



The Ultimate Guide to the Internet

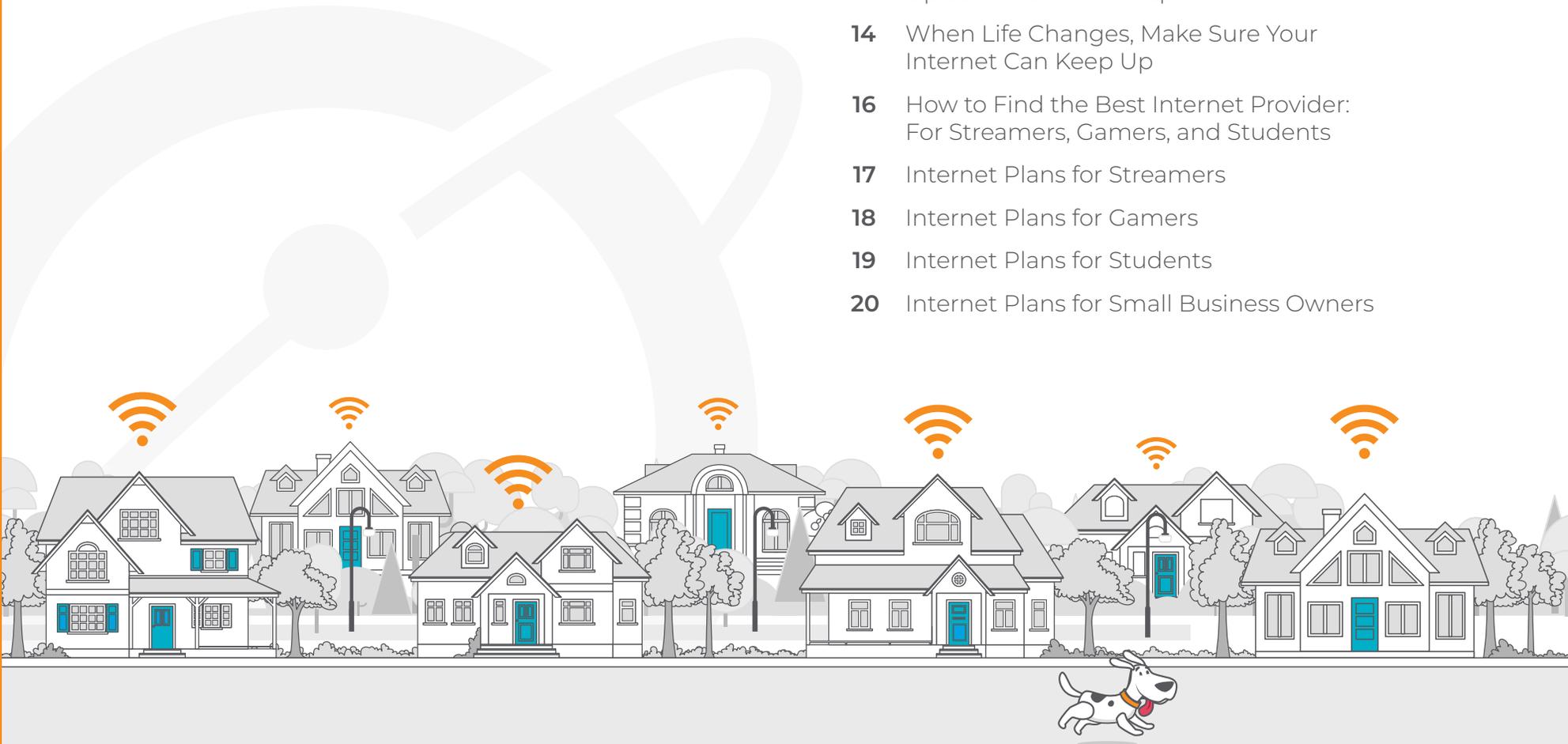
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The Ultimate Guide to the Internet

If you've ever felt overwhelmed while trying to choose an internet plan, you're not alone. But EarthLink is here to make those decisions easier with our ultimate guide. We've got you covered on how to estimate the speed you need, the top questions to ask your provider, specific guides for students, empty nesters, and more. Let's dive in.

