

# Little Falls, Minnesota, Undertakes Grassroots Broadband Effort

As the community overcomes its business-sector broadband challenges, it looks for ways to extend services to residents who have poor broadband access options.

By Sean Buckley / *Broadband Communities*

**L**ike other small cities, Little Falls, Minnesota, faces a common issue with broadband: It struggles for the funding, leaving many residents and businesses underserved. A city of 8,500 people, Little Falls is currently served by CenturyLink, which offers low-speed DSL, and Charter Communications, which offers DOCSIS services.

Despite being unable to handle bandwidth-intensive activities for city offices and local businesses, the speeds the incumbents do offer, which met the FCC broadband definition of “served,” mean Little Falls is ineligible for federal funds.

“The city didn’t qualify for FCC funding because the maps said the city was served,” said Jon Radermacher, city administrator of Little Falls, during the **BROADBAND COMMUNITIES** webinar, “Fiber Networks – Critical Municipal Infrastructure to Support the ‘New Normal.’” “However, the networks in our city weren’t robust or reliable for the needs of our business, the industrial districts and our schools.”

When a software company set up a location in one of the city’s business parks in 2013, it provided a catalyst to build out a fiber network for businesses. The company strongly demanded a fiber-based network. That prompted Little Falls to strike a network agreement with Consolidated Telecommunications Company (CTC), a Minnesota telephone cooperative

that works with utilities, municipalities and government entities to build fiber networks outside its traditional service area.

With support from various partners, the network was built to provide high-speed broadband to local businesses and city services. The hope is that soon it will provide broadband for local residents.

## DRIVING ECONOMIC DEVELOPMENT

Little Falls partnered with area economic development agencies (EDAs) to fund the build, which cost \$530,000. “We came to a construction and lease agreement with CTC to build out a fiber ring that would serve all of that business park, connect another industrial park, build a fiber network throughout our downtown area, and connect over to our school district,” Radermacher said.

The city also is served by a private nonprofit called Morrison County Community Development and local EDAs. “We split up the financing for this network between the partners,” Radermacher said. “We then leased it back with the buyout clause similar to the agreement CTC had with Long Prairie, Minnesota.” After the fiber network went live in 2014, CTC executed the buyout agreement and now owns the fiber network.

## CITY DEPARTMENTS SEE BENEFIT

Since 2015, Little Falls has connected eight sites to the fiber network. The network is used for the city's facilities as well as internal Transparent LAN Services (TLS) networks, which gives it universal shared access. This means there's no need to put servers in each building.

## GRAPPLING WITH MAPPING ISSUES

Little Falls' lack of broadband access is another unfortunate result of the way the FCC collects broadband data. Today, the FCC bases broadband data on Form 477 data. The FCC has used this data since 2000 to update Congress on broadband competition and broadband availability and to update universal service policies – including excluding certain areas from financial support.

Using Form 477, the FCC requires wireline broadband providers to identify the census blocks in which fixed broadband service is available. It defines "availability" as whether a provider does – or could within a typical service interval – provide service to a single end user in a census block. This process is flawed because if a provider serves a single area in a census block, the FCC counts the entire census block as served.

In March, President Trump signed into law the Broadband Deployment Accuracy and Technological Availability (DATA) Act. The new law requires the FCC to reform the nation's problematic broadband deployment maps. The FCC must create, and update every six months, a common dataset of all locations in the United States where fixed broadband internet access service can be installed.

