



May 10, 2021

LightReading
Roku CEO:
Streaming ad market
is catching up to TV

Associated Press
Maine senator looks
to expand tribal
broadband access

Next TV
Big Screens Are
Back, Baby

Variety
How Streamers Are
Scoring Sports
Broadcasting Rights
From Pay TV
Operators in Europe

Protocol
What Roku and
Google are fighting
about: Video
codecs, voice
search and millions
of eyeballs

The Hill
Lawmakers push for increased cybersecurity funds in annual appropriations

Providing high-quality, consistent internet presents a problem for rural communities across the nation and residents in parts of Lycoming County are among those who suffer spotty or zero coverage. It's certainly not a new issue – Three years ago, Pennsylvania Gov. Tom Wolf created the Pennsylvania Broadband Incentive Program, which provided up to \$35 million in financial incentives to entities interested in expanding rural access to broadband internet.

Broadband is another name for high-speed internet, which is defined as having a minimum download speed of 25 megabits per second (Mbps) and a minimum upload speed of 3 Mbps, according to the Federal Communications Commission. Downloading refers to receiving data, while uploading means sending data. High-speed internet, or broadband, can be delivered to a structure by four methods — cable, DSL, fiber and satellite. Prior to broadband, most households accessed the internet via a dial-up connection that utilized telephone lines. Dial-up provided a speed of about 0.056 Mbps.

Cable internet uses a coaxial cable, which also provides cable TV to a home, and can reach speeds of 500 Mbps, but that depends on which plan a subscriber purchases. The bandwidth, or amount of data capable of being transmitted at one time, is shared among all subscribers, which can result in slower speeds when more people are using it. DSL stands for digital subscriber line and it also uses phone lines. DSL speeds can range from 5 to 35 Mbps, and this method tends to be the most widely available option in rural areas.

Fiber is far less common in sparsely populated areas. It uses fiber optic cables to transmit the data and, depending on the area, download speeds can reach 1,000 Mbps. According to BroadbandNow.com, about 44% of Pennsylvanians have access to this internet service option, with the best coverage in the southeastern and west-central parts of the state. In March 2020, Lycoming, Union, Clinton and Northumberland counties collaborated to partner with local internet providers and state and federal programs to get \$2.5 million from the Appalachian Regional Commission. Additional matching funds and loans mean each county will receive about \$1.9 million. Back In 2018, Wolf's goal was to ensure "every Pennsylvanian has access to high-speed internet by 2022."

Pittsburgh Tribune-Review

Pa. politicians walk fine line on vaccine endorsements to hesitant constituents

Associated Press
Battle over voter ID
in Pennsylvania is
heating up again

Will that happen? Scott Kramer, principal IT specialist, and Mike Fisher, assistant executive director, both with SEDA-Council of Governments, which is organizing the multi-county effort, are optimistic. But another internet provider is investigating the possibility of moving into the rural valleys and wooded areas of Lycoming County, and its potential to provide download speeds of 150 Mbps – to start – is attracting quite a following. At his home in Mill Creek Township, business owner Matt Henderson is more than three months into using a beta program of Starlink, a satellite internet service developed by SpaceX. "My house is in a valley outside of Montoursville. It's geographically challenged," Henderson said. "We have woods all around us and mountains to the north and south. We have no access to cable or DSL."

Prior to using the beta test version of Starlink, Henderson relied on a local wireless broadband option but received only "pretty low speeds for a long time." He had been following SpaceX for a few years when Starlink and its beta version were announced. "About seven months ago, a buddy of mine told me they were doing beta tests," he said. "I did the research and found there were two options – you could be put on a waiting list or get the dish right away." Henderson filed his address with Starlink and was happy to learn he could start the testing phase right away.

