Broadband for Rural Businesses

Rural providers are taking aim at rural businesses with fiber and DOCSIS 3.1–based broadband services. But providers must educate this segment about using these new services to become more viable in the online world.

By Sean Buckley / *Broadband Communities*

With most business broadband deployments taking place in large metro areas, rural businesses often lack affordable broadband options. However, there are signs that change is underway, and rural providers are finding cost-effective ways to extend fiber and DOCSIS 3.1 to business customers.

Farmers are especially impacted by poor broadband service. According to the USDA report "Farm Computer Usage and Ownership, 2017," 29 percent of U.S. farms have no internet access. A September 2018 Illinois Farm Bureau study revealed that although three-quarters of respondents had residential internet access, their business broadband performance was poor. Further, two-thirds said broadband service quality "negatively impacted" their farming business. Inadequate broadband keeps farmers from implementing new precision agriculture methods, which are necessary for both competitiveness and environmental protection.

However, farmers aren't the only group lacking good broadband options. Broadband availability affects all kinds of rural businesses.

Jamie Belcore Saloom, assistant chief counsel for telecommunications for the U.S. Small Business Administration, said during the Incompas Policy Summit in February that rural small businesses cite a lack of broadband as a key issue.

"Our office has published research showing that small businesses – particularly in rural areas – tend to pay more for lower-quality services than bigger businesses," Saloom said.

She added that "policies that encourage more [providers] deploying more broadband to encourage companies to invest in places that are hard to reach" can bridge the rural business divide.

CLOSING THE BUSINESS FIBER GAP

A key gap in the rural business services market is the fiber available to business buildings. By making fiber available to more commercial buildings, carriers will narrow what Vertical Systems Group (VSG) calls the fiber gap.

GUIDELINES FOR RURAL BUSINESS BROADBAND PROVIDERS

- **Speed:** Service providers should offer a range of speed packages, whether they offer fiber or coax-based services. A symmetrical-speed service offers consistent download and upload speeds that businesses need to rapidly exchange large files and support managed services.
- **Price:** Small rural businesses have historically been overcharged for poor service, and because they have limited budgets, they seek lower prices. However, price/performance is the more relevant measure. Providers need to help customers understand that a higher-priced, symmetrical service may be more economical than a low-cost service because it provides greater reliability and reduces downtime.
- **Availability:** As service providers deepen their rural business broadband footprints, they will need to get the word out to local business communities that they offer services.

Since the research firm started collecting on-net fiber information in 2004, the fiber gap has continued to shrink as providers extend fiber deeper into metro and rural markets.

Fiber-lit buildings are defined as sites that have on-net fiber connectivity to a provider's infrastructure. These sites also include onsite active service termination equipment such as routers and optical switches.

In larger U.S. metros, the availability of fiber to large and medium-size commercial buildings that have 20 or more employees jumped to 54.8 percent in 2017. As a result, the fiber gap dropped to 45.2 percent for the first time.

However, in rural markets, the business fiber gap is much greater. In the small and rural segment, which covers buildings with fewer than 20 employees, VSG says more than 90 percent – that is, more than 4 million buildings – are without fiber access to network services.

STEPPING UP THE FIBER FACTOR

Service providers are now stepping up rural business fiber deployments to address the fiber gap. These carriers are looking to give their customers the same experience available to customers in Tier-1 cities.

Consider Windstream's plan to expand its 1 Gbps Kinetic fiber service to 100,000 business locations across 16 states. Nearly one-third of commercial locations – primarily small and medium-sized businesses – across its rural footprint will get access.

"Our approach to rolling this out is ubiquitous," says Jeff Small, president of consumer, small and medium-sized business for Windstream. "We're bringing the same types of services to Española, New Mexico, that we're bringing to Lexington, Kentucky."

Likewise, Lumos Networks, which recently announced plans to support 10 Gbps service, says customers want the same services found in urban markets.