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What Internet Speed Do You Need?

Perhaps the biggest question on everyone's mind: **What speed do you really need?** Let's start with the basics. Or, you can use our [bandwidth calculator](#) for a tld;dr fast take.

Number of Devices*	2-4	5-8	9+
Activity	Surfing the web, email, social media, occasionally streaming	Online multiplayer gaming, HD streaming, photo sharing	Working remotely, attending online classes, playing multiplayer games, 4K streaming, multiple smart home devices
Recommended Download Speed	100 Mbps or more	500 Mbps or more	800 Mbps or more

*When counting connected devices in your home, don't forget about smart home devices. Even if you're not using the smart capabilities every day, if it's connected to your network, it requires some extra speed.

The top tier of internet speed? Anywhere from 1 to 5 Gigs (or 1,000 – 5,000 Mbps). At these speeds, there's practically no limit on the number of devices that can be connected, and many data-consuming activities can be taking place at once.



BUMP IT UP

If you choose a speed that's just a little higher than what you definitely need (think: you need 800 Mbps but go with 1 Gig) it gives you some growing room. As graphics improve and you add devices to your network, you'll have the extra speed you need — all without having to worry about upgrading your internet plan.

SWITCH IT UP

If you're thinking about switching providers, it's a great time to switch your plan speed, too. If you're noticing problems connecting or staying online, you might need more speed.



How do you use the internet — and how does that influence your plan needs?

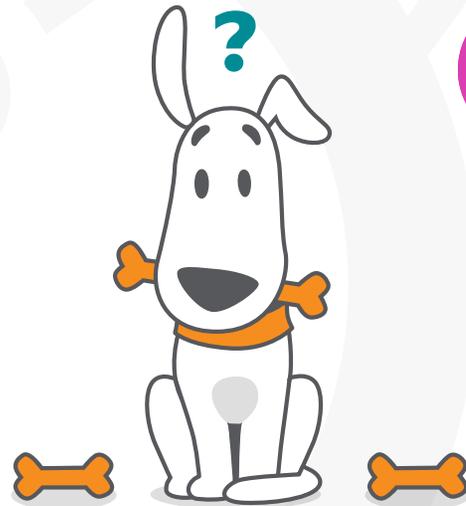


Beyond the number of devices, think about how you use the internet. Are you a casual surfer, mostly using it to check email and scroll social media? Or do you like to stream movies and play video games?

The more data-intensive activities you do (like streaming, gaming, video calls, and live workout classes), the more speed you need. And if you're doing those activities on multiple devices simultaneously? You'll definitely want higher speeds to help prevent any bottlenecks.

Three Questions to Ask an Internet Service Provider about Plan Options

There are lots of ways to find a new internet service provider (ISP), but we suggest starting with the answers to a few basic questions.



Are there contracts?

Depending on the type of internet connection available to you, there could be lengthy contracts involved. For most services, a one-year contract is standard. But if you tend to move more often than that, be sure to factor in early termination fees before signing up.



Is there transparent pricing?

Some ISPs entice new customers with low intro rates. But, as you stick with your provider, your rate increases (and increases) and you wind up paying significantly more for the exact same service. Not cool. Instead, look for a provider who doesn't use teaser rates — that way you avoid surprises.



Are there fiber internet data caps?

Some providers have data caps, which restrict what you can do online. When you reach your data limit (which can be easy to do with streaming, gaming, and other activities), you'll have much slower speeds. Not fun. Look for a provider with no fiber internet data caps so you can enjoy unlimited internet.

What types of internet connections are there?

The type of internet you have — like fiber, wireless home internet, cable, or satellite — influences the speed you can achieve. These are the most common options, but remember: where you live impacts the type of connection you can get.

