

When it comes to choosing an internet package for your ROC, most Boards understand “faster is better than slower,” but how much internet speed does a ROC actually need? This guide breaks down the cost/benefit of internet service options and provides some non-technical insight to help ROCs purchase internet plans that will improve day-to-day workflow.

THE BASICS OF INTERNET SERVICE

Internet Service Providers (ISPs)—Comcast, CenturyLink, etc.—make a lot of claims about the speed of their networks and the way each ISP measures speed can be confusing. Most internet connections have two speeds: downloading and uploading. Downloading is receiving files (documents, images, etc.), while uploading is sending files. Both speeds are measured in “megabits per second” or “Mbps”. The more megabits per second, the faster your connection. Simply put: the higher your Mbps, the less time spent waiting for uploads and downloads.

Most ROCs are on a 5/1Mbps or lower plan. That means download speeds of five megabits per second, and top upload speeds of 1 megabit per second. How fast is that? Using a 5/1 connection, you should be able to download a 25-megabyte PDF file in about 40 seconds, or upload the same file in about three minutes. When attending to the day-to-day business of the ROC, that can feel painfully slow.

NCF recommends 30/5 Mbps for any ROC. Speeds of 50/10 Mbps or 100/10 Mbps are even better if the ROC can get the service in its area and the price fits the budget. ROCs should expect to spend \$50 to \$100 per month on internet access.

INTERNET PURCHASE TIPS

1) Don't know what internet providers are in your area? Check out

<http://broadbandnow.com/>— the website allows you to see plans, prices, and ratings for every internet provider in your zip code! Remember, you're shopping for Business service, not Residential.

2) Ask every ISP what kind of connections your ROC has access to for delivering internet.

Do they offer copper, coaxial, or fiber? What's the most reliable connection they can provide you for internet?

3) Ask for referrals from your neighbors.

What internet providers are other nearby businesses using?

4) Ask the internet provider what level of support business customers get.

Is there a Service Level Agreement (SLA). Look for a guarantee of uninterrupted service or uptime. More importantly, what is the remedy if service is interrupted? Do you get a credit off your bill in the event of service interruption? Does the internet provider have dedicated support lines for business customers?

FACTORS THAT IMPACT INTERNET SPEED

No matter what internet package you choose, keep in mind that upload and download speeds will vary depending on the age and type of the ROC's computer, the community's distance from the internet provider, and the internet transmission lines available in the area. Older internet transmission lines like copper or cable tend to transmit at lower speeds, while fiber-based transmission lines (more common in larger metropolitan areas) are much faster. If your ROC is in a rural area with older transmission lines, your speed options may be more limited. Rural ROCs may consider satellite service as a good alternative.

WHY INVEST IN A FASTER CONNECTION?

The faster and more reliable the internet, the quicker the ROC will be able to conduct business. Another bonus of faster internet? Enhanced technical assistance delivery through virtual conferencing, online collaboration, and faster file sharing with NCF. A high-speed internet connection will give your ROC the bandwidth it needs to grow and flourish.

INTERNET CONNECTION TYPES

Cable — Internet provided through your local cable company. This is one of the most prevalent and reliable options for the money. Generally faster speeds than DSL, especially if you purchase a business internet package. Can be costlier than DSL.

DSL — This is Internet provided through a telecommunications company. DSL uses the phone lines coming into your premises for landline phones, to connect to the Internet. Traditionally not as fast as cable. For more information on DSL versus cable connections, [check out this online article](#).

Fiber Optics — This type of service provides Internet access using beams of light through special mirrored tubes. This option is fast, delivering Internet of up to 1 Gbps. Fiber optic is limited in availability because special equipment must first be installed. Although more expensive, there are obvious benefits for businesses. Higher bandwidth is possible meaning that download speeds are significantly faster. There's no loss of signal due to weather conditions.

Satellite — Satellite uses a satellite dish and bounces your Internet signal off of satellites. The advantage is that no cables or even wireless towers need to be nearby. Satellite is sometimes the only high-speed Internet service available in rural areas. However, in comparison to other forms of high-speed Internet, it can be slow. Speeds of 3 Mbps are common. "High speed" for satellite will be 15 Mbps. For business use, this is slow — compare to business cable which can be 150 or 500 Mbps or higher.

Fixed Wireless — Internet is provided through radio signal from a device like a cell phone or antenna to a tower. Wireless Internet can reach speeds up to 40 Mbps but are often subject to the environment between the user and the tower. Trees and buildings can interfere with line of sight and disrupt service.