"We're finding rural market users have the same bandwidth requirements
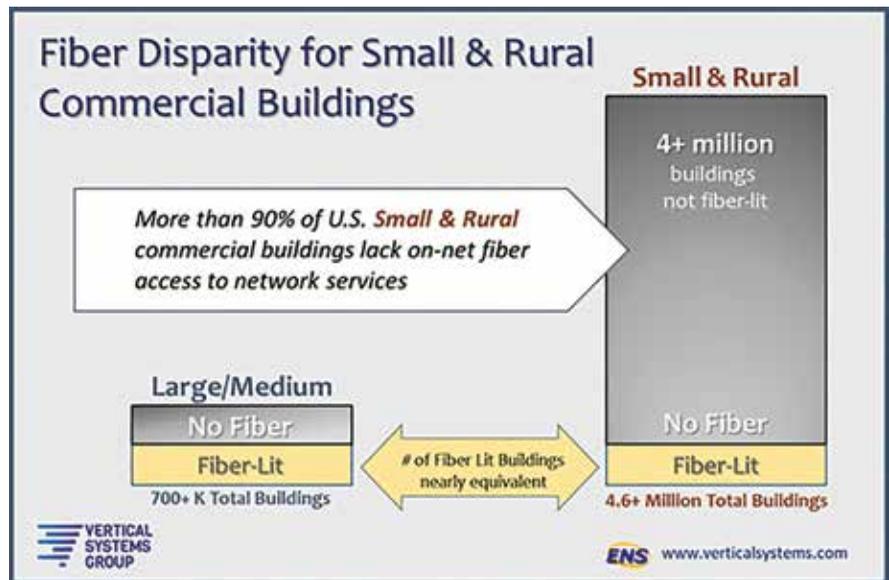
Small and rural commercial buildings are much more likely than larger buildings to lack fiber.

as customers in larger cities," says Diego Anderson, senior vice president and general manager of Lumos Networks.

Cable operators such as Mediacom and hybrid telco/cable MSO Shentel are also being aggressive.

Through its Project Open Road initiative, Mediacom set a goal in 2016 to put gigabit internet speeds within immediate reach of more local businesses. This is part of a broader goal to invest $1 billion over three years to upgrade and expand its national broadband network.

Mediacom, which targets rural customers via DOCSIS 3.1 and fiber, sees an opportunity to pursue businesses that currently use lower speeds. Its efforts are paying off as business services revenues rose 6.5 percent year-over-year in 2018.

"Our share of the business market is still below 50 percent, so there's lots of room for growth," says Dan Templin, senior vice president of Mediacom Business. "We believe we will get the customers that need to go beyond a DSL or a T-1 connection."

Shentel realigned its sales team to sell fiber and cable-based services. "Previously, we had a cable sales team focused on selling our cable plant to SMBs and our fiber sales team, but

we weren't synchronized," says Craig Venable, director of wireline sales and marketing at Shentel. "By having one commercial sales team, we can find out if we can solve it with cable or deliver fiber outside of the cable markets."

Competitive carriers such as Fatbeam are also making an impact. Fatbeam has taken a two-pronged approach to building out its fiber network: partner with a third-party carrier to get a foothold and then migrate customers onto its network.

Tammy Lange, vice president of sales for Fatbeam, says this method gave it a head start in Sand Point, Idaho, with immediate revenue results.

"Originally, we were waiting until we got our own fiber network built and marketing services," Lange said. "[Partnering with another carrier] gave us an advantage, and we've generated $35,000 to $40,000 in monthly recurring revenues."

UNDERSTANDING CUSTOMER NEEDS

In targeting rural businesses with broadband services, service providers begin by understanding customer needs.

A medical provider may need symmetrical bandwidth to process

MRIs, and schools need speeds for online learning. Other segments, such as car dealerships, which handle sensitive customer information, may find utility in managed security.

Shentel has found that car dealerships are good targets for distributed denial of service (DDoS) mitigation. "Rural car dealerships are one of the prime targets for hackers because there's so much sensitive information there," Venable says. "Although we don't provide fully managed security solutions, we do have DDoS mitigation within our network, so that gives another layer of protection."