 <h3>Fiber Internet</h3>	 <h3>Wireless Home Internet</h3>	 <h3>Cable Internet</h3>	 <h3>Satellite Internet</h3>
<p>The gold standard in internet service, you can enjoy speeds up to 5 Gigs, symmetrical upload and download speeds, and the most reliable connection. There's almost nothing you can't do at these speeds.</p>	<p>The latest technology for rural and underserved areas. It's more reliable than satellite and faster than DSL. You just choose a data plan and you'll be automatically connected to the fastest speeds from nearby cell towers. Easy peasy.</p>	<p>Helped revolutionize internet access when it first came onto the market but has fallen behind. Cable is prone to unnecessary bundles, speed fluctuations, and frustrating bottlenecks.</p>	<p>A popular option for rural areas, it requires a dish positioned on or near your home that sends and receives signals from a satellite in space. It usually includes high equipment costs and long contracts, which is why wireless home internet is a better option for most people.</p>



Is 100 Mbps fast enough for your needs?

Trying to find the perfect internet speed can make you feel like a bit of a Goldilocks. You want something that's not too slow, not too fast, but just right. The right connection for you is something that fits your speed needs as well as your budget needs. So while it's one of the most popular internet plans, is 100 Mbps internet enough speed for you?

Is 100 Mbps fast?

Yes, an internet speed of 100 Mbps is fast, but there are faster options out there. It's slightly above average for most internet users and allows you to stream videos, play online games, or join video chat meetings without too many slowdowns. If you hear the term 100 Mbps internet, it means that the download speeds a user can expect are up to 100 Mbps. Actual speeds may vary to be slightly slower — but it should be close.

Is 100 Mbps download speed enough for you?

Based on your results from our previous question about the speed you need for your home internet, it comes down to what you need for your everyday activities. Deciding on your plan from 100 Mbps to 1 Gig depends on how you use the web. This speed is fast enough to download small files quickly, stream movies in HD, play some online games, or connect a few smart home devices.

That said, if you have a large household where a lot of people use the internet at the same time — or you just have a household full of data-intensive users — 100 Mbps probably won't be fast enough. If you want to stream video on multiple devices, play intense multiplayer games, or participate in group video calls while other house members are online, you'll need more than 100 Mbps.

100 Mbps

Download small files quickly

Stream movies in HD

Play some online games

Connect a few smart home devices

Hello Astro!





Is 100 Mbps good for gaming?

Generally speaking, yes, 100 Mbps is a good speed for gaming. But that also depends on what you play, how often you play, and if you're doing anything else at the same time.

A lot of online games will still work with relatively slow internet speeds. But faster speeds generally mean that you'll have better responsiveness to other players and that you can download large video game files (like updates) or chat on apps like Discord while you're playing.

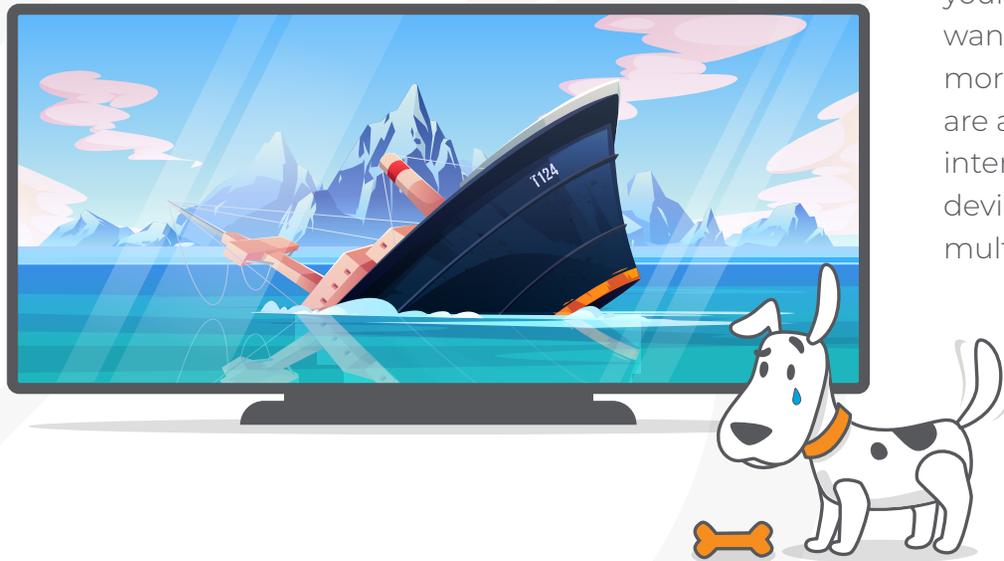
If you're a more serious gamer, you'll also want to consider the amount of latency in your internet connection. Latency, or ping time, is the lag that happens when a signal is sent back and forth between a device to the network servers. This can slow your controller's response time as you're maneuvering around the map. Faster internet speeds can reduce latency, but fiber internet has the lowest latency of any internet connection.