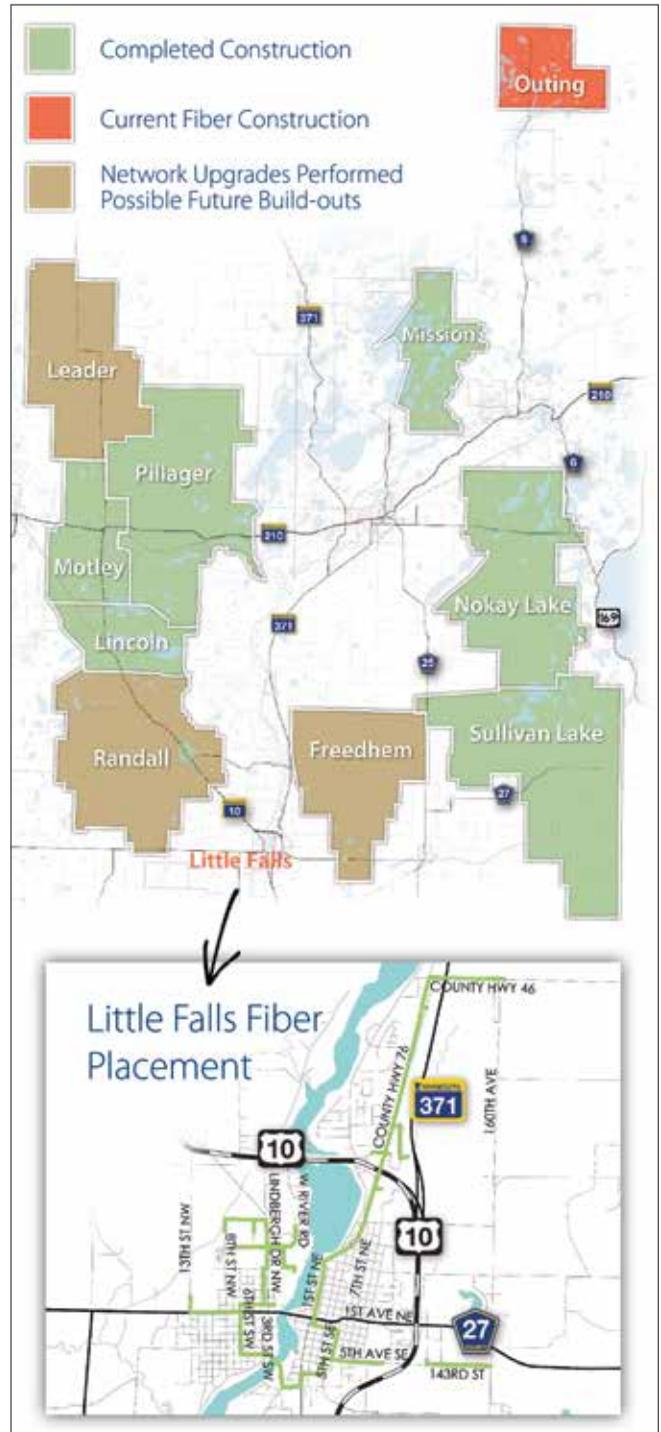
"We're actively engaging with state legislators, state officials, the FCC, senators and congressional leaders because we believe we have to change the way we are required to report our broadband availability," said Joe Buttweiler, partnership development manager for CTC. "At the federal level, reporting census block data is not a solution."

For rural Minnesota cities such as Little Falls, a major challenge is getting people to participate in surveys. A large majority of residents are 60 years and older and don't often use broadband or a computer.

"Part of the challenge is that those residents don't know what they don't have," Radermacher said. "This means that some of the crowdsourcing efforts we're trying to make aren't going to be sufficient because the people who need to be filling out those surveys won't know broadband exists."

"Some facilities operate with three or four people, but they do have fairly significant technology needs," Radermacher said. "In preparation for that, we started upgrading our network services."

In addition to the smaller departments, the new network provides benefits for local law enforcement and fire



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departments. “The police department and fire department facilities are across the street from one another, so that created another opportunity to partner and share,” Radermacher said. “As many municipalities know, data usage is getting really high and storage capacity is of utmost importance given all the data requirements of video in squad cars and body cameras.”

Radermacher said many of the city’s facilities are in close proximity to the existing fiber network, so adding those services incurred no construction costs.

### BRIDGING RELIABILITY, ACCESSIBILITY GAPS

The network buildout increased reliability and drove new demand from more businesses for services. Before Little Falls had a fiber network, several city buildings were connected to a sometimes unreliable broadband wireless network.

“In some of our facilities, the only level of service we had was fixed

wireless, which had outages on a daily basis,” Radermacher said. “Since the fiber network was constructed, we have not experienced an outage in nearly three years.”

Working with the Little Falls Economic Authority, the city extended the fiber network to businesses outside its initial target area. For example, a large electronics manufacturer located in a city-constructed business park requested service. Initially this would have required a specialized build, but Little Falls saw it as an opportunity to expand the network.

