(Approx. 1150 words)

High-Speed Internet Services - What’s New?

By Tom Burt, SCSCC Vice-President
Sun City Summerlin Computer Club
<https://www.scscc.club> tomburt89134 (at) cox.net

It’s been a while since I’ve written about high-speed Internet service in “Las Vegas. (Note … much of this material applies to internet services across the country, although pricing may vary in different locations.) This month we’ll survey what’s available in Las Vegas, including hyperlinks for those who want to dig deeper. The material below is as of July 2021.

More and more households are abandoning their cable and satellite TV providers in favor of streaming TV services such as Netflix, Hulu, Apple TV, YouTube TV, and others. Other “smart home” devices, such as the Amazon Echo, also frequently access the Internet. For all these Internet “services” to be responsive, you need a fast, reliable internet connection.

## Cox High-Speed Internet

<https://www.cox.com/local/residential/nv/las-vegas/internet>

Cox offers various high-speed Internet access plans:

|  |  |  |
| --- | --- | --- |
| Plan Name | Speed (down) | Pricing (first year) |
| Starter 25 | 25 Mbps | $30 / mo |
| Essential 50 | 50 Mbps | $40 / mo |
| Preferred 150 | 150 Mbps | $60 / mo |
| Ultimate | 500 Mbps | $80 / mo |
| Gigablast | 940 Mbps | $100 / mo |

You can get Internet-only service without TV service. However, you will get better prices if you bundle with Cox TV or Cox Phone.

Plans above Essential 50 feature “Powerboost,” which increases download speed when doing large downloads. My typical download speed is about 180 Mbits / second.

Preferred 150 & Ultimate plans require a DOCSIS 3 modem. Gigablast requires a DOCSIS 3.1 modem.

I’ve used Cox since 2000 and have had very few issues. I have the Preferred 150 plan bundled with Cox phone. It just works. This is the service most Las Vegans use. Watch out for price jumps after the first year. Also, if signing up on the web, watch out for Panoramic WiFi being added to the bill ($10/mo). If you already have a router, you don’t need it.

## Cable Modems – DOCSIS 3.0 and 3.1

The cable Internet services (Cox in Las Vegas) offer various performance tiers from 25 megabits downstream to 940 megabits downstream. However, for speeds above 30 megabits, you need a cable modem that supports the DOCSIS 3.0 cable internet standard. For the 940 megabits service, you need a modem that supports the DOCSIS 3.1 standard.

<https://en.wikipedia.org/wiki/DOCSIS>

<https://www.coxvalue.com/High-Speed-Internet_west_south>

While you can rent a cable modem from Cox, it is generally less expensive to buy one. In addition, the payback period is about one year. Popular DOCSIS 3.0 or 3.1 cable modem choices are described in: [https://www.tomsguide.com/us/best-modems,review-2832.html](https://www.tomsguide.com/us/best-modems%2Creview-2832.html). For speeds up to 300 megabits downstream, you will want a modem with 16 downstream x 4 upstream channels. Above 300 megabits, you will want a modem with 32 downstream x 8 upstream channels and probably should choose one that’s DOCSIS 3.1 compatible.

## CenturyLink DSL

<http://www.centurylink.com>

CenturyLink offers various speed options for Internet access.

|  |  |
| --- | --- |
| Speed (down) | Pricing (for life) |
| 10 Mbps | $50 / mo |
| 20 Mbps | $50 / mo |
| 40 Mbps (rare in Sun City) | $50 / mo |
| 100 Mbps (N/A in Sun City) | $50 / mo |
| 940 Mbps (N/A in Sun City) | $65 / mo |

You can lease a DSL modem / wireless router combo or buy your own & save $15 / mo.

You get price breaks for bundling with their phone service and/or TV service.

Watch out for activation and installation fees.

I checked availability at my home address and was told I could get an underwhelming 6 Mbps for $50 / mo. Not very competitive with Cox.

## T-Mobile Home Internet

<https://www.t-mobile.com/isp>

T-Mobile is now offering its Home Internet service in Las Vegas. I checked, and it is available at my home address. The latest price on their website is $50 / month with an autopay contract. You may get a discount if you also have a cell plan with T-Mobile or Sprint. That price does not increase after the first year. It includes the internet service, plus a WiFi 6 gateway (modem + router), so you don’t need to purchase or lease any other equipment. Just plug it in, set it up with a smartphone app, and you’re up and running.

Speeds (down) vary but are in the range of 30 Mbps to 110 Mbps, depending on the distance to a T-Mobile 4G or 5G antenna and how much other traffic is active. Their current offer also includes a $10 discount on YouTube TV (85 channels). In addition, their plan has no annual contract and no additional service fees.

I have no experience with this service. It uses T-Mobile’s 5G or 4GLTE cellular data network. It’s competitive with the lower-speed plans of Cox and CenturyLink.

## Verizon 5G Home Internet (Not available yet in Sun City Summerlin)

<https://www.verizon.com/5g/home/>

I checked, and Verizon’s 5G Home Internet service is not yet available in Sun City at my address. That’s a shame because it offers “up to 1 Gigabit per second (down) for a price of $50 per month if you also have a Verizon cell plan costing $30 / month or more ($70 / month if not). They are also offering several incentives to sign up, including a free Chrome Book and a free Verizon Stream TV device. They’ll also cover up to $500 of termination fees for your current service.

The monthly price also includes a WiFi gateway (router/modem), and the setup is an easy, do-it-yourself procedure.

When available (that could be quite a while), this looks very competitive with the service from Cox.

## Internet Service Options – Upcoming

The other soon option is satellite internet service from SpaceX’s **Starlink** network of low earth orbit (LEO) satellites.

<https://www.starlink.com>
<https://www.satelliteinternet.com/providers/starlink>

SpaceX is launching hundreds (eventually thousands) of small communication satellites into low earth orbits (about 300 miles up). These will operate in a mesh network so that an antenna on your home’s roof will always be in view of one or more of the satellites. **Starlink** claims speeds of up to 1 gigabit / second downstream. Pricing is $99/month plus $500 for the satellite antenna/transceiver. Starlink began beta testing in the fourth quarter of 2020 and launched about 60 new satellites each month.

At some test sites in Arizona, they’ve experienced antenna failures due to overheating, so their system may not be quite ready for use in hot desert climates like ours.

## Final Thought

Having high-speed Internet service (i.e., more than 100 megabits downstream) won’t result in much real-world benefit if your internal home network runs at speeds slower than 100 megabits per second. If your modem’s or router’s Ethernet ports are running at 100 megabits or less, or your WiFi network is running at 100 megabits or less (maybe a lot less), that’s as fast as that part of your network will run.

Check out all of your home networking equipment and consider upgrading it to 1 gigabit Ethernet and 802.11AC (Wifi 5) or 802.11AX (WiFi i6). That will assure you realize the full benefit of your high-speed Internet connection.