Is 100 Mbps fast enough for streaming?

Yes, 100 Mbps is good for streaming — but you still might need a faster plan.

Netflix says you'll need at least 5 Mbps to stream HD content, and 25 Mbps if you're streaming in 4K. However, that's the bare minimum speed you need if you're not doing anything else, and nothing else is connected to your network. More speed can help you avoid lags and buffering that can ruin your favorite movie experience.

So if you're like the rest of us and prone to scrolling social media while the TV is on, all while having your Ring doorbell connected... you'll need more than what Netflix recommends. If you want to stream in 4K (or stream in HD on multiple devices at the same time) and keep the rest of your smart home devices connected, you may want to look into faster speeds, like 200 Mbps or more. Of course, if 1 Gig (or 1,000 Mbps) speeds are available near you, that's the gold standard for internet. You'll never have to worry about adding devices to your network or streaming across multiple devices.



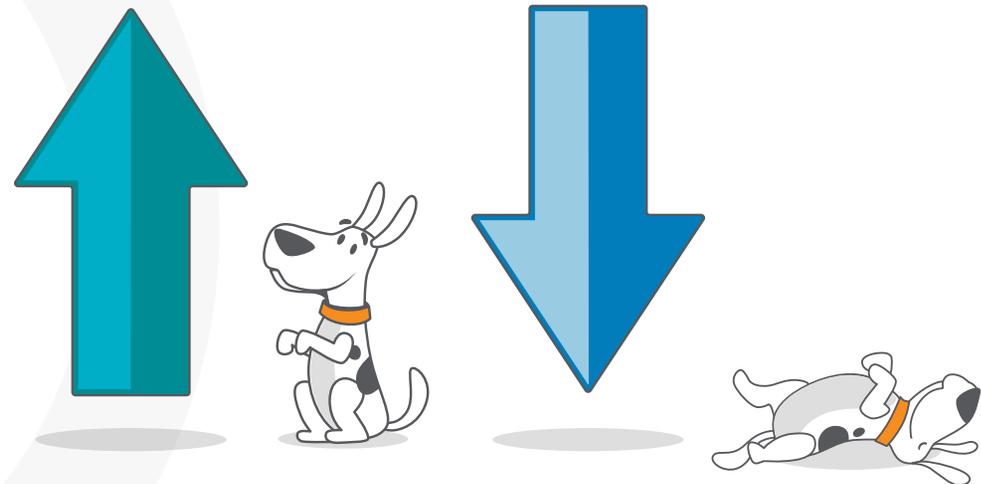
Upload vs. download speed

Did you know there are two types of speed to think about when choosing an internet plan? **Download speed is the one that's more prominently displayed on your plan — but upload speed matters now more than ever.**

What is the difference between upload speed and download speed?

The difference is: upload speed is how fast you can send information, while download speed is how quickly you can receive it. Upload speeds are typically slower than download speeds — this is only recently becoming a problem in some cases, thanks to the popularity of remote work, online gaming, and group video chats.

Think of it like this: if you're a content creator sharing your latest video, YouTube is using upload speed. If you're watching the latest video from your favorite account, YouTube uses download speed.



What is upload speed?



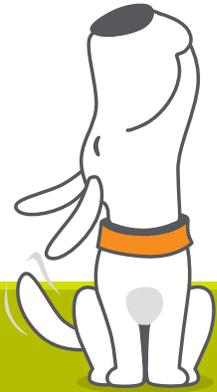
Upload speeds are used when you're sending information somewhere else. Think: uploading a video to Instagram or texting a picture to a friend. But you probably use upload speed most often when you're... Googling something. Every time you search for something on the internet, whether you're typing it in or using voice search, it requires upload speed.