Providers need to convince businesses that higher-priced, symmetrical services with quality-of-service guarantees offer greater value.

Trevor Jones, vice president of marketing for OTELCO, says rural providers need to understand how managed services such as cloud or managed PBX solve business issues.

"Most businesses understand the need for faster internet but may not understand why a symmetrical, fiber-based service is more useful than an asymmetrical, cable-based service," Jones says. "That's when you need to talk about hosted VoIP, cloud computing and other hosted/web-based platforms. The best way to do that is to uncover operational problems the business may have and present internet-enabled solutions to those problems."

Venable agrees and adds that Shentel's sales pitch centers around maintaining uptime and enabling new services.

"When we tell a customer that pays $39 for a 3 Mbps DSL line that it will be $300 for a 75 Mbps synchronous dedicated internet access over fiber solution, the initial reaction is 'we can't afford it,'" Venable says.

However, he adds, customers considering migrating to the cloud see value. "We ask them if they are using cloud applications today, and if not, our network service opens up because we have a direct connection with AWS, Google and Microsoft," he says.

Similarly, Lumos finds that customers – particularly those migrating to VPNs, VoIP and managed PBX – are willing to pay for symmetrical speeds.

"Several of our customers are taking the 1 Gbps profile because they're using cloud-based solutions where they need [symmetrical] speeds," Anderson says. "It depends on the application and what the customer is trying to do."

FOCUS ON AVAILABILITY

Because rural business density is low, service providers need to educate clients on service availability. Often, a small business may not be aware that a rural carrier has installed fiber facilities nearby.

Michael Morey, CEO of Bluebird, a midwestern carrier recently purchased by Uniti and Macquarie, says his sales team must convince businesses it is offering a new alternative.

"I have had state senators say to me, 'I was told this business can't get high-speed services,'" says Morey. "I find out from my sales team that the business has not been returning our phone calls because they don't know who Bluebird is."

Service providers building out fiber in rural business districts can use mapping applications to inform customers. Through a partnership with VETRO FiberMap, OTELCO enables customers to determine where its Lightwave fiber internet service is available. The system also allows OTELCO's engineering team to see new subscriber interest in real time and provide network buildout and availability to the marketing and sales teams.

"The other big problem with marketing fiber networks in rural areas is targeting," Jones says. "ISPs need to get good at using GIS tools and really focusing their sales activities on the areas that are built out."

PROVIDERS, COMMUNITIES HARMONIZE

A key reason to bring broadband to rural businesses is to drive economic development, as communities without sizeable broadband assets struggle to attract new businesses and retain existing businesses. When providers align with a local community's economic development teams, broadband deployment is most likely to result in economic development.

For example, broadband is a concern for residents in Prince George County, Virginia. According to the Hopewell/Prince George Chamber of Commerce, 61 percent of all businesses in Prince George County are home-based. Prince George Electric Cooperative (PGEC) Enterprises is deploying a new fiber network to help address their needs.

"High-speed internet will help our businesses become more competitive in this internet-based economy," said Becky McDonough, CEO of the Hopewell/Prince George Chamber of Commerce, in a release announcing the partnership with PGEC.

Texas provider GVTC partnered with the city of Boerne to understand the community's business broadband needs.

"We built fiber in Boerne, Texas, as a partnership," says John Hill, manager of communications and e-commerce at GVTC. "This was a testament to the local economic development team to have a long-term vision to say, 'Where do we want to be 15 years from now, what types of businesses do we want to acquire and what kind of community do we want to develop?'"

Chris Mitchell, director of the community broadband networks initiative at ILSR, says vocal communities are making efforts to attract more businesses and keep existing ones from leaving.

"A lot of times it's more about reliability than speed," Mitchell says. "Businesses are saying, 'If you can't figure out a way to get us better access, we're going to have to move to another place to run our business effectively.'" ❖

Sean Buckley is the associate editor of Broadband Communities. He can be reached at sean@bbcmag.com.