

# FTTH Customer FAQ



February 8, 2021, Southern Rivers Energy, an electric membership cooperative (EMC) announced plans to better serve our membership and communities by introducing world-class fiber broadband Internet.

SRE partnered with fiber-consulting expert, Conexon, to design and build a fiber-to-the-home (FTTH) network – the gold standard of communications transmission – over the existing electric distribution infrastructure that will take fiber directly into your homes and businesses and deliver reliable, high-speed internet services.

## **The Fiber-to-the-Home Project**

### ***What is the scope of the FTTH buildout?***

This FTTH buildout, encompassing more than 2100 miles of fiber, will ultimately reach 100% of SRE's nearly 16,000 members across nine counties providing access to high-speed broadband internet upon project completion.

### ***Who is building the network?***

Southern Rivers Energy is partnering with rural fiber broadband design and construction management leader, Conexon for this ambitious project. Under the partnership, design and construction of the FTTH network will be led by Conexon. Upon completion, the network will be managed and operated by its newly formed internet services provider (ISP) arm, Connect.

Connect was formed to operate and manage cooperative and investor-owned fiber-to-the-home networks. Connect leverages Conexon's decades of co-op operations, fiber-optic design and construction, telecommunications, federal and state lobbying and customer experience management expertise to successfully launch and operate projects. The Connect approach is to work exclusively with electric cooperatives such as SRE to launch and deploy high-speed fiber-optic networks, enabling them to offer world-class fiber broadband to 100% of co-op members.

### ***When will construction of the network begin?***

Fiber construction began in July 2021 with the installation of fiber huts at two of our substations. Fiber huts house all the equipment that actually lights the fiber so it can deliver internet service to homes and businesses.

The network is being constructed in two phases. Phase 1 was complete in February 2023 and included parts of Lamar, Monroe, Bibb, Crawford, Upson and Pike. Phase 2 is well underway and includes parts of Lamar, Pike, Spalding, Meriwether, Crawford and Bibb. Phase 2 construction will be complete at the end of August 2023.

***Where will the internet service be offered?***

The buildout will be completed in phases, and eventually, it will reach every SRE member in 9 counties, including some non-members if they live inside a census block that is being served by Conexon Connect. SRE's service area includes parts of Bibb, Coweta, Crawford, Lamar, Meriwether, Monroe, Pike, Spalding and Upson.

***Will my electric bill increase to pay for the FTTH network?***

No. Electric rates will not be raised to subsidize the buildout or deployment. Together Southern Rivers Energy and Conexon are investing more than \$60 million to build the network, which will enable improved electric service and increased reliability through smart grid capabilities in addition to delivering world-class internet access. A combination of low-interest loans, federal, state and local funds will contribute to the construction funding.

## **The Technology – Internet Service**

***What is a fiber-optic network?***

Fiber-optic systems are made up of tiny strands of glass that carry data using light waves, resulting in much faster internet speeds and better reliability than traditional copper lines. Most internet providers use fiber in their systems but use copper lines for the final connections to the home, resulting in slower speeds. Southern Rivers Energy, Conexon, and fellow cooperatives believe 100% FTTH is the best, most sustainable communications choice. With our FTTH service, we offer "symmetrical" speeds, meaning you'll enjoy the same high speeds whether uploading or downloading.

***What makes fiber so special?***

A fiber-optic network sends and receives data at the speed of light. In addition to super-fast transmission speeds, a fiber-optic network can carry an extremely high amount of data. Fiber is also more reliable than other networks, because it's less susceptible to interference and damage from lightning and other acts of nature.

***What does the term “broadband” mean?***

Broadband commonly refers to high-speed internet access that is always on and faster than traditional dial-up access. Broadband fiber-optic networks can deliver voice, data, video and email services over the internet. The Federal Communications Commission (FCC) defines the minimum broadband speed as 25 Megabits per second (mbps) download and 3 Megabits per second (mbps) upload.

