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PAUL D. TONKO U.S. HOUSE OF REPRESENTATIVES 20TH DISTRICT, NEW YORK COMMITTEE ON ENERGY AND COMMERCE CHAIR, SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE BUBCOMMITTEE ON ENERGY BUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON SCIENCE, SPACE, AND PECHNOLOGY SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY

May 7, 2020

The Honorable Ajit Pai Chairman Federal Communications Commission 445 12th Street SW Washington, DC 20554

Dear Chairman Pai,

After several engagements with your office on the subject, I write out of concern that the Federal Communications Commission (FCC) is still failing to bridge the digital divide facing millions of Americans. I am also deeply concerned that the FCC continues to take actions that seem to deliberately leave the constituents I serve in New York's 20th Congressional District with no path forward to access broadband services. This was not acceptable before and it is frankly intolerable now.

The FCC has repeatedly contended that all of New York has broadband service, a claim my constituents and your fellow FCC commissioners have repeatedly disproven. Regardless, your agency has reasoned that New York does not qualify for federal funding to ensure basic broadband internet access. In the Capital Region of New York, broadband access has long been limited, and we are feeling the effects of a lack of broadband access now more than ever.

During this pandemic, I have heard from parents, educators, students and workers that are unable to connect online from their homes. I have heard from small businesses unable to operate remotely because they do not have broadband capable of processing payments. I have heard from families worried about isolated seniors and inability to access telemedicine. I implore you not to ignore these people whom we are meant to serve.

For example, Susannah in Rensselaerville is struggling with inadequate broadband access while managing a large scale global COVID-19 humanitarian assistance program, as well as teaching graduate level classes. She also worries about her kindergartener who is struggling to access remote learning.

Hillary in Ballston Spa also is concerned that her children will fall behind in school without reliable access to broadband.

Kelly in Delanson and her husband are both teachers. She has to drive to the local supermarket to participate in Google Meet with her class. Her 13-year-old son is also struggling to participate in school without reliable broadband access. Kelly said, *"I don't feel that people that have always had broadband access understand what it is like living without this modern necessity."*

Colin in Ballston Spa shared, "Not having access to high speed internet has caused many problems for me both personally and for my business. I own and operate a small metal fabrication business in Ballston Spa, New York and I am regularly impacted by not being able to order materials as quickly as I need, and have lost jobs because I have not been able to communicate with clients easily."

I urge you to read the full *Addendum* below of a broad array of testimonials from the people I was elected to serve. The takeaway is clear: the FCC's failure to make New York eligible for broadband buildout and deployment is having devastating impacts right now on health, education, economic opportunity and quality of life.

As you well know, while this pandemic has exacerbated the broadband problem, it is not a new one for us. While some of the reports come from rural areas, many do not. Having heard from thousands of constituents during this session of Congress alone, I can tell you conclusively that broadband access remains a deep and pervasive challenge in the Capital Region, and the job to buildout broadband access here is far from finished.

I do want to recognize the many providers - state and local responses, community organizations and school systems - who have stepped in to help bridge the gap during this pandemic. Yet, despite these efforts, many are still left without needed broadband access. I appreciate the State of New York's broadband program and the FCC's Connect America Fund, but the examples in the *Addendum* should illustrate that we must do more. Too many people are still being left behind with no access in sight.

I have been proud to fight for better broadband maps with greater accuracy and granular data. I am pleased this concept has now been signed into law. I also continue to push for my ACCESS BROADBAND coordination bill (H.R. 1328), to ensure that communities can access resources and use them effectively. I was also proud to help introduce, and remain committed to advancing, the House Democratic Plan to Connect All Americans to Affordable Broadband Internet for the Coronavirus stimulus response. However, these efforts will not solve the persistent access challenges that have long hindered the people and communities I represent. The central issue is that the FCC continues to insist on using outdated and inaccurate broadband maps, and worse, it systematically chooses to exclude New York from broadband funding on a false premise that we are all served. As you consider future federal funding and whether New York should be eligible, please consider these examples and appeals from my constituents.

I am grateful for your consideration of this matter and would be pleased to respond to any questions you may have. Please contact Emily Silverberg (<u>Emily.silverberg@mail.house.gov</u>) in my office should you have any questions regarding this letter.

Sincerely,

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Paul D. Tonko Member of Congress

Addendum of Constituent Testimonials

Demonstrating Severely Limited Broadband Access:

Educators, Students and Families:

From local teachers in one school and what they are hearing from the community:

"When parents were surveyed whether or not they had access to the internet, we never imagined the load of the whole family needing devices and our internet just wasn't enough to handle us all."

"I heard of an offer for free hookups and service for \$20, but since I lost my job, I haven't been able to pay my bill, so I am not able to take advantage of that offer.

"I have several families that have talked about spotty internet. 1 family went from a hot spot to mid hudson cable and the internet still breaks up."

"I have families that have their child join Meet classes on their front porch or on their playset trying to get a better signal."

"Kids are going to the school parking lots to get wifi, provided they can get a ride."

Susannah Friedman of Rensselaerville:

"We live in a rural part of Rensselaerville where we face the double whammy of no access to fiber optic broadband internet and a very weak cell signal. This was manageable during normal times, but now that we are working from home, as well as attempting to maintain out six year old daughter's engagement in school, we face a major challenge. We currently rely on satellite internet service, which is expensive, unreliable and of poor quality. We also have cellular hot spots, but these don't serve their purpose, given the very low cell signal at our location. Both of our jobs are now reliant on the quality of our internet connection. Susannah is managing a large scale global COVID-19 humanitarian assistance program for CARE USA, one of the largest American relief agencies, as well as teaching graduate level classes at Columbia University's School of International and Public Affairs. All of this now needs to be delivered from a poor quality connection. When the weather is bad, it barely works at all. Gareth's ability to connect to his staff is all predicated on internet. Our ability to do our jobs is increasingly under threat by lack of a poor internet connection.

