# A Consumer Guide to Broadband

Helpful advice for you to maximize your current speed; security tips; and what broadband speed is needed based upon your usage and number of devices.

## How much speed do you need?

<table>
<thead>
<tr>
<th>Number of devices</th>
<th>Use</th>
<th>Recommended download speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Web surfing, email, social networking, moderate video</td>
<td>Up to 25 Mbps</td>
</tr>
<tr>
<td>3-5</td>
<td>Online multiplayer gaming, 4K streaming</td>
<td>50 - 100 Mbps</td>
</tr>
<tr>
<td>More than 5</td>
<td>All the above plus sharing large files and live streaming video</td>
<td>150 - 200 Mbps</td>
</tr>
</tbody>
</table>

## Tips to increase speed

- Disable WiFi on devices that you’re not using
- Ensure your router is close to the device you’re using and not blocked by walls, furniture, etc.
- Reboot/reset your router
- Upgrade your router if need be, and make sure the router software is updated as directed
- Limit the number of people using broadband devices at the same time
- If you need to video conference for work or medical services, make sure no one else is streaming Hulu, Netflix, etc., at the same time
- Turn off services that connect to the Cloud that you’re not using
- Use a WiFi booster
- Restrict background data and put devices in low data usage

Special thanks to the Federal Communications Commission (FCC) for information about household broadband usage and speed. More information can be found at [https://www.fcc.gov/consumers/guides/household-broadband-guide](https://www.fcc.gov/consumers/guides/household-broadband-guide)
Another way to look at how much speed you may need

The FCC publishes a Consumer’s Guide for Home Broadband Service:  https://www.fcc.gov/research-reports/guides/broadband-service-home-consumers-guide. Although the FCC chart below is a rough sketch of what you can expect to do at various service levels, your experience may be different given the particular devices you are running and the actual broadband speeds available to your home. The FCC defines “Basic” internet speed as 3 to 8 Mbps, “Medium” as 12 to 25 Mbps, and “Advanced” as more than 25 Mbps. Mbps (Megabits per second) is the standard measure of broadband speed. It refers to the speed with which information is downloaded from or upload- ed to the internet.

<table>
<thead>
<tr>
<th>1 User/1 Device</th>
<th>Light Use (Basic functions: email, browsing, basic video, VoIP, Internet radio)</th>
<th>Moderate Use (Basic functions plus one high-demand application: streaming HD video, multi-party video conferencing, online gaming, telecommuting)</th>
<th>High Use (Basic functions plus more than one high-demand application running at the same time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Users/Device</td>
<td>Basic</td>
<td>Basic</td>
<td>Medium</td>
</tr>
<tr>
<td>3 Users/Device</td>
<td>Basic</td>
<td>Medium</td>
<td>Medium/Advanced</td>
</tr>
<tr>
<td>4 Users/Device</td>
<td>Medium</td>
<td>Advanced</td>
<td>Advanced</td>
</tr>
</tbody>
</table>

Device security suggestion/reminders

- Don’t access bank accounts or use personally identifying information (e.g., social security numbers) when using open/unsecured networks (those that don’t require a password or login)
- Only use secured public networks when accessing or transmitting personally identifying information or account numbers (those that require a password/login or to agree to legal terms)
- Don’t leave your laptop, tablet, or smartphone unattended while in a public place
- Turn off automatic connectivity when in public places, which will prevent automatically connecting to networks you don’t normally use
- Don’t shop online when using public WiFi or an unsecured network
- Be wary of giving out too much personally identifying information when accessing a public WiFi hotspot
- If you can, use a Virtual Private Network on your device if using public WiFi

Contact the Department of Public Service:
Call 800-622-4496
Email psd.consumer@vermont.gov
Online at: https://capi.epsd.vermont.gov/?q=node/51