Statement by

Shirley Bloomfield

Chief Executive Officer

NTCA–The Rural Broadband Association

Arlington, VA

Before the

United States House of Representatives

Committee on Agriculture

Hearing on

"Closing the Digital Divide in Rural America"

Washington, D.C

June 21, 2023

INTRODUCTION

Chairman Thompson, Ranking Member Scott, and members of the Committee, good morning and thank you for the opportunity to testify about the continued role of the broadband programs overseen by the U.S. Department of Agriculture ("USDA") as part of this Committee's review of the "Farm Bill's" rural development programs. With the help of these and other important broadband programs, NTCA members across the country deploy cutting-edge broadband networks in deeply rural areas and deliver services that are as robust and reliable as those available in urban markets. These providers stand ready both to help close the digital divide in areas beyond those that they serve today, and to sustain their good work to date in keeping millions of rural Americans connected to the rest of the world. Building upon such efforts, I greatly appreciate you holding this hearing and the opportunity to speak to you today.

I am Shirley Bloomfield, Chief Executive Officer of NTCA–The Rural Broadband Association ("NTCA"), which represents just over 850 community-based companies and cooperatives that are leading innovation in rural and small-town America. NTCA members and companies like them offer broadband, voice, and other advanced communications services across more than thirty percent of the country's geography where less than five percent of the U.S. population resides. There is no question that small rural internet service providers are a critical part of the equation as we work to provide Americans with affordable and reliable internet services that will meet the needs of today and stand the test of time.

Every day, NTCA members work hard to deliver for rural America. Their steadfast commitment to serving the communities that they – and many of you – call home makes them America's trusted communications solution providers. On average, each member serves nine public safety entities (police, fire, etc.) and seven schools in their areas with fixed broadband. NTCA members have worked for decades to invest in our nation's future by deploying essential state-of-the-art communications infrastructure. Over eighty percent of their customers on average have access to 100 Mbps broadband service or better. Over sixty percent of their customers on average have access to Gigabit speeds. These accomplishments are staggering when you consider that the average population density in these areas is about seven customers per square mile, or roughly the average density for the entire state of Montana.

The Rural Utilities Service ("RUS") within USDA has played a significant role in enabling much of this deployment to date, and it is uniquely positioned to close the digital divide for the benefit of millions of still-unserved Americans – and it should be tasked with doing so in a way that will ensure that divide stays closed. As members of this Committee assess how best to structure broadband funding programs, success in broadband programs should be measured by results rather than promises, and we should all note that what matters most to rural Americans is not the mere deployment of the network but the quality of the services they receive. Some programs in recent years have offered the promise of better broadband, with announcements asserting that tens or hundreds of thousands of Americans will be connected to broadband at some point in the future due to Program X or Initiative Y. Some of these programs will undoubtedly deliver on that promise in coming years, at least in part and in certain places. But NTCA submits that the best

proofs of concept can be found – and the best lessons drawn for future program design – by looking at which programs have in fact already delivered on the promise of reliable and sustained broadband access in rural areas.

NTCA'S EXPERIENCE WITH RUS BROADBAND PROGRAMS

RUS telecommunications and broadband loans and grants have helped enable and unleash billions of dollars in federal and private capital investment in rural communications infrastructure. A mix of local presence and commitment, entrepreneurial spirit, private capital, public capital through RUS financing programs, and ongoing support through the high-cost universal service fund ("USF") programs overseen by the Federal Communications Commission ("FCC") have empowered NTCA members and other community-based providers like them to deploy reliable networks and offer robust and affordable services across wide swaths of rural America.

NTCA members have been the recipients of a number of RUS loans and grant awards through programs such as the ReConnect program, the Rural Broadband program, Distance Learning and Telemedicine grants, and the Telecommunications Infrastructure program. Through ReConnect alone, 159 NTCA members have been awarded grants or grant and loan combinations to serve approximately 441,000 households, 21,000 businesses, and 14,000 farms.[1]

NTCA recommends that Congress approach proposals for new broadband programs with a thoughtful eye and a preference for leveraging proven concepts such as many of these prior efforts. In lieu of creating new initiatives that might compete or even conflict with existing efforts, Congress should consider how well-functioning existing programs, like many of those listed above, can be enhanced and expanded to achieve even better results and reach remaining unserved areas with service levels that meet the needs of users both immediately and over the life of the network that the federal government is helping to fund.