Even worse, our attempt to maintain consistent education for our kindergarten age daughter has become increasingly challenging. The halting internet service, audio delays and lagging video have made it challenging for her to engage in ways that a six year old can manage and she has become increasingly withdrawn from her online school activities,

sometimes even refusing to attend. Her teacher is unable to see a clear image of her face and the audio line frequently drops. It is an untenable situation.

With the prospect of prolonged pandemic conditions, we fear that our lack of access to proper broadband place our livelihoods and our children's opportunity to engage with online education at risk. We are concerned that without a better connection to the world outside our village, communities like ours will be left behind and put at even greater disadvantage to keep pace with the rest of the world.

A constituent in Ballston Spa:

"I'm a NYS Dept. of Health employee assisting with the pandemic and also graduate student pursuing a Masters in Public Health. I recently moved to my house and the lack of access to internet has caused a great deal of strain. I have to seek out public places with free Wifi access in order to do any online work, and forget about being able to work from home. **Due to the pandemic I can no longer access public areas with Wifi, which is costing me my education.**

Dr. Timothy Mundell, Superintendent of Schools at Berne-Knox-Westerlo Central School District:

"As Superintendent of Schools in the Berne-Knox-Westerlo Central School District, I have been grateful for Congressman Tonko's support of our district, its students and families over the years. During this very unpredictable time, our amazing little community has faced the challenge of quarantine, a shift to an online learning environment, and interruption of economic activity that sustains daily life. Certainly, we are no different than many communities in facing these challenges. However, your inquiry regarding broadband internet access could not come at a more critical time. It is during the challenging times that disparities and inequities are often exposed in our society. In this situation, broadband internet access for the Helderberg Hilltown communities of western Albany County is no less than a moral, ethical, public health, educational, and economic equity issue.

In making the transition to online learning more than one month ago, policy makers made assumptions about broadband access that may be valid in suburban and urban areas, but are not valid in rural areas. We are now aware that nearly 40% of our students do not have broadband access, and many of those who have internet access have satellite service or dial up service. For years, community members have inquired about broadband service, only to be told by providers the cost is prohibitive. Obviously, installation of fiber optic cable on sparsely populated streets may not return the investment for the service providers because the potential number of consumers may be too few to cover the initial cost of installation. It is an economic question, I understand. However, as for my students, they are clearly at a disadvantage educationally and

economically in the future when compared to their peers in urban and suburban districts, for no other reason than the zip code in which they live. **If we are truly committed to the creation of a fair, equitable, and just society, then this issue is a basic infrastructure issue for policy makers at all levels of government to address.** This issue is no different than historic public policy regarding interstate commerce, the telegraph system, railroad expansion, telephone networks, air traffic control, the interstate highway system, and the public airwaves. In every one of those circumstances the government played a role in ensuring a level playing field for every citizen. This is why we see broadband internet as an equity issue.

New York state has experienced a significant drop in population over the past decade. Rural areas have seen disproportionate loss of people and opportunity, virtually bringing rural economies to a standstill. Commitment to broadband internet access gives students greater educational opportunity and networking capability. Enterprising community members who seek to operate internet-based business would have the potential to revive local business in a new and reimagined way that could lead local communities back to prosperity. Community members would have greater contact and communication with one another and vital services necessary for healthy living and social activity.

In the past year, our school district has invested local dollars in our technology infrastructure and digital capacity. We have upgraded our internal wiring and wifi access points to the highest capacity. We have invested in hundreds of devices for students which are now out on loan to be used for completing school work. Our school has provided temporary hotspots for internet access, and is currently working with Hudson Valley Wireless and Albany County to install wireless transceivers at local residences for internet access. Thus, many parties have sought to make inroads on this issue. However, these are not the ultimate solution to the problem. As a school leader, community leader, parent, and taxpayer I offer my voice to help you cultivate support in Congress to address this significant equity issue.

The information superhighway is where ideas are exchanged and where value is created. The general welfare of rural community members suffers every day they are without access. As a society, we must provide opportunity for all to engage broadband to fulfill futures and lead the way to tomorrow. New York is a unique educational and economic environment. We possess some of the brightest students and best schools in the nation, and engage in two of the most significant segments of the economy in finance and agriculture. Broadband access in the rural areas would unify and enhance the potential for each of those elements to create thriving opportunity and success for our region, state, and nation.

On behalf of the Hilltown communities, I thank Congressman Tonko for his determination on this issue, and again offer my voice as an advocate.

Hillary Jablonski in Ballston Spa:

"I live in Ballston Spa, NY and am without broadband access. There is cable less than 1/4 mile from my home, however 1 mile stretch of road that I live on is without cable internet, FiOS, or any other broadband capabilities. Spectrum has increased the estimate for the job from \$2300 (back in 2016), all the way up to \$65,000 this past year. There's quite a bit to our story, but this is the gist of it. **Currently, with schools shut down, my children are relying on remote learning via the internet.** We hotspot from our phones which works pretty well, until we reach our hotspot limit for the month, at which time the speed will slow drastically. We are **12 days into our billing cycle and by tomorrow we will have hit our cap. The kids just started using Google Meet last week for lessons with their teachers, and this uses quite a bit of data. If the slower speeds interfere with their meetings, my children, like so many others, will risk falling behind.** As I said, I have a ton of information regarding our specific situation, as it has been a project I've been working on with local officials, so please do not hesitate to reach out for further discussion. Thank you for giving voice to my neighbors and my family."

