42), about 424,000 new units are expected to start construction in 2019.

"It's got to make business sense," says David Smith, senior director of operations and planning for Lumos. "Outside our footprint, we have to get a commitment from a developer or a homeowners association to build fiber to them."

Smith adds that the ongoing desire by consumers and businesses for broadband is driving more requests for MDU FTTH service.

"We have had more success with apartment MDU complexes in the past 12 months than

we have had in the previous five to six years," Smith says. "This is mainly because developers understand that the need for broadband has grown."

The home of Liberty University, Lynchburg, Virginia, has experienced a rise in new multifamily apartment building developments.

"Our biggest market for MDUs is Lynchburg," Smith says. "Apartment complexes are popping up all over the place."

COUPLING RESIDENTIAL MDU, BUSINESS OPPORTUNITIES

As it pursues small to medium business (SMB) service opportunities, Lumos looks to hit existing nearby MDU locations.

These scenarios could include an MDU located near an SMB or a business that resides in a mixed-use building with residential units.

"As we build fiber to these businesses, we try to pick up what's along the route," Smith says. "So, if there's an MDU or future growth, we go and build capacity to support that long-term."

Smith adds that the presence of a business and an MDU in one area helps build a fiber business case. This is because the service provider can leverage network infrastructure such as poles, rights of way, and other materials.

“It’s one of those areas where the MDU has its own stance, and we have our small business segment,” he says. “There are definitely cases where we try to make them both work out, or if there’s one side that can’t support the business model, we can combine the two opportunities.”

ACCOMMODATING BUILDING DIVERSITY

Not all MDUs are alike, so Lumos takes steps to accommodate the unique characteristics of each building.

“In our footprint and outside our footprint, some customers may have only Cat 3 wiring inside,” Smith says. “What we have done for those types of buildings is bring fiber to the building’s entry point. The customer will then rely mainly on Wi-Fi to distribute bandwidth to users.”

For example, Lumos is bringing FTTH to an MDU customer that has two use cases: expanding an existing complex and building a new location.

In the first, Lumos will bring fiber into the building, and the customer will carry the data signals over the existing Cat 5 and Cat 6 wiring. In the other use case, Lumos will bring fiber to each unit.

For the expanded MDU, “we’ll put a device on the side of the building or a telecom closet, and the customer will run the existing Cat 5 cabling to this location,” Smith says. “With the new location, we’re going to install fiber in each of the units, which is a physical design change we have made.”

ENHANCING WI-FI REACH, VISIBILITY

Wireline technology is only one element of Lumos’ MDU fiber network strategy. The service provider is improving the Wi-Fi experience for MDU residents and businesses.

To alleviate Wi-Fi interference issues, Lumos has implemented the AirTies Wireless Networks Wi-Fi solution. The AirTies Managed Mesh System runs an intelligent routing algorithm that calculates the best path

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from a consumer’s wireless client to any source with fast recovery to resolve real-time network changes.

Whether a consumer lives in an apartment building or a single-family home, AirTies Interference Avoidance technology ensures the system uses the least busy frequency channel and optimizes wireless airtime.

“We spent a lot of time evaluating Wi-Fi,” Smith says. “It has been the main source for people to access the internet, but in MDUs we have congestion.”

By gaining visibility into the Wi-Fi performance across an MDU or a single-family home, Lumos gains two benefits: lower operational costs and an additional revenue source.

“We decided in 2015 to own the whole home versus stopping at the

traditional demarcation point [on the side of a home or an apartment],” he says. “We started implementing the residential gateways where we could see into the home network and went to more sophisticated Wi-Fi.”

Lumos can take advantage of new Wi-Fi networking technologies, including the emerging 802.11ax standard. Known as Wi-Fi 6, 802.11ax is designed to provide connectivity in locations with hundreds or thousands of connected devices such as stadiums and other public venues, as well as corporate networks utilizing time-sensitive, high-bandwidth applications.

“Whenever you’re pushing 1 Gbps to the premises or higher, you can offer a strong signal, but does it offer the throughput?” Smith asks. “That’s one of the reasons why we have held

FIBER BROADBAND RAISES MDU VALUES

When MDU owners and developers agree to let a provider equip their buildings with fiber, they can raise the property values. Recent research from RVA and BroadbandNow illustrates how powerful fiber-based broadband is for a multifamily property.

RVA revealed that high-speed broadband, which usually means fiber-based services, adds 2 percent to the value of a condo and 8 percent to the rental price of an apartment. However, only 40 percent of MDU owners and renters are prompted by property owners/sellers about internet connectivity.