Starlink isn't his first experience with satellite-sourced internet. "Ten or 12 years ago, we used HughesNet, which is another satellite provider," Henderson said. "Latency was a problem. The satellites had a much higher orbit, and livestreaming was limited because you had that lag." To put it succinctly, latency means delay. It refers to the amount of time it takes for data to be transferred between its original source and its destination. It is measured in milliseconds, but latency can still cause a problem, especially for users who expect to be able to react in real time. "Gaming is highly dependent (on low latency). It's also very important for Zoom calls, so our conversation can take place like a normal conversation," said Dr. Steve Brady, executive director of the Covation Center in Williamsport, who also runs a business from his home near Rose Valley Lake in Gamble Township.

Better internet can have an impact for all ages in all stages of life. "We can start with the trivial," Brady said. You can see pictures of your grandkids and do video chats with them. "But it's more than chatting or sending emails. Businesses can begin to compete, share information and drive the economy," he added. People in rural areas, especially senior citizens who might not be as readily able to leave their homes and travel to more populated areas for basic health care, could take advantage of telemedicine options. "They will be able to visit with a doctor, send them (their) readings," Brady added.

Starlink's service offers a low latency because the satellites it uses are launched into a low orbit around the earth. According to the company website, Starlink satellites are more than 60 times closer to Earth than traditional satellites. The satellite option would bypass many of the current struggles with providing high speed broadband to rural regions, which often are shrouded in trees and behind hills, unable to see communication towers throughout the region. The site also projects that beta users will see speeds between 50 Mbps to 150 Mbps. "The speed I'm getting is anywhere from 30 Mpbs to 120 Mbps," Henderson said. "It's been within that window that they advertise and it's definitely more than we need."

His previous service delivered about 2 Mbps, he said. "I see this as a potential broadband solution," Henderson added. That "low lag time" contributes to his bright outlook toward Starlink. "I'm pretty pleased with it," he said. "We've had multiple users, but (service) has been consistent, which is great." Henderson's "driving factor" in finding a better option stems from his family's needs and the existing technology's failure to deliver.

His business, Henderson Consulting, is based out of his home. The COVID pandemic shut down schools and colleges in 2020, causing his children to need the internet to attend class virtually. Then, of course, there's the

entertainment aspect, "streaming Netflix and (Amazon) Prime." "There's a set amount of bandwidth that's coming into your house and you're sharing that with three different people when it's barely enough for one person," Henderson noted. "With any internet, you have ebbs and flows based on everybody's network traffic," he added. But service is "markedly better with Starlink (and) it's only going to get better."

Not everyone is 100% onboard with Starlink and its low-orbiting satellites. First, there's the cost. "They do charge a \$500 fee for the hardware — a dish and a modem," Henderson said. "It's definitely more expensive than just (a typical) internet service." The service itself is another \$100 a month. "My options were limited," Henderson noted, "rent an office space or invest \$500 or \$600."

For a businessman like he is, the startup fees may be a minor inconvenience, but other rural residents may find them unattainable. "The upfront cost to get the actual equipment might deter people from signing," Kramer said. However, according to a SEDA-COG-commissioned broadband feasibility study compiled for Lycoming, Clinton, Northumberland and Union counties, the immediate costs may not be much more than the costs of broadband spread out over the course of a year.

The study, completed by Design Nine Inc. during the summer and fall of 2019, revealed that the average U.S. household pays \$67 a month for home internet use. "Usually rural areas either pay more and/or get a lot less for their money," states the study, which can be found online here. Using data available at that time and prior to the COVID pandemic, the study wrote this about high-speed internet options: "The only DSL offering advertised speeds better than 25 Mbps comes from Windstream but its availability is spotty except in four zip codes. Verizon DSL is almost as expensive but does not come close to 25 Mbps. Xfinity cable services actually show up as the least expensive services meeting 25 Mbps. "However, past experience has shown that the low rate will go up significantly in the second year. Most cable services go up year after year. Even assuming they were happy with the speed and choice of the lowest priced services we found, your typical Lycoming County family would spend \$1,920.00 annually for internet, TV, phone and cellphone. That price would likely be well over \$2,000 in the second year."