THE CASE FOR HIGH-SPEED INTERNET ACCESS IN RURAL AMERICA

While broadband has value universally, it is especially important for rural Americans who often must rely even more than their urban counterparts on online access given the challenges of distance and density. From telehealth, remote work, distance learning, and precision agriculture, the opportunities for rural Americans are substantial when given the ability to access high-speed, reliable internet services.

For example, telemedicine can play a crucial role in bridging the gap between veterans and the Veterans Affairs system by providing them with seamless access to telehealth services, virtual consultations, and online resources, ensuring timely and convenient healthcare support regardless of their geographical location. Nearly a quarter of the United States veteran population resides in rural communities, underscoring the importance of leveraging connectivity to deliver critical

[1] https://www.usda.gov/reconnect

services over great distances.[2] In fact, the Veterans Health Administration, which has long been a pioneer in the use of telemedicine, conducted a pilot program which included seven hospitals, 10 multispecialty outpatient clinics and 28 community-based primary care clinics. The 900 patients in the trial were able to utilize home telehealth devices, which allowed them to self-manage their health. The results were dramatic: a 40% reduction in emergency room visits, a 63% drop in hospital admissions and an 88% decrease in nursing home bed days of care. While the total cost savings resulting from the dramatic decrease in resource utilization was substantial, perhaps even more impressive was the 94% patient satisfaction.[3] High-speed internet is not just a luxury; it is a lifeline for rural America, bringing greater telemedicine functionality and helping residents overcome the challenges of distance that make so many tasks more expensive and time consuming.

Moreover, one of the most difficult challenges facing rural America is keeping younger generations from moving away or ultimately helping them to come back home. However, thanks to the unique opportunities of teleworking and remote learning, many parts of rural America are seeing positive growth. Technology is shaping the next generation of American jobs. Manufacturing, agriculture and health care are among sectors that are demanding more highly-skilled employees than in the past. Increased training and education opportunities are imperative for many rural areas that face demographic and economic challenges. In rural areas, broadband can be used to support secondary and postsecondary education and training: broadband-enabled services can be used to overcome instances in which small or insular areas lack sufficient economies of scale to support interest in advanced or specialized courses.

Rural broadband providers are playing vital roles, leveraging their networks and working closely with local educational institutions. For example, Rainbow Communications of Everest, Kansas, provides fiber connectivity to Highland Community College, the oldest college in the state. The network enables the college to offer numerous courses at various sites. The college also supports the agricultural industry through courses that include precision agriculture and diesel mechanics; both are necessary as farms rely increasingly on precision agriculture that blends traditional mechanical equipment with analytical tech and GPS guided systems.[4] Meanwhile, in Alaska, the arrival of a submarine cable line allowed for one family to move back to its hometown while

---

[2] "Rural Veteran Health Care Challenges." Veteran Affairs: https://www.ruralhealth.va.gov/aboutus/ruralvets.asp#:~:text=return%20to%20top-,Rural%20Veteran%20Demographics,2.7%20million%20enrolled%20in%20VA.

[3] Broderick, Andrew, "The Veterans Health Administration: Taking Home Telehealth Services to Scale Nationally," The Commonwealth Fund Case Studies in Telehealth Adoption, Jan. 2013, http://www.commonwealthfund.org/~/media/Files/Publications/Case%20Study/2013/Jan/1657_Broderick_telehealt h_adoption_VHA_case_study.pdf, p. 5.

[4] "Rural Broadband and the Next Generation of American Jobs." NTCA–The Rural Broadband Association:https://www.ntca.org/sites/default/files/documents/202103/SRC_whitepaper_the_next_generation_of_american_jobs.pdf.

allowing the parents to retain their current jobs that required access to high-speed internet. This increased connectivity also provided their children with the ability to participate in classes and coursework that were not offered at the local school.