Likewise, BroadbandNow found in a survey that nearly 50 percent of all apartment hunters would be willing to pay more for ultra-high-speed internet connections via fiber.

Nearly half of the survey respondents said they would pay more for an apartment where fiber-based broadband was available. Interestingly, for apartment dwellers who already have fiber, 35 percent said that they would be willing to pay an additional \$50 per month to continue using fiber for internet access.

To boost revenue and continue to grow its business, Lumos plans to launch an app-based streaming video solution later this year.

off on anything new on the wireless side – because we’re at that stage where 802.11ax is going to be available.”

Looking forward, Lumos plans to pursue opportunities to equip whole properties with Wi-Fi.

With Wi-Fi 6, MDU broadband customers will be able to get Wi-Fi not only in their living units but also by the pool or along an adjacent walking trail. MDU developers have been extending their Wi-Fi service ranges to other parts of their properties to stand out in the crowded rental market.

“What we see with new developments is walking trails,” Smith says. “We’re looking into new solutions where you can blanket a whole property with Wi-Fi to get internet services.”

FIBER CONVERSION OPENS NEW OPPORTUNITIES

Lumos’ MDU buildout, particularly in its own territory, is clearly complemented by converting aging copper plant to fiber. To date, the service provider has overbuilt 50 percent of its traditional customers with fiber.

Larger telcos such as Verizon have faced ongoing customer issues with copper to fiber replacement. Rolling a truck to visit a customer premises to rectify an issue results in lost time and money.

Copper, unlike fiber, can degrade over time and cause issues for traditional DSL and even phone lines.

“Every year, that copper gets older and is out in the weather longer,” Smith says. “So, we definitely try to go after areas that we know about from our trouble ticket history or from staff. We try to build a better solution for our customers in these places.”

But connectivity is only one part of the story.

By targeting MDUs with fiber, Lumos can ratchet up additional revenue growth streams from IPTV and streaming video applications. A fiber connection will easily handle an array of over-the-top video streaming services such as Netflix, Hulu, Amazon and others.

“We see that we need an avenue for other growth, and that’s why the edge-out strategy is big for us,” Smith says. “We’re searching for different avenues to continue to grow the business.”

Unlike other large telcos that have abandoned their facilities-based video service plans, Lumos sees IPTV as a sticky service that most customers bundle with a broadband connection. Today, 98 percent of Lumos’ video customers have broadband.

“We felt that we would see a loss if we got out of the video business,” Smith says. “With that we said, if we’re going to stay in the video business, we want to offer the best solution we can.”

Lumos realizes that consumer video consumption habits continue to favor streaming solutions. The service provider will launch a streaming video solution later this year.

“Streaming video is another avenue for us to offer a good solution for customers, which I hope will put us on an upward revenue track in a segment that’s stagnated,” Smith says. “This video solution will be app-based and can be played on Amazon Stick, Apple TV and Android phones, so it supports the bring-your-own-device movement.”

EYEING 10G AND BEYOND

Today, 1 Gbps is cited as a top broadband speed, but Lumos is looking to stay ahead of its competition by bringing fiber directly into the living units. Having fiber in every MDU unit

allows it to support an array of services, including residential 10G speeds.

“If we get in early with the developer, we’ll take our fiber into each individual unit,” Smith says. “That means if we want to upgrade the infrastructure to support 10G, we don’t have to mess with the internal wiring.”

The timing could not be better as Lumos’ chief competitors, Shentel and Comcast, have been expanding DOCSIS 3.1 and FTTH into MDUs in the same territories.

For instance, Shentel recently issued a job posting for an MDU account executive who will be charged with building out its new Glo Fiber subsidiary’s market position within the MDU vertical. Meanwhile, Xfinity Communities continues to extend Wi-Fi and other broadband services into MDUs.

For Lumos, 10G momentum is rising, particularly with business customers.

Earlier this year, Lumos announced that it is leveraging ADTRAN’s 10G fiber access portfolio to provide 10G fiber services for small business customers. This will address what Lumos says are growing bandwidth demands from municipalities, higher education facilities and teaching hospitals, financial services companies, government and small business customers.

Initially, Lumos will offer business customers tiered symmetrical speed profiles of 2, 4 and 8 Gbps. Lumos’ customers include seven to eight businesses, including a few schools, IT consulting and a medical call center.

“Our gigabit products have picked up steam recently because our customers weren’t ready for that type of service,” Smith says. “If you asked a customer if [its] network can support more than a 1 Gbps handoff, the majority of our customers’ equipment stopped at 1 Gbps.” ❖

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