Dianna in Delanson:

"I have been a resident of Delanson, NY since 2014. I have been calling and emailing internet companies, and the broadband programs offices for years.

Due to the pandemic, I am now required to teach from home. I have many google meets to work with students, attend virtual faculty/ district/ cse meetings. I have to prepare online work and materials for students. Since the shut down, I have contacted spectrum multiple times in which I told it will eventually get put in but it isn't cost effective at this time. The beginning of our street and the end where our high school is located is set up and has access but a lot of houses in between still do not have access included ours.

I have reached out to the broadband program office and was told that my address is included in the spectrum broadband expansion plan but our expected date for service is September 2021. This makes it very challenging to try to teach my students using a hot spot on my phone.

I hope this information will help show the lack of broadband access and how, during this pandemic, **it poses great challenges in teaching at home**. Thank you for your time and listening to our concerns. "

Kelly Brooks in Delanson:

"My family and I live in Delanson, NY and we are a part of the unserved in the Duanesburg area. Our town has fought endlessly to get residents the broadband services they need to function in an internet dependent society.

My husband and I are both teachers trying to navigate Google Classroom, Google Meets and assigning grades for report cards without access to broadband. **Everything we do involving an internet connection takes much longer than normal.** My husband spent eight hours to work

on report cards, where he would have spent under two hours, if he was able to work from his school. **I have to drive to our local supermarket to participate in Google Meets with my class because otherwise the video comes across blurry and the audio sounds distorted.** Both my husband and I are having issues with "turned in" assignments showing up in Google Classroom and then we are unable to access the students responses. The responses show up hours later due to poor connectivity.

We also have a 13 year old son that is in 7th grade at Duanesburg Jr./Sr. High School that is trying to work daily on Google Classroom.

His school provided him a hotspot device, but because of the surrounding hills the connectivity is not always strong. The device averages 1-2 bars on a good day. He has submitted assignments on Google Classroom to teachers that include pictures and will find out after submission that the pictures didn't show up. He is unable to use Seesaw, YouTube and other platforms that require audio or video.

I don't feel that people that have always had broadband access understand what it is like living without this modern necessity. New York State should not be excluded from federal funding opportunities."

Erin Sheevers, Director of Technology at Troy City School District:

"Troy City School District currently has approximately 120 students reporting no internet. There are still families that we have been unable to reach though, so that number could increase.

Students without the internet are unable to receive and complete their schoolwork, they are unable to engage with their teachers, peers, and support staff. Students without the internet are not only missing out on opportunities for learning but their ability to receive interactions and services essential to their well being.

We have been sharing the free internet through spectrum information, as well as the information <u>attached</u> but many families are having difficulty getting the free spectrum service due to outstanding bills, etc.

We are also working with the city of Troy and local businesses to provide other locations where wifi can be accessed safely and for free.

Buying hot spots for all of the students who need them during this time is not feasible or sustainable- for 3 months we would incur a cost of approximately 45K- plus they are on backorder.

As a district, we have enough devices for all students that need them, we just need the internet."

Joe O'Neil, Management Information Systems Director for Duanesburg Central School District:

"The lack of broadband access to all the residents of the Duanesburg Central School District has negatively impacted our students' instruction and ability to engage in continuing education during the Covid-19 shutdown. Located in a rural area, students without access to broadband at home, are unable to access online resources for learning that most other children take for granted. Aside from a small public library offering free WiFi, students would have to travel outside of the district in order to take advantage of commercially available free WiFi. During the current Covid-19 pandemic, our district has had to reallocate funds in order to purchase and send home Verizon hotspots to students without broadband at home. Due to a lack of cellular coverage, we are unable to take advantage of free offers from companies like T-Mobile. The result has been thousands of dollars in extra expenses to provide connectivity to them."

Health, Small Business and Work:

Martha in Delanson:

"We have been trying for years to get Spectrum to expand Broadband access to the western most part of Schenectady county. While the contract with them was renewed they have continued to slow walk expanding access. This negatively impacts families with children as they attempt to interface with our teachers and therapists for teletherapy and continuity of education services during NY Pause. Additionally we have a number of parents and I have staff who have needed to drive and sit in their cars in order to access internet services from a hotspot. One of my therapists needs to walk around in the fields beside her home to get a smartphone signal strong enough to allow her to send needed data to our office following any teletherapy services she has provided. She needs to leave her home to drive to one of our program sites in order to deliver teletherapy services which would be able to be completed from her home if she had the ability to connect via broadband. Please help!"

Colin in Ballston Spa:

"Not having access to high speed internet has caused many problems for me both personally and for my business. I own and operate a small metal fabrication business in Ballston Spa, New York and I am regularly impacted by not being able to order materials as quickly as I need, and have lost jobs because I have not been able to communicate with clients easily (I manage my own website and making edits to it is nearly impossible unless I travel). On a personal level I have had a lot of difficulty with my graduate school homework for the same reason."

Justin Carman in Oak Hill:

"I work as a Software Development Team Lead at InfoEd Global which is headquartered in Albany NY. InfoEd Global works with some of the largest medical research universities and companies across the globe to provide them a comprehensive electronic research administration software suite. Many of us are working tirelessly to support these clients who are submitting research funding proposals to agencies like NIH, NSF, DHS, and DOD to combat a wide range of diseases from COVID-19 to cancer. A lack of consistently reliable internet access has hampered my ability to work as expediently and as often as I would like. I am tethered to a wireless hotspot, which is connected to a cell phone tower at max capacity, in an incredibly rural area - often the quality of the connection will prevent me from remotely connecting and working completely, and always at a diminished throughput and capacity all in a time when we are all required to be working from home to flatten the curve."