If you're in a content creation field, you likely rely on upload speed more than most people. It's especially important for uploading, sharing, or sending video, audio, or other large files. But if you work remotely and spend a lot of your day on videoconferences, you need upload speed, too. If your upload speed is too slow, your image will be laggy and blurry — leading to coworkers saying, "We can't hear you!" as you frantically try to reconnect. Not fun.

What is a good upload speed?

Average upload speeds vary, but if you're using broadband internet, you have at least 3 Mbps. But if you're using upload speeds for things like sharing large files or competitive online gaming, you'll want to have at least 5-10 Mbps of upload speed.

Just like choosing the right internet plan, an upload speed that is good for you may not be good for someone else. It all depends on what you do online. The more information you send (especially if it needs to be in real-time), the more upload speed you'll want.



An upload speed that is good for you may not be good for someone else.





Any download speed of 25 Mbps or faster is considered high-speed, or broadband, internet.



What is download speed?



Download speed is used to receive information. Download speed affects things like streaming music on Spotify, binging the latest Netflix series, or downloading large files for work. Any time you're downloading information from somewhere else — including window shopping online or doing research — you're using download speed.

What is a good download speed?

Any download speed of 25 Mbps or faster is considered high-speed, or broadband, internet. But 25 Mbps is really only suited for households with 1-2 devices that stream occasionally, but primarily surf the web or scroll social media. If you're like most people, you have 10 or more connected devices. Depending on how you use the internet, and how many devices you're using at once, you might need something closer to 300 or 500 Mbps.



Now that you know the basics of internet plans and the speeds to look for, we can get into the guides you need for different chapters of life.



When Life Changes, Make Sure Your Internet Can Keep Up

From the devices you're using to the speed you need and how data caps play a part, we've got the guide for you whether you're starting a business from home, gearing up for studying at home, enjoying a newly-empty nest, or anything in between.

Like many of us, we bet you've got some big changes happening in your life, and that means there's a lot to evaluate. But those transitions means it's a good time to take another look at all your services to make sure they meet your new needs. No more kids at home? Side hustle moving to your professional center stage? Or is your family now connected to multiple devices all day, every day?

Consider resizing your internet plan to match.

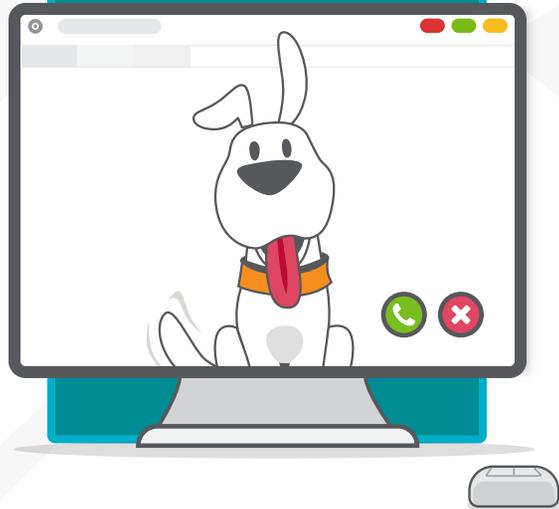
How much internet do I need at home? Take a moment to review the chart back at the beginning of the guide to make sure your speed is on target for your needs. Factor in any changes to the number or people or devices that will need to access your internet regularly. If that's changing significantly, it's probably a good time to take a look at your internet plan.

If you're using less data now or will be soon, you may be able to decrease your speed and save some money on your monthly bill.

But before you go cutting your speed in half, take a moment to think about how it's been working... and if you're expecting long-term guests in the future (like family visits over the summer). It's better to have slightly more speed than you need than to not have enough speed. Why? Imagine everyone trying to get online at the same time with a lousy connection. Who will they come to for complaints? You. Plus, if you're trying to run a business from home, more people and more devices will slow your productivity down, too!



According to Zoom, you'll generally need about 3 Mbps upload and download speed if you're on video calls.



