

# Broadband & Wi-Fi

## An Explainer

### What is Broadband?



Broadband internet service is the most used form of internet access because of

its high speeds; it is offered in four different forms, DSL (or Digital Subscriber Line), also fiber-optic, cable, and satellite.

If you currently pay for internet access in your home, chances are that you have a broadband connection. In order to access the internet using broadband, you simply click on your browser icon of choice (Internet Explorer, Firefox, Google Chrome etc.) and you can immediately start surfing the web. The whole process should take no more than about 5 to 10 seconds, depending on the computer's speed and barring any issues of slowness. The connection is maintained with the use of a cable or DSL modem. The **modem** can either be connected directly to your computer via a wired connection through an **ethernet** cable or wirelessly to a **router** that distributes **Wi-Fi**. Only when these connections become unplugged, will the internet connection be lost.

### What is Wi-Fi?

Wi-Fi is the technology that allows a PC, laptop, mobile phone, or tablet device to connect to the internet without the need for a physical wired connection. The technology uses radio signals to transmit information between your Wi-Fi enabled devices and



the internet, allowing the device to receive information from the web in the same way that a radio or mobile phone receives sound. The speed of the connection depends on how strong the reception is (how many bars you have).

### What Does it Look Like?

If you can access the internet at home wirelessly (Wi-Fi), you probably have one or two little boxes called a modem and a router. Your router creates a network between the computers in your home while your modem connects that network—and thus the computers on it—to the internet. When you connect to Wi-Fi, you're really connecting to your router, which forwards traffic between the internet and your computer. So, while the modem's job is to connect to the internet, the router's job is to create a wireless computer network, linking all your computers together, as well as give all your machines a shared gateway to the internet. Many internet providers offer a combined modem/router unit that performs both these functions in one device.

### How Will the Tribe's Private Wireless Network Work?

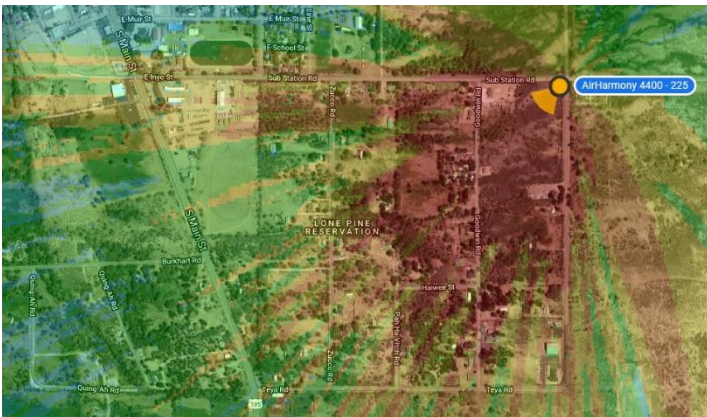
Modern wireless communications started out as a way of sending audio programs through the air. Pretty soon we started calling it radio and, when pictures were added to the signal, TV was born. Radio is audio one-way; TV is audio/visual one-way. The tribe's wireless internet is audio/visual/data both-ways.

The tribe will be placing a transmitter on the cell tower located on the corner of Esha and will give each tribal household a receiver in order to receive internet connection. The tribe has two types of wireless technologies, LTE and Wi-Fi. Think of

them as different languages. The radio on the tower speaks LTE. The CPEs/Modem/Router translates LTE to Wi-Fi. Your phone, computer and/or tablet speak Wi-Fi.

### **Broadband Coverage Map**

Pictured below is a representation of the tribe's broadband coverage over the reservation. The orange dot represents the transmitter that will be placed on the cell tower. The red, yellow and green represent the areas of coverage. The transmitter will be able to provide Broadband Wi-Fi to the entire Lone Pine Paiute-Shoshone Reservation.



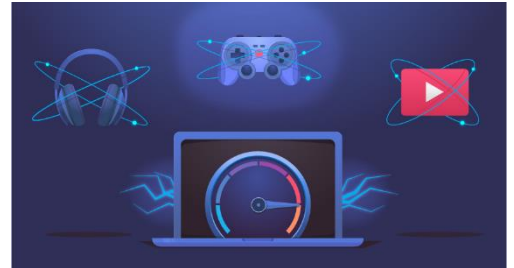
### **What are Hotspots?**

Wi-fi is where the expression **Wi-Fi hotspot** comes from. A Wi-Fi hotspot is simply a public place where you can connect your computer wirelessly to the router/internet. You have probably noticed or utilized hotspots in airports, coffee bars, bookshops, college campuses or downtown Lone Pine or Bishop. There are currently three outdoor hotspots available to the tribal community that provide internet access completely free. They are located at the Tribal Office and Wellness Center at 975 Teya Rd. and at the Cultural Center. Tribal members currently without an internet/Wi-Fi connection and who are unable to apply for emergency services or employment online are encouraged to use these hotspots.

### **How can Tribal Members Utilize Wi-Fi?**

To utilize the Tribe's Wi-Fi, tribal members must have devices that are Wi-Fi compatible. Many devices, such as smartphones and tablets, come ready to accept Wi-Fi signals straight out of the box, whilst

others, such as some PCs, will require buying a separate wireless



card or adapter, which often comes in the form of a small device which plugs into the USB port of your PC or laptop. Newer devices are likely to be able to connect to Wi-Fi without any extra technology, but older or more basic computers may still require an adapter. Your smartphone, for example, should be able to access Wi-Fi both in your home and when out and about.

Tribal members will be able to utilize the tribe's robust, highspeed broadband network to check emails, search the internet, participate in video conferencing (Zoom, WebEx etc.), stream videos (YouTube, Netflix, Hulu etc.), pay bills online, play or download video games online, listen to music online and anything else that requires an internet connection. To be clear, the tribe will only be supplying the high-speed internet/Wi-Fi. Devices, apps, games, consoles and software will not be provided by the Tribe. In other words, tribal members must have their own computers, smart phones or iPads to utilize the Wi-Fi. Tribal members are also responsible for purchasing their own streaming apps, gaming devices or any other software or subscription-based services.

For more information and updates visit [www.lppsr.org](http://www.lppsr.org)