

# Benefits

**Once East Buchanan Telephone Cooperative has installed a state of the art fiber network. How does that affect you?**

## Faster Speeds

Fiber will give our company the ability to offer much faster Broadband Internet speeds and quality than what are currently available in our rural areas. The speeds available using fiber will be perfect for social networking, gaming, watching videos, video conferencing or working from home.

## Superior Video

This new technology will give our company the ability to offer the best quality video and new services to our customers as they become available. Online streaming services have been known to compensate for a slower Internet connection by automatically downgrading the video quality that you see. If you use these types of services, you may not have even noticed a HD video (1080p) being played at 480p quality, or a 4K (4000p) video being played at HD quality. Once you've been exposed to high-quality videos, you'll notice and appreciate the difference. By installing fiber, these high-quality videos become readily available as your Internet speed is only limited by the Internet package that you choose.

## Same Local Service and Support You Deserve

The technology we use to deliver services will be different, but the friendly local service you're used to receiving will remain the same.

## Economic Development

All companies consider fiber networks a necessity when considering a move or expansion to a community. Our new fiber network technology will help ensure the area is ready to take advantage of future economic development.

## Cooperatives Keep You Connected and Competitive

EBTC understands that broadband Internet service has become a necessity in life. We've already completed the deployment of fiber in the rural areas of the Aurora-Stanley exchange, with the rural Winthrop area scheduled for this Fall and our intention is to deploy in rural Quasqueton in 2021. Our new fiber network will position you and your children for the future. It will provide the opportunity for you to stay connected and competitive in this global economy. Many small rural communities are being left behind because some service providers are not a cooperative and do not see the value of having you as a customer. East Buchanan Telephone Cooperative works for our members and keep the 7 core cooperative principles on the forefront. As a reminder, they are:

- Voluntary and Open Membership
- Democratic Member Control
- Members' Economic Participation
- Autonomy and Independence
- Education, Training, and Information
- Cooperation Among Cooperatives
- Concern for Community



**East Buchanan**  
Telephone Coop

## FIBER-TO-THE-HOME

Bringing next generation technology to you

EBTC • 214 Third Street North • 319.935.3011  
866.327.2748 (toll free)  
[www.eastbuchanan.com](http://www.eastbuchanan.com)

# FAQs

## Q. What is Fiber-to-the-Home?

**A.** Fiber-to-the-Home or FTTH refers to a technology that can be used to provide services to your home or business. Fiber replaces older copper wires and allows us to provide voice, high-speed Broadband Internet, and SkitterTV over fiber optic cable which is as thin as a human hair.

## Q. What are the benefits of FTTH?

**A.** Unlike copper and wireless Internet, fiber has a higher bandwidth capacity and can carry data for great distances without signal loss or interference – with plenty of capacity left over for future services. Plus fiber is more durable and less susceptible to inclement weather, but if damaged it is significantly more expensive to repair than copper wire. Additionally, the services offer great speed and crystal-clear connections.

## Q. What is different about fiber?

**A.** Unlike copper or coaxial cable, fiber optic cable cannot provide electrical power to the devices that are connected to it. Therefore, power must be supplied by a local source at your home or business. In addition to standard AC power, [a battery backup unit is recommended inside your house or business to allow 9-1-1 services to function in the event of a power outage.](#)

## Q. How does FTTH affect Broadband?

**A.** FTTH offers greater bandwidth and the ability for us to provide you more Broadband Internet speed. This benefit provides the opportunity for music, movies and a variety of other services that require higher speeds of Broadband Internet.

## Q. Any other concerns?

**A.** Because FTTH is more expensive to operate and repair, it is even more essential that you call Iowa One Call at 811 or 800-292-8989 at least 48 hours prior to digging anywhere on your property. Not only will it keep you safe and help you avoid the inconvenience of an outage, but it may save you from having to pay for costly repairs to the fiber optic cable. For this FTTH project, our contractor calls Iowa One Call for each location. But for any other digging, you need to call One Call...it's the law.

## Q. Why are you building the FTTH network?

**A.** We need FTTH to offer the services our customers deserve and expect. The new technology will allow us to offer today's services and those that become available in the future for tele-commuting, tele-health, and tele-education or distance-learning.

## Q. Will I need to purchase a new computer or television?

**A.** It depends on the equipment you have. Computers will need to have an Ethernet port to plug into or have WiFi capabilities – same as today. Televisions should have an HDMI type connection in order to receive the best quality picture and audio.

## Q. How do I make sure that I get the new FTTH network installed?

**A.** Simply call our office at 319-935-3011 to schedule a time for a technician to do a site survey, or stop in our office to discuss your options.

## Q. Will the process of burying fiber disturb my yard or property?

**A.** We'll do everything we can to make sure any disturbance is minimized, and the original condition of your property is returned as promptly as possible.

## Q. Will company employees need to enter my home?

**A.** Yes. As the accompanying letter states, our technicians will come to your home or business and perform a site survey of your needs and the best location for the new equipment. Then beginning in late summer, authorized contractors from West Union Trenching will place fiber optic cable from the nearest road to your home where the site survey determined the location. Once the fiber is brought up to your home, EBTC technicians will need to enter your home to install new equipment that make FTTH work with your current computers, TVs, and phones.

## Q. What equipment is needed in my home to be connected to the FTTH network?

**A.** We will install a network interface device (NID) on the side of your home and a new optical network terminal (ONT) device inside your home where the fiber terminates. The device will need to be placed near an electrical outlet, which will act as its power source.

The amount of electricity used by the ONT device is extremely small and not noticeable. From the ONT, we connect your phone line (if needed) and a cable to an EBTC WiFi solution router. The WiFi solution will be placed to give your home the best possible signal.

## Q. What Internet speeds can we expect?

**A.** Internet speed is measured by how much data you can access per second. Slow network connections are measured in kilobits (think of the old dial-up Internet days of 56k Internet service).

High-speed Broadband Internet is measured in megabits per second and super-fast Internet is measured in gigabits (achieved through fiber optic connections).

• **1 megabit per second (Mbps) equals 1,000 kilobits per second = Normal Internet Speeds**

• **1 gigabit per second (Gbps) equals 1,000 megabits per second = Super-Fast Internet.**

How much Internet speed your household requires depends on many factors such as...

1. The number of people in your household
2. The number of Internet-enabled devices in your household
3. How often you use each device
4. How often your household streams videos or using video-conferencing services or tele-commutes from home, or plays online games simultaneously on multiple devices.

For example, anything above 25 Mbps is considered usable Internet for one user streaming TV services on one device. However speeds below 100 Mbps may be challenging for larger households with multiple family members trying to stream services on multiple devices or working from home while others household members are online.

On the other hand, subscribing to 1 Gbps of Internet service will provide even the most high-tech Internet consuming household with plenty of bandwidth speed to keep everyone streaming peacefully.

If you need help calculating your home's required bandwidth Internet speed, give us a call at 935-3011.