**The Next Steps – Getting Service**

***How will I get FTTH services through the co-op?***

Southern Rivers Energy will own the fiber network and use some of the fiber strands to strengthen the electric distribution and take advantage of smart grid technology to enhance electric service and improve reliability. Conexon Connect will use a portion of the fiber to provide fiber-to-the-home broadband service to 100 percent of SRE’s members. Connect will install internet service inside SRE members’ homes and manage the billing and customer service.

***What internet packages will be available?***

Connect, powered by Southern Rivers Energy offers the following packages:

- 100 Megabits (Mbps) per second upload and download speeds (symmetrical service) for \$49.95/month
- 1 Gigabit (1 G) symmetrical speeds for \$79.95/month
- 2 Gigabit (2 G) symmetrical speeds for \$99.95/month
- Wi-Fi services for an additional \$4.95/month (included with 2G package at no additional charge)

***Are there data caps with this service?***

NO. There will be no data caps or bandwidth throttling (intentional slowing or speeding of internet service) with this service.

***How long will it take before we have access to the service? What is involved in the process of building a fiber-to-the-home network?***

Construction of a fiber network is a complex process involving numerous contractors and dependent on a number of variables that include length of the circuit, terrain and soils,

weather, and other external factors. Most distribution lines are a mix of overhead and underground construction. SRE's territory was divided into two phases of construction based on substation locations and access to the main fiber huts that actually light the fiber and provide internet service. The estimated completion time for the project was less than three years and as of June 2023, we are on target to complete construction in August – two after construction began.

## **The Benefits**

### ***Why are you offering broadband service?***

Our communities have long suffered from a lack of broadband equality – access to the same speeds and capabilities as those in less rural areas. Broadband availability across our service area will help close the digital divide between those who have access to advanced technology and those who don't. A few of the many advantages of broadband access are:

- Online teaching capabilities allowing our students to learn from home
- Healthcare benefits such as telemedicine
- Work-from-home interoffice connectivity and videoconferencing capabilities that will help professionals stay in their homes while being optimally productive
- Quality of life improvements through enhanced communications
- Economic development and growth in rural areas. Access to high-speed internet can raise home prices and attract businesses to communities.

In addition, by connecting SRE's electric substations and offices with fiber, we will create a smart grid with more automation capabilities to better serve our members. Smart grid capabilities – the standard for optimum electric infrastructure – allows our devices to communicate with each other and delivers benefits such as improved power outage response times, better load balancing, more efficient electricity delivery and others.

### ***How will I benefit from fiber internet access?***

Our sole reason for offering high-speed internet services is to meet the needs of members like you. You will no longer have to rely on DSL, fixed wireless or satellite internet to stay connected online. You will be able to stream high-definition media smoothly and quickly, have the data capacity to download and upload data such as files, photos and videos at super-fast speeds, and have access to the latest technological advancements and applications.

You will be able to run multiple devices – such as cell phones, computers and laptops – simultaneously in your home or business without decreased download and upload speeds. The table below gives you a speed comparison between what you may have now and what's possible with FTTH.

*	Typical dsl/wireless/satellite (3Mbps)	Standard internet speed (25 Mbps)	High-Speed internet (100 Mbps)	High-speed internet (200 Mbps)	Ultrafast INTERNET Up to 1000 Mbps (Gigabit)
Download 100 photos	14.7 minutes	1.8 minutes	26.4 seconds	13.2 seconds	2.8 seconds
Download HD movie	4.8 hours	34.4 minutes	8.6 minutes	4.3 minutes	54.3 seconds
Download 50 Songs	8.2 minutes	1 minute	14.7 seconds	7.3 seconds	1.5 seconds
Download 50GB Game	39.8 hours	4.8 hours	1.2 hours	35.8 minutes	7.5 minutes

\* Download speeds calculated using the following averages:

Phone Photo – 3.15 MB

HD movie – 6 GB

Song – 3.5 MB

Game – 50 GB