Internet Speed to Keep in Touch with Loved Ones

Looking to keep in touch with family and friends who live in other places? You're probably using a video conferencing app like Zoom, Facetime, or Skype. For your loved ones to see you clearly, you'll want a good upload speed. And, to hear the other person, you'll want enough download speed.

So exactly what speed do you need? According to Zoom, you'll generally need about 3 Mbps upload and download speed if you're on video calls. That's the bare minimum, and it still might lead to lags, frozen faces, and a lot of "can you hear me now?" questions.

Plus, that's the minimum speed if that's the only thing everyone in your household is doing online at the time. If someone else is gaming, streaming, or on their own call, you'll need more speed. That's another reason fiber internet is a great choice: your upload and download speeds will be the same. (In other words, 1 Gig download speed means 1 Gig upload speed.)

We've got even more helpful hints and information for the students in your family.



How to Find the Best Internet Provider: For Streamers, Gamers, and Students

Picture this: your internet service frequently goes out during important meetings, in the middle of class, or on a video call with your parents. On top of that, you feel like you're paying too much — your monthly bill keeps climbing up and up from that great promotional deal you signed up with. It feels like there's nothing you can do about it, even though that plan isn't the best fit for your life anymore.

If that sounds familiar, it's time to switch providers! The thought of researching new providers, comparing

benefits, and then calling your current provider to cancel your service can sound overwhelming. But you deserve the right connection — a high-speed internet plan that fits your life and budget.

We'll break down the main things to look for in an internet service provider and go into specifics about what to consider if you're a streamer, gamer, or student.

Internet Plans for Streamers

If you're a heavy streamer, it's a big factor when choosing your next internet plan. Whether you're streaming Netflix, HBO Max, YouTube, or a combination of multiple platforms, seamless compatibility is likely important. You'll want to take the number of streaming devices (TVs, gaming systems, streaming sticks like Roku or Amazon's Firestick) into account to find the download speed for you.

You'll also need to consider what definition you're streaming in. Standard definition (SD) streaming requires considerably less bandwidth than streaming in 4K or even high definition (HD). If you tend to stream in 4K and/or across multiple devices at the same time, finding an internet service provider with no data caps will be vitally important. Video streaming is a high-data consuming activity and can quickly get you to your data limit, resulting in speeds so slow you can't stream.

In addition to increased emphasis on speed and data caps, you'll need equipment that can keep up. Your modem and router can actually have an impact on

the internet speed you experience.

You'll need hardware that's new enough to handle the plan that works best for you, and you'll want to place it in a central location (away from brick, concrete, other electronic devices, and stacks of books) to have the best experience. We suggest finding an ISP who rents your modem and router – that way, you never have to worry about compatibility with your plan. And, if you upgrade your high-speed internet, you don't have to go buy a new router. Win-win.

Looking for high-speed internet, no data caps, and rentable equipment will let you get back to binge-watching your favorite show from any room in your house.

Video streaming is a high-data consuming activity and can quickly get you to your data limit, resulting in speeds so slow you can't stream.



Internet Plans for Gamers

As a gamer, you probably already know that internet speed is important. But, unlike streaming, you need to worry about two types of internet speed.

Download speed is how fast you can receive data like seeing the moves your teammates have made. But upload speed is how fast you can send data. In other words, how long it takes for the action you did to upload to the server and register.

Historically, upload speeds didn't really matter. Most people weren't sending a large amount of data on a regular basis and waiting a few extra seconds for an email attachment to upload wasn't a problem. Gaming has changed

that. Slow upload times can be the difference between a victory and a bitter defeat that has you promising your teammates it's your internet connection, not you.

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Lag, or ping, time also factors into this. Ping time is how much time your device requires to send signals to a server and receive the response. You want this number to be as low as possible. And, just like with streaming, you'll want to consider the graphics resolution that you prefer when choosing an internet plan. Better graphics require faster speeds and more data.

Looking to achieve the best of all possible worlds? Get fiber internet.



Internet Plans for Students

Students have unique needs – and their internet plan should reflect that.

