



Infrastructure Law Pledges Internet for All, The Lehigh Valley Really Needs It

US Department of Commerce broadband czar Andy Berke visited the Lehigh Valley last week to pledge that every person in America will have access to reliable, affordable internet, and \$65 billion is already set aside to make it happen within five years.

If you're reading this online, then you probably don't realize what a game-changer it will be for the Lehigh Valley because according to a Lehigh Valley Planning Commission

(LVPC) analysis, just 6% of the region's neighborhoods have the type of high-speed internet Berke said will be necessary. That's a hidden shortfall that's impeding student learning and business growth, while widening the equity gap for disadvantaged communities.

It's a gap U.S. Rep. Susan Wild and Berke said they're determined to close nationwide, during a panel discussion at the Lehigh Carbon Community College (LCCC), that also included LCCC President Dr. Ann Bieber, Lynn Township Dairy Farmer Brian Dietrich, Lehigh County Commissioner Geoff Brace, Pennsylvania Broadband Development Authority Director Erin Smith, Workforce Board Lehigh Valley Executive Director Nancy Dischinat and LVPC Executive Director Becky Bradley.

"We need to get to a point where it literally is like turning on a spigot and fresh water comes out. [Connectivity] is that important," Wild said. "It's really about democratizing access to the internet and making sure that anybody that's been left behind is caught up and making sure that we stop leaving people behind in the process."

"Internet for All" has been the nationwide plan since the \$1.2 Trillion Infrastructure Investment and Jobs Act passed in November with \$65 billion for broadband connectivity, including \$42 billion to improve existing connections that are slow, unreliable or non-existent.

"This bill puts into action that every American will have access to affordable, reliable high-speed internet – we mean *every* American," Berke said, referring to the federal Broadband, Equity, Access and Deployment (BEAD) plan. "We're talking about the person living deep in Alaska, the person off the coast of Maine, and we're talking about the people right here in the Lehigh Valley. Every single American will have access."

Berke was appointed to lead this mission because he knows something about blanketing a population with high-speed internet. As Chattanooga, Tenn. Mayor, he created a Downtown Innovation District and then made Chattanooga the first community in the nation where every family with a student on free or reduced lunch got free internet. As a result, Chattanooga was nicknamed "Gig City" and became one of the top cities in the nation for job growth.

The LVPC learned first hand in 2020 how important connectivity can be. When the COVID-19 Pandemic shut schools, an analysis by the LVPC and the Allentown School District determined that at least 7,200 of the district's 17,000 students didn't have the internet access needed for remote learning. The analysis, LVPC Geographic Information Systems mapping and millions in federal grant dollars helped get students connectivity and devices, but they lost "two full marking periods" of education, falling weeks and probably months behind other districts in the region, Brace said.

That ultimately affects to the student's success when they leave school, Dischinat said.

"The internet is beyond vital," Dischinat said. "It's where you are getting work, it's how

you are getting work, it's the knowledge base you have in that technology. It's everything. Every [student] coming out of high school is so imperative to our workforce that they better be technology ready."

And the LVPC's most recent analysis shows that internet access is an issue for people in every corner of the region. A preliminary connectivity data analysis, by zip code, showed that of the thousands of IP addresses analyzed in 65 Lehigh Valley zip codes, just four zip codes met the federal threshold for reliable internet. That threshold is 100 MHPs of download speed and 20 MHPs of upload speed. And more than half of the region has fair or poor connectivity, according to the analysis.

Low or no connectivity is especially problematic in the Lehigh Valley's rural areas and disadvantaged neighborhoods, but Bradley noted that, even the region's highest-income zip codes don't pass muster.

"When the Lehigh Valley economy is bigger than that of the state of Vermont, that becomes an issue when we're a host to things like PPL Utilities and Air Products, a Fortune 500 company," Bradley said. "Not only is there this argument to increase the fiber networks that allow our economy to continue to thrive and grow, but it's also has that digital equity and inclusion argument that we learned about in 2020 during the shutdowns."

Dietrich, the Lynn Township Supervisor and dairy farmer showed the other side of what having superfast internet can do. Dietrich in 2019 automated his 97-year-old family farm to enable the cows to initiate their own milking several times a day.

"My grandfather, my father and my uncle farmed with horses. Now, my two sons and I depend on high-speed internet," Dietrich said. "I can call up on my phone right now and tell you which cow is being milked, I can tell you how much milk she has and I can tell you the conductivity of her milk, as far as the quality goes. My phone is also alerted if there is an issue with the cooling system or if anything is going wrong."

The result of the new automated system? Production has increased, the cows are healthier and profits have increased, Dietrich said.

Berke said an analysis will be done to determine every address where connectivity is low or non-existent, a plan will be created by the fall of 2023 for every state on how to fix it – every single address he stressed – and the money will be allocated by the end of next year. Then states will have four years to spend the money. Every state will get a minimum of \$100 million, but Smith said Pennsylvania is likely to get something closer to \$1 billion.

Will that be enough?

“Yes,” Berke said emphatically. “Rhode Island is easy. But then you have Pennsylvania, with mountains, valleys and all kinds of other stuff – tougher. Then you have Alaska. Let’s not even talk about Alaska... But we’re going to innovate and get it done.”

Berke said it will be done differently everywhere, and that could include upgrading existing cable, digital and satellite networks but his focus will be laying as much fiber optic lines as possible because it enables the fastest uploads and will better handle future innovations, he said.

When it’s done, it will bring a sea change, Smith said.

“This is the Rural Electrification Act of our generation,” Smith said. “This is a game-changer.”