

# Charlotte Fiber Project



**Q.** I have internet service; do I have fiber?

**A.** It depends. If your service provider is Consolidated Communications, it is likely that you have DSL, which sends information over the telephone lines. If you connect to the internet via antenna, it is likely that you have satellite or fixed wireless internet. All of these offer less consistent service compared to fiber.



**Q.** What is fiber and why does it matter to me, to my business, and to Charlotte?

**A.** Fiber is the fastest, most future-proof internet connectivity available. Fiber is a thin tube of durable glass through which light is transmitted at very high speeds. It matters because only a fiber connection can transmit and receive all the data that is now needed to participate in today's economy. The Covid-19 pandemic brought to light the disparities and inequities of internet access across rural Maine, especially for our youth, adult learners, businesses, and remote workers.



**Q.** Who is working on this in Charlotte? How can I learn more?

**A.** Charlotte Select Board and interested residents have formed the Charlotte Broadband Committee. Public input is needed and appreciated! You can learn more at [www.charlotteme.com](http://www.charlotteme.com).



**Q.** Is fiber a new technology?

**A.** Fiber was discovered in the late 1800s, so it has been around for a very long time. It was introduced into modern communications in the 1930s.\* In 1965, the first patent was issued for the use of optical fibers in communications.\*\* Today, without fiber, we wouldn't have telephones, internet, texting (you get the idea!).

\*<https://www.thoughtco.com/birth-of-fiber-optics-4091837>  
\*\*<https://www.fiberplex.com/blog/a-simple-history-of-fiber-optic-technology.html>



**Q.** So, if fiber is used for nearly everything, why is Charlotte talking about fiber?

**A.** The main “backbone” -- also known as “middle mile” -- of the internet is fiber. The term “last mile” refers to the actual connection to your home or business. In most cases the “last mile” connection to your home or business is not fiber, it is copper-based cable or DSL. It is the “last mile” that causes the problem of slow speeds, inconsistent service, and frustration for households or businesses using copper-based cable or DSL. Fiber provides lightning-fast speeds and consistent service.



**Q.** If Charlotte achieves a fiber network, will we need to upgrade again in a few years?

**A.** As a medium of communication technology, its limits have not been reached. Moving data and information at the speed of light will transform how Charlotte conducts education, business, and communications across Maine, the United States, and the world. Fiber is considered “future-proof” and estimates are that fiber will be the medium of choice for many decades to come.\*

\*<https://www.govtech.com/network/could-fiber-be-the-final-frontier-of-high-speed-internet.html>