As a student, consider what you're using the internet for. Homework? Online classes? Video conferencing and group projects? That will help determine what speeds you need. You should also pay special attention to contract lengths. College students tend to move every school year (or more frequently!) and often have roommates.

You could also ask:

1. Can I transfer service to be in another roommate's name?
2. Will there be an early termination fee if I transfer service?
3. Can we split bills?

Oh, and remember to ask your roommates how they tend to use the internet, too. If

you're all heavy internet users, you'll need faster speeds than if most people in your household will be working from campus or a university and only scrolling social media while at home. We suggest gathering everyone up and taking a bandwidth test to get a realistic estimate of how much speed you need.

Finally, ask if your ISP offers any student discounts on your internet service or on additional services (like a VPN to keep you safe while working at coffee shops). Choosing the right ISP is key to having the internet connection that will allow you to complete group work, attend class, and submit homework on time – even if it's at the last second.

No matter if you're a student, streamer, or gamer, it's essential to carefully consider your internet service provider options before choosing one to meet your needs. And if you decide to start your own business on the side? We've got the guide for that, too.

Oh, and remember to ask your roommates how they tend to use the internet, too.



Internet Plans for Small Business Owners

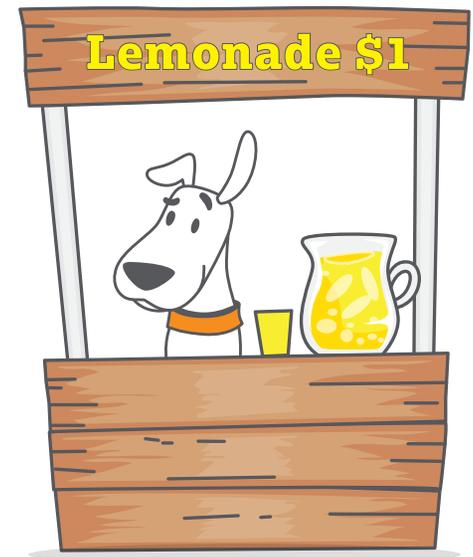
Did you know there are more than 30 million small businesses in the U.S.? If you're a proud small business owner, you need a reliable internet plan. Because whether you have a brick-and-mortar location or you do everything online, potential customers need to be able to find you, and you need to get paid for your hard work.

Internet Speed for Your Small Business

Depending on the type of business you have and where you do your work, the internet you need will be different.

If you're frequently on video calls with clients or messaging potential customers in real-time, you'll want faster speeds than if you're primarily using email. Faster speeds will also help you avoid a video call that's cutting in and out or dropping every fourth word. If your connection is the one that's frequently delayed, look into your upload speed. While your download speed is the number most prominently displayed on your internet plan, your upload speed is the one that affects your video connection. The faster it is, the clearer others can see and hear you. (That's why we always recommend fiber internet, where available.)

For a secure connection, especially if you're sharing files among employees, you'll want to invest in some additional measures. While we recommend that everyone has a dark web monitoring app, a [protection package with a VPN](#) is a good idea for remote workers. A VPN, or virtual private network, keeps your connection and files safer even if you're using public WiFi (like at a coffee shop or airport). VPNs can keep your personal information safer online, too, particularly if you use online banking, online shopping, or need to access sensitive documents for work.



As an entrepreneur, a secondary internet connection is important.

Moving from a home office and remote workers situation to an in-person or hybrid office? Do your research to find the best business internet in your area. You'll still need to consider things like security tools (VPN, anti-phishing, secure logins, etc.) as you shop for business

internet service options, but at a brand-new work address that isn't in your dining room.

Consider a Backup Internet Solution

As an entrepreneur, a secondary internet connection is important. Picture this: the cable internet plan at your storefront works just fine most of the time. But during the after-work rush, it slows down because the folks

who live in the apartments above are all home and streaming TV while cooking dinner.

Then, you have trouble connecting to your network, and your Square reader won't work. Unless the customer has cash, you risk losing the sale. With another option available, like [wireless home internet](#), you can simply switch network connections.

And wireless home internet doesn't use a shared connection, so it won't matter that your neighbors are home from work.

You keep the sale, the customer has a smooth experience, and everyone leaves happier.





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