A multisite business, the electronics manufacturer struggled to send designs housed in large files to Little Falls because it had such a slow internet connection. “The company’s internet speed was poor, and these files were so large that it would take nearly a half a day to transfer files,” Radermacher said, adding that “file transfers now take seconds.”

Since the city connected this manufacturer’s facility, it has been getting requests from other businesses located in the office park. Three other businesses that built sites in the complex were encouraged to connect to the city’s fiber network. One business made fiber a requirement to locate a facility in Little Falls.

“The electronics manufacturer would not have located in our area if fiber was not available,” Radermacher said. “We do see this as an economic development tool.”

### FIBER HELPS WEATHER COVID-19 CHALLENGES

The COVID-19 pandemic has shone a light on how important broadband is for city employees now working from home. Like other cities, Little Falls had to be creative in how city officials and other city employees could continue running operations during the pandemic.

“Thanks to the fiber networks we built and an IT service that’s connected through CTC, we’ve been able to seamlessly transition our staff to a work-from-home environment, which for most cities in rural parts of a state is a tremendous feat,” Radermacher said. “It’s not something we could have done 10 years ago.”

Little Falls is looking into whether the U.S. government’s CARES Act, a \$2 trillion economic stimulus bill passed in March in response to the economic fallout of the pandemic, can help fund broadband expansion to more parts of the city.

“As an employer, we felt it was valuable to be able to send our employees home and have that work still be seamless,” Radermacher said. “If you call up our city hall number, you get a directory and that call gets forwarded to any person on our staff who’s working from home. You would not know if they are in the building or not thanks to the investments we have made.”

### NEXT STEP: HIGH-SPEED FIBER FOR RESIDENTS

The next step for Little Falls is offering high-speed fiber service to residents.

## REMOTE WORKING GAINS MOMENTUM

The COVID-19 pandemic forced employers and employees in various companies and government agencies to adopt telecommuting policies. Buffer and Angellist’s 2020 State of Remote Work study of 3,500 remote workers around the world found that 98 percent of respondents want to continue to work remotely (at least some of the time) for the rest of their careers. Ninety-seven percent said they would recommend remote work.

Most respondents (57 percent) are full-time remote workers. Nearly 27 percent work remotely more than half the time, and the smallest group (18 percent) works remotely less than half the time. Finally, 70 percent indicated that they were content with the amount of time that they currently work remotely, 19 percent would like to work remotely more often and 11 percent would like to work remotely less often.

According to the study, despite the benefits of saving on gas and time, working remotely comes with three key challenges: communication, collaboration and loneliness.

“We have heard a lot of requests from people who are working from home and are now starting to experience what it’s like to be on the wrong side of the digital divide,” Radermacher says. “We are trying to come up with a strategy to make sure our residents are connected, so we are partnering with CTC to engage the community.”

In the near term, Little Falls set up various Wi-Fi hot spots to extend its fiber network to residents who can’t get broadband. Residents can go to city hall and other locations to access the internet for free. Students benefit by being able to complete classwork and other remote learning activities.

“Little Falls is a low-income area where more than 50 percent of students in our school district are on the free or reduced cost lunch program, so this network is a strong asset because a lot of residents don’t have internet service,” Radermacher said.

## MAKING RURAL COMMUNITIES ATTRACTIVE

By providing fiber-based broadband to businesses and, eventually, residential customers, Little Falls could make itself more attractive to people who want to live in a rural area.

“We’re going to move into a world in which we need people working from home more than ever to mitigate public health risks or because people have done it and they like it,” Radermacher said. High-speed internet is essential to make work from home possible for everyone who needs or wants to do it.

Little Falls is among several communities whose broadband is beginning to attract homeowners to relocate in rural areas. For example, Blue Ridge Mountain EMC, an electric cooperative that offers fiber-to-the-home service in rural parts of Georgia and North Carolina, has found that more residents who don’t want to live in

large cities such as Atlanta are building new homes in the communities it serves. BRMEMC’s service areas are located two hours from Atlanta and Chattanooga, Tennessee.

The COVID-19 pandemic will have an impact on local economies, including Little Falls, but Radermacher said that the city’s investment in fiber supports addressing new challenges.

“We don’t know what the total impacts are going to be at the state level, but it’s clear there’s a recession coming,” he said. “There’s going to be some tough economic decisions to be made over the next few years, but we’re going to be much better positioned to get us back to the new normal.” ❖

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