



Why a Broadband Study?

Feature	Fiber	Broadband Wireless	DSL	Cable
Bandwidth and capacity	Fiber is 1,000 times faster than a typical DSL connection and 50 to 100 times faster than cable.	Improved capacity over DSL and dial up services	Limited bandwidth, typically only about 1-3 megabits.	Varies with time of day. Slowdowns every afternoon and evening.
Future Proof?	Fiber lasts for decades, and bandwidth can be increased to meet any future need.	An important service alternative until fiber becomes more widely available.	20th Century copper-based DSL has distance and bandwidth	Copper-based system is 20th century technology.
Work from home	Fiber does a great job of supporting any kind of work from home bandwidth requirements.	Capable of providing needed symmetric bandwidth for videoconferencing and file uploads	Too slow to be useful in many cases.	VPN and videoconferencing may not work well.
Guaranteed bandwidth	Provides reliable bandwidth without time of day slow downs.	Can also provide more predictable bandwidth without afternoon and evening slowdowns	Maybe.	No.
TV support	Want to watch Hulu in HD and Netflix Ultra? Go ahead. Use all the bandwidth you want!	Yes. Can support business use of Skype and will provide reasonable use of services like Netflix.	Only SD (Standard Definition), one show at a time.	SD and HD, but not Ultra, and limited number of screens.
Symmetric bandwidth	Equal upload and download speed.	Can provide symmetric bandwidth if needed.	No.	No.
Afternoon slowdown	Never!	Tends to be much more reliable than copper-based services.	Slow all the time.	Don't try to get any work done once kids get out of school
Cost	Fiber is 50 to 1000 times the bandwidth and better performance for the same cost.	Comparable to copper-based services with better bandwidth.	You get what you pay for.	Keeps getting more expensive every year.
Move large files	Gigabit networks give you ultra-fast file transfer, including super-fast uploads.	Provides improved support for file uploads and data transfers.	Very slow.	Uploads are going to be very slow.

What Can You Do With Fiber?

- Work from home--full time, part time, or nights/weekends.
- Run a business from home, or run a server from home.
- Connect more TVs, laptops, computers, tablets, printers, and servers and have them all work at the speed of light!
- Watch TV, movies, sports, and video at the highest possible quality--a better entertainment experience!
- Put home security cameras around your house and get notifications, live HD video, and sound right on your tablet or smartphone, wherever you are.
- Give your children fast access to online learning resources.
- Connect to your company VPN as if you were sitting in your office at work.

Why is the area doing this study?

- Ensure that residents and businesses have access to affordable high speed broadband.
- Broadband has become important to both K12 schools and higher education. Students need affordable broadband to do well in school.
- Broadband has become critical infrastructure, just like transportation, clean water, and sewer facilities.
- Broadband has become a quality of life issue for residents.
- Affordable high speed broadband has become a business essential for our businesses.
- The region needs to be able to retain existing businesses and to attract new businesses and jobs.

For more information on the regional broadband study, contact Marla Akridge of the Allegheny Highlands EDC (marla@ahedc.com)