

Your internet connection from any internet service provider is sold to you at a prescribed speed level for a specific monthly charge. The fee for the internet service may be billed to you as part of a “bundle” (with telephone and television services, for example) or separately.

The speed level of your internet service is usually stated in terms of “megabits per second (Mbps)”, sometimes with separate speeds for download and upload of data from the internet. For example, basic DSL service might be specified as “5 Mbps download, 1 Mbps upload”. A good high-speed internet service would stipulate both download and upload at 100 Mbps (balanced transmission). Actual measured speeds will be somewhat less than this, but should not be less than 80% of the stipulated speed for very long. There are a number of reasons for slower than advertised speed, as discussed in this article:

<https://www.howtogeek.com/165321/why-you-probably-arent-getting-the-internet-speeds-youre-paying-for-and-how-to-tell/>.

Before you run a test of your internet speed, you need to know what you are currently paying for. This may be stated on your monthly service bill; if not, you may have to contact the customer service department for your service provider. Once you know your “nominal speed”, you can perform your test.

Testing your internet connection's performance is fairly easy. You don't need any extra software, just a computer with a web browser. But there are a few things you should do to make sure you are getting the most accurate measurement of your internet speed.

- For best results, use a wired connection to eliminate interference and performance fluctuations that can occur while you're on Wi-Fi. If you have any other wired devices on your home network, plug your test computer directly into the modem so those don't interfere in your testing.
- If you're stuck using Wi-Fi, minimize interference from other devices by disconnecting them from the Wi-Fi network temporarily. Make sure the Wi-Fi router is away from other electronic devices like cordless phones. Be mindful of any streaming music services that run in the background, patches downloading via Windows Update, Netflix streaming on a TV in another room, etc. Don't forget mobile devices, too. Many smartphones auto-connect to your wireless network when they're within range, so turning off the phone is a good idea during the test. And if you're not sure if something might be using the internet, turn it off.
- Restart your cable box or router / modem. These devices give your computers and other devices access to the internet and are, themselves, tiny computers. Like your computer or smartphone, various things keep them from

working optimally over time, and can manifest as sluggish web browsing and movie-streaming. See [How to Properly Restart a Router & Modem](#) for the *right* way to do this.

- Close any programs or applications that are running on your test computer. The best approach for this is to actually shut down and restart your computer. Restarting the computer that you're testing your internet from is a very easy thing to do that might have a real impact on the accuracy of your internet test. See [How to Restart a Windows Computer](#) or <http://www.dummies.com/computers/macs/how-to-restart-your-mac/> .
- Once the computer is ready, start your browser (Firefox, Microsoft Internet Explorer, Microsoft Edge, Google Chrome, etc.). The browser should be the only program running during the test.
- Finally, prior to testing your internet speed, clear your browser's cache. You should do this before each subsequent test, assuming you plan on testing several times in a row. Most internet speed tests work by downloading and uploading one or more files of specific sizes and then using the time those files take to do that to calculate your internet speed. If you're testing several times in a row, test results after the initial test may be impacted by the fact that those files already exist on your computer (i.e. they're cached). A good internet speed test should compensate for that but often they don't. See [How Do I Clear My Browser's Cache?](#) if you're not sure how to do that in whatever browser you're using to test from.

When you run your speed test, if you find a problem that must be reported to the service provider, you may find that the provider will not accept your test result if you use an application that they don't approve. So for the New Lebanon service area, it is best to use the speed test applications hosted by the providers themselves. For Consolidated Communications (old Fairpoint), use:

<http://speedtest.mycci.net/>

For Charter Communications (Spectrum™), use:

<https://www.spectrum.com/internet/speed-test>

Follow the directions given on the speed test web page to run your test. Write down both the download and upload speed results when the test is complete. Clear your browser cache and repeat the test. Do this four times, testing with the same computer or device each time, using the same internet speed test. Average the results.

For the best results, test your internet speed once in the morning, once in the afternoon, and once in the evening, over the course of several days. Save the averages for each test.

If you find that your internet speed is consistently slower than you're paying for, it's time to take this data to your Internet Service Provider (ISP) and ask for service to improve your connection.

Bandwidth that varies a lot at different times per day, sometimes meeting or exceeding what you're paying for, may have more to do with [bandwidth throttling](#) or capacity issues with your ISP than an actual problem. Regardless, it might be time to negotiate the price of your high-speed plan or get a discount on an upgrade.

No speed test is perfect, but if you follow the procedure given above, you will have a reasonably good set of data to use to inform and negotiate with your provider.

Note: This article was excerpted from resources at www.lifewire.com (“Tech Untangled”) by the New Lebanon Broadband Committee.