Arthur Hanvey in Delanson:

"I am writing to express my frustrations concerning the lack of broadband access in rural upstate N.Y. We have been residents of Delanson for almost 30 years and in those 30 years there has been no progress in broadband. We live on the main road and yet broadband ends a mile to the east passes by our house and resumes 2 miles to the west. This has become especially important during the covid19 epidemic for numerous reasons. I have been unable to telework from home causing me unnecessary risk of exposure to covid-19 as I work at the Albany V.A. During these difficult times it has made it difficult to remain in touch with family and friends. While broadband is taken for granted in the rest of the state and country it is a fantasy here. This shouldn't be considered a luxury but a necessary utility. Your immediate attention to rectify this dangerous and unnecessary situation is appreciated."

Jenna Smith in Ballston Spa:

"I am one of Congressman Tonko's constituents. I participated in the Congressman's broadband roundtable last Fall and focused my comments on how the lack of broadband impacts my family's business.

I am an attorney by trade and am finding our lack of reliable high speed internet particularly problematic during the current work from home environment. Unfortunately, all aspects of my job require access to effective internet. It has now become a question of being able to do my work or risking my safety and breaking quarantine to be able to do my work.

In addition, my parents who live next door to me operate Smith Brother's Farm and Smith's Orchard Bake Shop. As the Congressman knows, my mother runs a very busy bakery and farm store, featuring homemade pies and cider doughnuts, apples from our family's orchard, and farm raised meats. During the COVID outbreak, we have relied on reaching out to our customer base

via Facebook to let them know about when our store will be opening and what we are able to offer. The lack of reliable internet has made managing the Facebook page difficult. In addition, we are unable to offer online ordering or to accept credit cards. These were both issues that posed problems to the efficiency of our business prior to the COVID outbreak, but have recently been exacerbated. For example, the ability to process orders online and accept credit cards would allow us to serve our customers while minimizing person to person contact and reducing the amount of staff who would need to answer the phone.

More broadly, not having internet places us at a competitive disadvantage. We are unable to shop online for the best prices for our supplies, and during the current pandemic, have not been able to search online for alternative sources of ingredients that our suppliers are not able to provide. In addition, we are severely limited in how we market our products and find it generally difficult to conduct any business online.

In this day and age, access to high speed internet is necessary for completing basic every day activities, let alone to run a successful business. The current pandemic has only highlighted how critical access to high speed is to survive.

We thank you for your time and attention to this matter."

Matthew Keyser in Delanson:

Now that COVID-19 has literally shutdown our communities, we, like everyone else in Upstate NY are working from home, learning from home, and staying home. But, unlike the majority of Upstate New Yorker's, my house is forced to ration "data", as we are limited due to not having broadband access. It's kind of sad and funny at the same time when your 3 year old yells out to turn off the computer and save "data", because he hears us say it all the time now.

I know that not having broadband internet access is considered a "first world problem" ... But now, with the forced closures, broadband internet is now a necessity to keep my job and educate my children.

Please know that I am not complaining about the lack of broadband because I can't stream Netflix, DisneyPlus, YouTube, etc. Those "struggles" are not even on the radar in my house. Right now, we're just trying to keep up with work and educational requirements. I've already had to leave on-line meetings early or not even attend certain on-line meetings, as I'm worried about reaching my data cap too soon and not being able to work until the data month resets."

Kim in Duanesburg:

"I'm writing to share my story of Broadband service in my town of Duanesburg, NY.

I have lived in Duanesburg for 15 years. I also happen to live on the only 1/4 mile stretch of Schoharie Turnpike that is not serviced with Broadband access. Despite my best efforts, and the

best efforts of the town, Spectrum has not connected my home, or the surrounding 11 additional homes, to Broadband.

The lack of broadband access has impacted my ability to work remotely. However, **the lack of broadband has never been more greatly felt then during this time in our lives dealing with the COVID-19 pandemic.**

On March 13th Governor Cuomo closed all schools in NYS and on March 16th he sent all nonessential government staff (for which I am one) home to work remotely. It was at that time I realized the hardship my family faced trying to work and school from home with no ability to do so.

Thankfully, the Duanesburg School District came to the rescue of many residents without broadband service and provided chromebooks and mifi's to their students. If it were not for the quick work of the school district to ensure students would be able to continue learning from home I do not know what I would have done to keep my children's education moving forward. I am also thankful to my employer for providing a state issued cell phone allowing me to connect via its built in hot spot.

The Federal Government needs to understand not all rural residents have access to broadband. I live mere feet from neighbors on either side of my home who have broadband access but my home is not serviced. This needs to change. We need to be connected. All homes in upstate NY need to be connected to broadband service. The state of our world is changing. Normal will never be the same. Our children could very well learn from home for the foreseeable future. I may be required to work from home for the foreseeable future. And having broadband service to my home is what will allow my family to continue to live and thrive in these unprecedented times.

Paul Brino in Scotia:

"Both my Daughter and I work from home and the 5 meg Broad Band service provided by Pattersonville Telephone Company makes it difficult to keep up with our work. We cannot get Spectrum and most of your cable providers will soon rely on High Speed internet for Cable stations, therefore, the satellite service might soon be a thing of the past. Problem with us on the Town of Glenville side of the River that have limited or no access to High Speed Internet: I had contacted Pattersonville Telephone Company who provides us 5 meg of Broadband service in the Town of Glenville, when there was a notification in the media that NYS has Grant Money for upgrading the Telephone lines to fiber for High Speed Internet in rural communities.... NYS acted on this because there was Media coverage in Duanesburg, that had very limited High Speed Internet and people were moving out of the Town of Duanesburg (My cousin is a Town Board Member of Duanesburg and he made this a Major priority with much success but, still needs support). But, when Pattersonville Telephone Company called me back, they told me we have good news and bad news. Good News, they got the Grant to upgrade to Fiber for High Speed Internet... BAD NEWS, Timewarner at the Time (Now Spectrum), told the State they had 100% coverage over the Glenville side, hence, no high speed DSL for some of us in the rural communities of Town of Glenville..... We have a lot of rural area's in Glenville with no access to High Speed internet..... I have been trying to get the Town Board and the current Town Supervisor to make this a priority... It is time for us to make the Town or State Governments work for us and make sure we have resources like other communities.