Using only the beta pricing scale for Starlink, costs appear to hit around \$1,700 for a year of service. Starlink shows "significant promise," said Brady, who is anxiously awaiting his opportunity to try the beta program. "Elon Musk, with SpaceX, has significantly changed the space launch industry. He's driven costs down tenfold," Brady said. While it cost the former United Space Alliance about \$422 million to launch a rocket, Musk's SpaceX company realized a cost of about \$50 million, Brady said. "That's eight times cheaper," Brady said, adding that the rockets that launch the satellites for Starlink put 60 satellites into orbit at one time.

Musk, he added, is investing \$42 million into the project. Another potential drawback to Starlink may be that its satellites will have an impact on the purity of the night skies. "Astronomers are concerned that more and more satellites might impact the dark sky," Henderson said. "You have to weigh both sides of the story," he added. "The ultimate goal is to get access for places that don't have it." – *onthepulsenews.com*

Vice Media Group's plan to go public later this year is coming into focus. Under a proposed deal to merge with blank-check company 7GC & Co Holdings Inc., Vice would remove one of the biggest obstacles it has faced, onerous financial obligations to private-equity investor TPG, people familiar with the matter said.

The proposed transaction, valued at nearly \$3 billion including debt, would leave existing shareholders—including TPG, Walt Disney Co., A&E Networks Group, merchant bank Raine Group and founder Shane Smith—with a combined 75% ownership of the company, the people said. The rest of the

company would be owned by Vice's new investors. The nearly \$3 billion valuation under consideration would be a discount compared with the \$5.7 billion valuation set in Vice Media's last major equity-investment round, a \$450 million infusion from TPG in 2017.

7GC & Co Holdings, which was founded by tech investor Jack Leeney, is preparing to pitch institutional investors on the deal beginning this week, the people said. The blank-check company is hoping to complete the deal this summer, depending on how long it takes the Securities and Exchange Commission to review it. There is no guarantee that 7GC & Co Holdings, which has raised \$230 million, will complete its deal with Vice.

The Information reported in March that Vice Media was in advanced talks to go public in a deal with 7GC & Co Holdings. CNBC reported Sunday that an investor roadshow was coming soon. Blank-check companies, also known as special-purpose acquisition companies, raise capital by going public. They then put those proceeds—and other funds raised from institutional investors—into acquisitions. For their targets, a SPAC merger offers an alternative route to an initial public offering.

The SPAC market, which was hot at the beginning of the year, has begun to cool. Some SPAC investors have attributed the dimming enthusiasm to new scrutiny from the Securities and Exchange Commission. The agency has questioned the rosy revenue projections used by some startups that are merging with SPACs.

The Vice Media deal calls for Vice's existing investors to exchange their shares for common stock in the public company, simplifying the overall ownership structure, according to the people familiar with the matter. That includes TPG, which owns preferred stock in Vice Media that entitles the private-equity firm to receive additional equity if the company doesn't hit certain performance targets, the people said. In its pitch, 7GC & Co Holdings plans to tell potential investors that Vice Media is different from other new-media companies because it has several lines of business, including its Virtue ad agency, Vice Studios film and TV production arm and Refinery29, a female-focused brand it acquired in 2019.

7GC & Co Holdings will sell potential investors on the promise of growth and profit in its pitch, one of the people said. Vice generated about \$600 million in revenue in 2020 and was profitable in the fourth quarter, the person said, though it wasn't profitable for the full year. The company projects that it will generate about \$680 million of revenue this year and reach \$1 billion by the end of 2023, the person said. There is no guarantee that institutional investors will want to fund the proposed Vice Media transaction. Vice has long promoted the prospect of becoming a consistently profitable new-media colossus. Mr. Smith, the company's founder, projected revenue would near \$1 billion in 2015. Those goals have eluded the company in recent years as the digital-media sector came under pressure.