Of course, while substantial distances in rural areas make broadband access a necessity for many aspects of life, there may be no more uniquely rural application for high-performing broadband than precision agriculture. Precision agriculture has revolutionized farming practices and enhanced the overall agricultural landscape. By leveraging advanced technologies such as GPS, drones, sensors, and data analytics, precision agriculture enables farmers to make informed decisions based on real-time information, leading to increased productivity, resource efficiency, and sustainability. In rural areas where farming is a vital economic activity, precision agriculture offers immense benefits. The value of precision agriculture is conveyed effectively when agriculture is viewed as a business of logistics. Row and specialty crops are particularly suited to tech-enabled efficiency during planting and cultivation that enable farmers to harvest and deliver product to market at peak times. Precision agriculture also facilitates better future planning. Visual inspection of crop development (either by surface imaging or drones) combined with sensors that assess soil conditions can help farmers create a forward-looking plan of action. Or, in one instance, an NTCA member's customer in South Dakota uses a live-video feed in a calving barn to monitor newborn calves and mothers from the comfort of home.[5]

As the President of the Missouri Farm Bureau aptly observed during a hearing hosted by this Committee last September, "Truly the farm of the future has to be connected…with at least 100 [symmetrical]. It's what we need to be shooting for. My rural hospital says the same thing, they need a hundred up, a hundred down in order to do telemedicine in a way that is truly a good experience for the provider as well as the patient."[6] These broadband-enabled benefits combine to serve greater economic efficiencies and opportunities for the agriculture industry as a whole.

BUILDING FUTURE-PROOF NETWORKS

With billions of dollars and millions of unserved Americans at stake, it is prudent and responsible for the federal government to invest taxpayer resources based upon more than speculation as to potential performance, marketing hype, and overstated claims of capability not borne out of real-world applications throughout rural America. The minimum speed and other performance criteria for receiving federal funding must be determined by the needs of rural consumers and not set by the maximum capabilities some in the industry feel they can offer. With so much on the line in terms of dollars and unserved customers, this is not the time to award

[5] "From Fiber to Field: The Role of Rural Broadband in Emerging Agricultural Technology." NTCA– The Rural Broadband Association: https://www.ntca.org/sites/default/files/documents/2021-07/06.14.21%20SRC%20Ag%20Tech%20Final.pdf.

[6] *See,* https://agriculture.house.gov/calendar/eventsingle.aspx?EventID=7426 at minute 2:48:00.

participation trophies. Setting standards is not a matter of technological neutrality – it is a matter of public interest and fiscal responsibility.

To keep pace with consumer demand, the minimum speed for eligible projects administered by USDA to receive funds should be set at 100/100 Mbps – just as was the case in Rounds 3 and 4 of the ReConnect Loan and Grant Program. It has been argued that the 100/100 Mbps minimum speed threshold is too high and that it may prevent certain providers from applying for the program. However, during Rounds 3 and 4, the program was oversubscribed by four to five times, proving that more than enough providers are willing and able to build the kinds of networks that consumers need today and well into the future.

While some will argue that such an approach is not "technology neutral" and that this would favor fiber, we have seen providers and manufacturers of technologies of all kinds proclaim the ability to deliver services at these speeds or even higher, and providers that prevailed in the FCC's USF auctions similarly pledged that they could use technologies of all kinds to deliver even Gigabit speeds – so it is unclear why some feel as if demanding this minimum level of performance would now somehow shut them out.[7] Moreover, it is not a violation of technological neutrality merely to set high standards and expectations – the public interest and fiscally responsible use of government funds demands nothing less. It is true that not all technologies are equally capable in all cases, and it does not violate a principle of "technological neutrality'' to take stock of and account for the relative attributes and limitation of different technologies as demonstrated in the marketplace.