Again, apologize but, frustrated since, this should be a MAJOR Priority for all Glenville Residents to have access to High Speed Internet"

Joanne in Glenville:

"We have been living in Glenville/West Glenville area for 20+ years. When our children were of school age, and teachers would send homework home, that often times required use of online applications, I would have to send a note to the school to explain that we did not have internet access at the home.

Since the COVID-19 outbreak forced many of us to work from home, the internet service has become an even more matter of urgency. I'm limping along with the use of a WiFi jetpack that typically gets one bar of reception if we park it near a window. This jeopardizes my ability to work and maintain my paycheck and benefits.

We had, at one point, used dial-up, but we all know that is antiquated. We have been waiting for Verizon to bring Fios to our area, but that hasn't been on the horizon.

We have inquired with Spectrum (Time Warner) annually to see if we could subscribe to their services. The last quote to run internet from the road to our home was \$60,000.00 - yes, sixty thousand! Various satellite internet providers offer constrictive and expensive plans.

We just learned that Verizon will be putting up a new tower in the Charlton area, so we hope that will help with the lack of cell phone service we have in the Glenville Hills. We do not have a landline (too costly) and being dependent upon having a cell signal is not only frustrating, but unnerving for health and safety reasons, especially for those of us with chronic, life threatening illnesses; I worry about being able to call for emergency services should something happen."

Community:

Kyle in Glenville:

"I am looking at purchasing a house in Glenville. The house is one of five or six houses in a small development directly off of Rt 5. These houses, however, do not have any internet services available yet. Spectrum is not available, Verizon FiOs is not available. Even Dish isn't available, which to me is crazy considering the house is only a couple hundred feet away from Rt 5, which is arguably the busiest road in the Glenville area. I spoke to the town and they said that they wouldn't be able to assist in paying for the installation of internet to these houses because internet is not a basic human right, however my wife is expected to work from home and my son

is expected to attend online classes for school. These things cannot be done without an internet source of some sort. I spoke with Spectrum and they told me that they could run internet lines to the house but that it would cost me \$20,000. Instead, I most likely just will not move into this house in Glenville, despite loving every other aspect of it. The town is unwilling to assist us and frankly at this point, the internet is absolutely a necessity. Thank you for your time. Hopefully everyone working on this is successful and we can move in soon! We look forward to spending the rest of our lives in Glenville, especially considering it is right down the road from my job."

Steven A. Tommasone, Town Supervisor in Rotterdam New York:

"The federal government (FCC) definitely should include New York State, especially the upstate counties who have more sparsely populated rural areas, for federal funding opportunities. The current COVID-19 crisis should be common-sense justification enough for the federal government to comprehend the risks to everyone - especially our children & seniors - to conclude a more robust build out to broadband access is vital.

There are hundreds of families in the western most parts of Rotterdam, and further into the neighboring towns of Guilderland, Princetown & Duanesburg, where broadband access is at best - expensive to the consumer with poor service - or just non-existent. For all the reasons you've outlined - from completing necessary forms to access to services broadband is a commodity we can no longer live without. For example, I know several people who rely upon their physicians and emergency personnel to remotely access devices which monitor insulin levels, heart rates, etc. which transmit vital statistics.

Lynne Bruning in Duanesburg

"As the medical industry goes virtual the most vulnerable of our population requires access to reliable affordable broadband services.

My step-father, Sheridan Biggs, wasn't born in rural New York but he loved it and requested to remain on Arrowhead Farm until his dying breath.

During 1940's while attending Nott Terrace High School and dating my mother, Susan Liss, Sheridan worked on her family's farm. It is where he chose to retire after a long and successful international career as partner at Price Waterhouse. He was locally active with Christ Church and a generous supporter of the Duanesburg Historical Society. Regionally he helped found the Graduate Management Institute at Union College and the Empire Center for Public Policy. He loved to worked on our property and kept both his global and regional connections informed of his projects thru daily emails and video chats.

Our home is at <u>13388 Duanesburg Road</u>, <u>Delanson</u> about a mile from the Schenectady and Schoharie county boarderline. It is an area overlooked and under represented. It is a wild west on New York's political landscape and small town governance. As a result even though we are on Route 7, a major through fare, we have never had access to broadband. Beginning in 2000 I annually called, emailed and wrote letters to internet providers requesting fiber optic service. Satellite did not serve our technology savvy and global families needs. Sheridan needed it to keep up with PriceWaterhouse online meetings and grandchildren videos. My siblings and I required high speed internet when we visited to maintain our business connections.

When Sheridan asked me to return home in 2015 he had the best internet service I could obtain. Hughes Satellite 50 GB for \$130/month. This was woefully insufficient for Sheridan's medical needs and my business. Requests to Verizon, Spectrum and other broadband providers escalated. In the end my solution was to keep the Hughes Plan, purchase three iPads with cell plans for maximum data, and an additional hot spot.

I would start my business day at 2 AM when the satellite was most reliable and work until 8 AM when I relieved the night nurse and begin streaming the morning news for Sheridan. Even with closely monitoring our internet usage we would run out of data by the 20th of each month and limp thru the remaining days with decreased coverage and productivity.

My solution was expensive and beyond the financial reach of the majority of New York's constituents. However it was necessary so I could keep Sheridan safely at home.

