

Rural Broadband 101

A glossary of terms and services

Cable Modem – Cable modem service enables cable operators to provide broadband using the same coaxial cables that deliver programming to a television. Comparable to those of Digital Subscriber Lines, transmission speeds depend on the modem, network and traffic load.

Digital Subscriber Line (DSL) – DSL is a wired-line transmission technology that transmits data faster over traditional copper telephone lines that are already installed. Availability and speed of DSL depend on how close a home or business is to the nearest service provider.

Fiber – Fiber-optic technology converts electrical signals that are carrying data into light and send the light through transparent glass fibers. Data transmission is much faster than DSL or cable modem speeds.

5G – Short for “fifth generation,” 5G is a commonly used term for advanced wireless systems. 5G networks are digital cellular networks where the service area is covered by providers divided into a mosaic of small geographic areas called cells. 5G can support up to one million devices per square kilometer.

Line of Sight Wireless Technology – Line of sight wireless technology involves the transmission and receipt of data between stations that are in view of each other with no sort of obstacle between them. FM radio, microwave and satellite transmission are examples of line of sight communication. This type of transmission would work in flat areas, such as South Georgia or along the Georgia coast, but is not as practical in the more mountainous areas of North Georgia.

Megabyte vs. Megabit – A megabyte (MB) denotes file size. A megabit (Mb) measures download speeds.

Mobile vs. Fixed-Line Broadband – Mobile broadband is internet on the go, using a smartphone, tablet or portable Wi-Fi hot spot to connect. Fixed-line broadband is an in-home or in-office internet connection delivered via phone lines or through a provider’s cable network or super-fast fiber optics.