Several other digital-media companies are exploring SPAC deals or mergers with rivals. Even though the ad market has started to rebound, many of these companies say they would benefit from scale and more capital. Longtime investors are also looking for opportunities to exit. Executives from Group Nine Media Inc. have launched a SPAC to purchase a digital-media company. BuzzFeed Inc. is in talks to go public through a SPAC. The Athletic, a sportsnews website, was pursuing a deal with news publisher Axios but now is eyeing one with the New York Times Co., The Wall Street Journal reported.

Under the proposed Vice Media deal, Chief Executive Nancy Dubuc would continue in her position, as would other Vice Media executives. Mr. Smith would remain executive chairman. The proposed deal calls for Mr. Smith and Ms. Dubuc to retain their seats on Vice's board of directors, the people said. Mr. Leeney, of 7GC & Co Holdings, would also get a board seat, the people said. — *Wall Street Journal*

Billionaire Elon Musk dropped a surprise early in his hotly anticipated turn as host of "Saturday Night Live," saying in his monologue that he "is the first person with Asperger's" to host the show, before clowning through skits for the first global livestream of the NBCUniversal comedy show. Musk, one of the world's richest individuals, opened his monologue by telling an audience in more than 100 countries he is "the first person with Asperger's to host SNL. At least the first to admit it." The billionaire made light of his tendency to speak in a monotone, adding "I'm pretty good at running human in emulation mode."

Asperger syndrome is a condition on the autism spectrum that is associated with difficulty in social interaction, and sometimes is referred to as high functioning autism. Comedian and Saturday Night Live alumni Dan Aykroyd has spoken in interviews about being diagnosed with a mild form of Asperger's. He hosted Saturday Night Live in 2003.

Many had wondered how Musk would handle himself during a live comedy show. The answer was that he, and the show's writers, sought to soften the rough edges of Musk's public persona. Throughout the show, Musk gently poked fun at himself, including his penchant for provocative tweets and the time he smoked a joint on a podcast. "To anyone I've offended I just want to say, I reinvented electric cars and I'm sending people to Mars on a rocket ship. Did you think I would be a chill, normal dude?"

Musk's mother, Maye, joined him on stage and the two made a joke about Dogecoin, the cryptocurrency Musk has touted. Cryptocurrency jokes popped up throughout the show. In one sketch, Musk was cast as a bow-tie wearing cryptocurrency expert on the show's Weekend Update segment. Dogecoin and other digital currencies had surged in price ahead of Musk's SNL appearance. Dogecoin fell during the show and was last down about 12% from late Friday at around \$0.53. It hit a record high Thursday above \$0.73.

Musk was most convincing playing a version of himself as head of SpaceX dealing with an emergency on a Martian colony. The crisis had a happy ending, until it didn't. In the end, Musk will keep his day jobs. Still, the "Saturday Night Live" appearance offered plenty of synergies with his real gigs as "technoking" and Chief Executive of Tesla Inc, head of rocket launch company SpaceX and even chief of the Boring Company, a tunnel construction venture.

Musk got days of attention across all forms of media ahead of the show, and shared the spotlight with a prototype of Tesla's futuristic Cybertruck that Tesla brought to Manhattan on Friday. Video of the hulking, angular pickup prowling Manhattan streets blew up on social media. During the show, a Tesla supercharger made an incongruous cameo appearance in a skit set in an old West saloon. Musk played a gunslinger who had developed an electric horse, and advocated tunneling through the earth to escape a shootout.

Musk often boasts that Tesla doesn't spend billions on advertising the way established automakers do. He doesn't have to so long as he has access to platforms like Twitter or "Saturday Night Live." Musk's appearance also boosted NBCUniversal. The media company used Musk's global celebrity - and the controversy surrounding his appearance on a stage normally reserved for film stars or professional comedians - to get attention for launching the "Saturday Night Live" franchise beyond the confines of broadcast television. The company said Saturday's show was streamed live via Alphabet Inc's YouTube to more than 100 countries. – *Reuters*





Broadband Cable Association of Pennsylvania

127 State Street Harrisburg, PA 17101 717-214-2000 (f) 717-214-2020 bcepa.com

First in Broadband. The Future of Broadband.