We required video streams to monitor the nurses and Sheridan's quality of care. There were live security camera feeds from the barns and workshops to know if he was safe or had fallen. We all needed access to videos that would keep him entertained with Ken Burns documentaries, senior memory game apps and PriceWaterhouse meetings. As his medical needs increased I required access to his doctors websites including image downloads of x-rays and CT scans. Additionally, I needed to keep my own business afloat with international calls, video meetings and production of teaching video uploads to YouTube.

Not having access to broadband puts the elderly and disabled at a health and safety risk:

- Lack of access to email and video cuts them off from their family and friends resulting in depression.
- Inability to utilized virtual doctor visits, medical equipment and tracking devices increases safety risks and response time for emergency services.
- Prohibits working children and relatives from coming home to care for aging parents increasing expense to local emergency services and medical providers .
- Deprives them from normal daily news services, entertainment streams and information.

Many towns throughout New York, including Duanesburg, have received broadband grants. Yet the residents still do not have this basic service."

Carol Ash, resident of Rensselaerville:

"I have been a resident of Rensselaerville for nearly 50 years and it is a wonderful rural community. It is the fact that it is a rural community that makes it very frustrating in this moment of coronavirus. I have several comments that I hope are helpful to you.

1. Census Blocks. The census blocks for our area incorrectly show that we are covered by broadband. Again, the mapping is incorrect.

2. While some of us do have relatively adequate cell phone coverage, that coverage is by no means universal or provide strong signals into homes. If a home is in a low lying area, cell phone calls are regularly grainy in quality, or disconnected mid-conversation.

3. Internet Coverage. Many in the community have internet service which is provided by private companies - and now , because of covid19, we are in the position of working on our home computers all day long, families with children needing to do their homework through the internet, resulting in exceeding our data caps several times a month, making the monthly payments to the internet providers a financial burden to the normal household.

4. Our potential provider for broadband, MidTel, has been an advocate on our behalf and has taken advantage of the New York State broadband construction grants where possible. In our case, it has resulted in fibre being installed up to 500 feet our our road. Therefore, our neighbors have broadband, but those families on the other side of the road do not have fiber.

5. If, in fact, there is a second round of this virus, and we are all confined to our homes again, we will not only not be covered, but the hope of being covered will be gone. We should be looking at the need for broadband to be as basic as the need for telephones.

6. Additional mapping, or correcting existing incorrect maps, may take many years. I would suggest an alternative: that legislation should mandate that every home within five miles of a village center in rural communities like Rensselaerville be hooked up to broadband. and that infrastructure dollars be provided to willing providers to achieve that."

Ava in the Town of Florida:

My husband, Mike, and I moved back to the Capital District 10 years ago and built a house in the Town of Florida on Route 161. We came from a very rural area in Chenango County where we had a high speed DSL connection. We never dreamed that we would not be able to get that type of access or better in an area that is more populated and closer to large cities. For a number of years we struggled with dial-up and satellite. We continually called Verizon to upgrade and they repeatedly said DSL was not available in our area. We knew this was not true as all our neighbors had DSL through Verizon. We also contacted Time-Warner (at the time) about running a line. They would do it if we could come up with \$25,000 to split the cost with the company. We finally learned of a "back door" approach to get the Verizon service. It took over 5 years for this to happen. While we were very happy have something faster, the connection was still considered very slow by modern standards. Download speeds were 2.7 and upload speeds were .6 . If we had visitors, the strain on the DSL would shut it down.

Recently, Spectrum began stringing lines near our house and, about two months ago, we were able to get connected with fiber. It only took ten years for this success story but we'll take it!"

Bob Scardamalia in Rensselaerville:

"Here is an article I did in 2013 for the Daily Yonder – a weekly eNewsletter from the Center for Rural Studies. While old, the situation is no different today so I thought it would be more useful to link you to that article.

Here's the link: https://www.dailyyonder.com/broadband-speed-lets-get-real/2013/07/22/

Note the date of the article – July 22, 2013. Here we are almost 7 years later and there has been NO, that's NO, improvement in service. That's telling in 21st century United States."

Updates from and about Providers in the Region

"Charter Spectrum invested \$790 million in infrastructure in technology in New York in 2019 alone and has more than 10,800 employees in the state, with an additional 200 jobs currently open at the Spectrum Mobile call center in Rotterdam. To help ease the strain on New Yorkers during the COVID-19 pandemic, Charter has offered Spectrum Internet up to 100 Mbps for FREE, including in-home Wi-Fi, to new subscriber households with teachers or students for 60 days and recently announced the extension of that 60-day free offer for new customers through June 30th. Additionally, since mid-March, Charter has opened its Wi-Fi hotspots for public use and has not charged late fees or terminated service for residential or small business customers who let us know they are facing economic hardship related to the coronavirus pandemic, all of which will continue through June 30th. Charter recently announced that it will permanently increase its minimum wage to \$20 per hour. Frontline field technicians and customer service call center employees, who are providing critical services to our communities, emergency relief workers, and government entities, received an immediate \$1.50 per hour increase in February and will receive subsequent increases so that in 2022 all current and future hourly employees will have a starting rate of \$20 an hour or more on top of excellent benefits.

Verizon:

https://www.verizon.com/about/news/high-speed-broadband-has-expanded-upstate-new-york

"Patternsoville Telephone Company located in and around Rotterdam Junction and State Telephone Company, located in and around Ravena have also been participants in the NY state broadband grant program that has helped them deploy fiber homes and businesses in their respective territories. Like most all carriers in NY they have joined in the FCC's Keep America Connected Pledge during the pandemic, They are also busy responding to new customer requests resulting from the increase needs of their communicates given the new world we live in and are providing increased speeds at no additional cost to those who require it, working with schools and local officials to identify specific needs of schools and some pupils, building community Wi-Fi hot spots."

Midtel:

The New NY Broadband grant process we served about 140 homes/small businesses in western Albany County, primarily with voice and some DSL services. Under the New NY Broadband grant program MIDTEL was awarded a small number of census blocks in Albany County (down near Preston Hollow) as part of our Phase 1 award and a larger number of census blocks in our Phase 3 award. In total we will be building by approximately 500 units (homes/businesses) in the towns of Berne, Rensselaerville, and Westerlo. And it appears there may be some more possible areas under RDOF....we're waiting to see what the challenge process yields. Due to make-ready delays with Nat Grid and one of their approved engineering firms we are still working to get the Phase 3 project done, which is slated for total network completion by August 1st. We have 30 homes on our phase 3 grant fiber service already and expect to be able to start turning on more homes in the Rensselaerville area in late May/early June and then the rest of the area in August. Our base residential service starts at 150Mb/25Mb for \$59.95 per month and we offer service as high 400Mb/100Mb for \$129.95, but we can serve up to 1Gb when needed.

We work closely with Hudson Valley Wireless to try to minimize overlapping of service areas, and we hand off interested customers to each other in each other's territories. Our goal is to get everyone covered, not compete against each other, if at all possible.

While we are working on completing all of the grant build out areas, and due to the Covid-19 pandemic and the issues it is causing, we launched 8 FREE Wi-Fi hotspots throughout the territories we serve. We are unable to have a hot spot in our Albany County areas at the moment but we put 3 locations nearby (Broome Town Hall, Huntersland FD, and Wright Town Hall) for people in those areas that have no other good option. We know it's a short drive but it was our way of trying to help and all 3 of these location spa being utilized."

Hudson Valley Wireless:

"I wanted to highlight a recent success story. Last week we announced the completion of the New NY Broadband Phase 3 Project within district and partnership with Albany County & Berne-Knox Westerlo Central Schools to provide broadband access to Low Income Students. The announcement was during the Albany County COVID-19 briefing (<u>https://www.youtube.com/watch?v=iEOoY5Xx-fg&feature=youtu.be&t=590</u>). Please click on the video for project details. Construction is complete and we expect to schedule hundreds of installations in the Albany, NY Hilltowns.

I am pleased to announce that last month we completed construction of facilities in the Town of Duanesburg, NY and now offering 100 Mbps service in the area. High-Speed Internet access is now available to many of the homes in the south east corner of the Town of Duanesburg, NY."

From what I understand there is still a lot of work to be done in the Town of Duanesburg, NY. The Duanesburg Broadband Initiative published a study

(https://www.google.com/maps/d/u/0/viewer?mid=1zqpm9Z-VUvfk245UONYiwWO1j14kE-Ym&ll=42.78410556376172%2C-

74.12999633226451&z=12&fbclid=IwAR3IuMsVPX1Lf8IwEsoRxcQhKKFEwPxkp0N-IEDLYEpFLCaCwNbS5BmfcGw) in June 2018 illustrating the unserved areas. I recommend checking with the Broadband Program Office to see if the Charter buildout obligation changed to cover these unserved areas. We do not see many of these homes listed on Phase 1 Preliminary List for RDOF. We are also working in Albany County and Rensselaer County to provide access to unserved communities." From July 22, 2013 Daily Yonder - Rural News and Information



Speak Your Piece: Broadband, Let's Get Real

Thirty miles outside the state capital of New York, the author struggles to maintain a 21st century connection to information and commerce. The National Broadband Map says he's covered – experience says otherwise. If that's what's happening in a "metro" county of 300,000, what's going on in more rural parts of America?

Broadband and Technology

By Robert Scardamalia On Jul 22, 2013 Last updated Sep 20, 2019



The maps say it's covered, experience says otherwise. The author lives in the town of Rensselaerville, in the southwest corner of Albany County. Although only 30 miles from the state capital in Albany, parts of Rensselaerville have no wired broadband service. Wireless service can be inconsistent and is more prone to outages, the author says.

The federal government says I should have no trouble getting broadband Internet service. My experience says otherwise.

I know many folks in rural America could tell similar stories. Here's mine:

I live only 30 miles from Albany, the capital of New York, and about two miles outside of a rural hamlet in the foothills of the Catskills. Even though our county (Albany) has more than 300,000 residents and is in a metropolitan statistical area, our more sparsely populated part of the county doesn't have cable or DSL broadband access.

Our little library has cable access, as do the 70-80 homes in the hamlet. The cable company says it would cost \$50,000 to run cable to my house. But even if I could pay that kind of fee, they wouldn't run the line because we don't have the 25 homes per mile to make it "cost effective."

In 2007 I bit the bullet and went from dialup to satellite Internet. It was a good move. When someone wanted access to the Internet, we didn't have to check to see if the phone was in use. And we didn't knock someone off the Internet if we picked up the phone.

Satellite promised much faster download and upload speeds, and we would be able to do all that the advertisements tell you are possible. Reality was a bit different from the advertisements.

Many times our throughput speeds weren't any better than dialup. We'd go through the speed tests and contact the provider about the speeds. But from the provider perspective, everything looked fine. When the weather was bad here in Upstate New York, we'd lose service. When snow piled up high enough on the dish, we'd lose service. On balance, it was better than dialup but marginally so and quite a bit more expensive.

About a year ago we made the jump to wireless service because Verizon had installed a cell tower and it promised faster speeds. Most of the time it does, but many times we're back to dial-up speeds.

Even with the top access plan, we're limited to a total of 10 gigabytes of upload and download per month. Service outages aren't as frequent as they were with satellite, but they still occur. The longest recent outage was two hours. That's not a big deal if you can't check your Facebook account, but it sure is if you're a small business dependent on Internet service, which we are.

I pay for satellite television, I pay for my telephone landline, I pay for my cell service (which we've only had available for three years), and I pay for my Internet service off that cell tower. That's a total of \$375 per month. Even paying that much per month, the major providers still can't give me access to 21st century technology.



National Broadband Map

The National Broadband Map shows availability of wired broadband service. There are problems with the map. Each state is responsible for reporting its own data. Definitions and reporting techniques are inconsistent. And the data is based on "advertised" speeds reported by Internet service providers. What users get on the ground (especially with wireless access) may be different. (Explore the National Broadband Map.)

National Broadband Mapping

My story isn't just another example of the frustrations that many rural residents face when it comes to accessing high-speed broadband. To add salt to the wound of rural broadband, the National Telecommunications and Information Administration (NTIA) has me officially classified as having broadband service. That's technically correct, as I currently get my Internet service off a fixed wireless cell tower.

What frustrates me is my service shouldn't be classified as broadband (at least 768 kilobytes per second download). The "official" data is misleading and over-represents the extent of broadband coverage in the United States. My speeds are nowhere close to advertised speed, and the data limit of 10 gigabytes makes it impossible to view large videos, let alone try to stream a movie. In my business, I need to access large data files and can easily bump my 10 gigabyte limit if I'm not careful.

Through the American Recovery and Reinvestment Act and the Broadband Data Improvement Act (BDIA), the U.S. Department of Commerce, NTIA, was charged with the development and maintenance of a "comprehensive, interactive, and searchable nationwide inventory map of existing broadband service capability and availability in the United States". The map would

depict the extent of broadband availability from commercial or public providers in each state. To complete the nationwide effort, NTIA awarded grants to assist states in gathering and verifying state-specific data on broadband services.

In February of 2011 the agency released the National Broadband Map. Above is the national map of wireline coverage – that's DSL, copper, cable and fiber. It's easy to see the U.S. providers run cable, whatever the type, to where the population is. But even this shows interesting differences. For example, North and South Dakota, ranking 48th and 46th respectively in population size, have reasonable coverage. It makes one wonder whether it's really more affordable to run cable across long distances than providers tell us. Could there be political influences in provider coverage?

Fixed and mobile wireless presents a very different picture, though those living in the West clearly still have significant areas with no coverage of any type.



National Broadband Map

States report a much broader coverage area for wireless broadband. But, the author says, there's far more chance that actual availability may be different. Terrain is a large factor in service. (Explore the National Broadband Map.)

When wireline and wireless coverage is taken together, much of the continental United States arguably has some type of broadband access. Estimates of the percent of U.S. residents with broadband access vary and depend on the speed definition of broadband and coverage area of providers. As a result, there's considerable debate about where the United States stands globally in a ranking of broadband accessibility and penetration. The Organization for Economic Co-

operation and Development measures the broadband Internet penetration rate as the number of subscribers per 100 inhabitants. The United States ranks 16th in this category. The United States ranks eighth in total wireless broadband, though we rank second (behind Japan) in mobile broadband penetration. As with so many statistical comparisons, the conclusions depend on the data and definitions used. And that's where the NTIA official measure of broadband access falls short.

NTIA Broadband Mapping

While the NTIA provided detailed specifications for the submission of area coverage data, the methods by which states could determine unserved and underserved areas were not predetermined. The data submitted by providers varied in format from paper/PDF maps to address points to digital shapefiles. A major problem is that these formats don't always allow for exact determination of coverage, especially for large rural blocks over the two-square-mile threshold.

Estimating the number of unserved and underserved housing units requires two data elements: 1) accurate boundary data from service providers on coverage areas and 2) accurate data on residential housing units at the census block level. Census data is the easy part of this equation, while accurate boundary data on service areas is difficult and subject to error. We've all had experiences with dropped cell coverage due to terrain in areas that are supposed to have service. These areas will show as having service on the national map, when in fact they may not. Or, as in my case, service is available but at speeds well below what's advertised but meeting the NTIA threshold for broadband. The bottom line here is that even in not-so-rural America, there is sub-optimal Internet access.

What To Do

There are rural communities across the United States with extraordinarily high quality of life. But these communities are under threat. They are aging rapidly, and their economies are based on 19th and 20th century industries that have long since left. Will 21st century technology and Internet access save them all? Probably not. But limited access to today's technology infrastructure insures that they won't be able to establish new economies and attract a younger population.

On most measures of broadband access, penetration and adoption, the United States lags the rest of the world. We need to understand the deficiencies in our official measurement of broadband availability and acknowledge that using advertised speeds is not an adequate measure of broadband access. Reliance on service-provider data does not fully describe the extent of unserved and underserved areas.

The National Broadband Plan contains six long-term goals and two are most relevant from my perspective:

"At least 100 million U.S. homes should have affordable access to actual download speeds of at least 100 megabits per second and actual upload speeds of at least 50 megabits per second."

"Every American should have affordable access to robust broadband service, and the means and skills to subscribe if they so choose."

I think these goals are inadequate and see two problems inherent in them. First, there are nearly 120 million households in the United States, which leaves 20 million homes, one out of every six, with sub-standard access. Second, the goals are inconsistent. If 20 million homes are left without access, how can every American have access to robust service and the option to subscribe?

Rural areas can't very well meet the growing needs for education, health care and economic development without the technological infrastructure necessary to support them.

On May 3, 2013, the U.S. Department of Agriculture announced new rules for funding broadband service in rural communities through the Community Connect broadband grants. The program moves in the right direct. But in these days of sequestration, funding is limited. Unfortunately, with goals limited in scope and funding restricted, the hope of connecting rural, and not-so-rural residents is still a dream.

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