For example, while many NTCA members have experience leveraging fixed wireless technology to serve end users in hard-to-reach areas, the consensus with respect to such services among these members is that even as they may offer a means of initiating service, they are less desirable as long-term solutions to overcome the digital divide (which, as the title of this hearing suggests, is what programs like ReConnect should aim to achieve). In addition to interference and other reliability issues that can affect unlicensed spectrum specifically, fixed wireless networks require relatively clear lines of sight and other optimal conditions to realize their potential. Technologies that rely upon high-band spectrum in particular can be difficult to implement in rural areas given limited propagation over great distances. Finally, spectrum capacity can present a substantial issue, as the more users that place demands on a cell site or antenna can degrade the experience of the other users sharing that capacity. Put another way, just because certain technologies can perhaps be used to serve *anyone* does not mean they necessarily can serve *everyone* at a sustained level of performance – which is the essential long-term objective of sound universal service policy.

To be clear, wired and wireless facilities are necessary to support the full complement of ag tech solutions. Therefore, the collective interest of the ag and tech industries, alongside policymaker

[7] *See, e.g.,* https://www.prnewswire.com/news-releases/gigabit-6-ghz-fixed-wireless-is-a-reality-301553129.html and https://www.fiercewireless.com/tech/tarana-provides-1-gig-speeds-its-fixed-wireless-access.

interest in supporting U.S. farm markets and expanded broadband deployment, should drive actions to develop and maintain robust future-proof scalable broadband networks that can enable wired and wireless solutions alike.

Some will also claim that consumers do not need 100 Mbps symmetrical services, and we should therefore build lesser networks leveraging government dollars. But the marketplace indicates that consumers – your constituents and our members' customers – already believe and expect otherwise. Ookla, the global speed test provider, reported average U.S. fixed broadband speeds of 179/65 Mbps in January 2021 – which means the "build-to" speeds that some in the industry are advocating for now (100/20 Mbps) were outdated more than two years ago. It is predicted that the average U.S. fixed broadband speeds will be 1500/599 Mbps by 2030.[8] In other words, anything less than 100/100 Mbps is outdated and even this speed threshold may soon be surpassed, which is why treating it as a minimum standard that can evolve over time as new awards are made is a sensible and pragmatic approach.

A letter addressed to this Committee on March 14, 2023, underscores the robust support by rural stakeholders of all kinds – county governments, educational institutions, electric utilities, rural broadband providers, health care providers, economic development organizations, and banking institutions – for robust symmetrical broadband. In addition to NTCA, the following organizations signed onto that letter:

National Rural Electric Cooperative Association
Fiber Broadband Association
National Association of Counties
National Association of Development Organizations
National Rural Health Association
National Rural Economic Developers Association
The Power and Communication Contractors Association
National Rural Education Association
Rural Community College Alliance
National Rural Telecommunications Cooperative
Farm Credit Council
CoBank
National Cooperative Business Association
National Utility Contractors Association
Rural Telephone Finance Cooperative

[8] "Eliminate the Digital Divide in Rural North America with Fiber." The Fiber Broadband Association.

These stakeholders represent a broad cross-section of entities with a vested interest in the vitality and long-term viability of rural America, and their constituencies are at the heart of the communities that are intended to be benefit from the Farm Bill. [9]

I would again encourage this Committee to make sure program requirements are driven ultimately by the long-term needs of rural communities. I would also encourage this Committee to avoid the mistakes of too many broadband programs past, where 4/1 Mbps or 10/1 Mbps sounded like terrific ideas to build – only to find a few years later that we needed to start over because we had aimed too low. Indeed, if anything, Congress should view the 100 Mbps symmetrical threshold as a *baseline*, and give USDA the flexibility to increase this standard over time as needs and use cases for broadband evolve.

NTCA'S FARM BILL PRIORITIES

1. Meeting the Needs of Consumers Today and Tomorrow

Federal broadband investments should support technology that can be readily upgraded to deliver the fastest speeds over the long-term life of the assets being built, rather than supporting technologies that may appear cheaper to deploy now but will be unable to provide meaningful internet access over time that keeps pace with consumer demand without the need to be substantially rebuilt (perhaps again at the expense of federal dollars). To this end, the Farm Bill should support high-speed symmetrical broadband networks that offer a minimum of 100/100 Mbps speeds. As discussed above, this is a reasonable threshold that will ensure consumers realize the benefits of these investments backed by federal dollars for years to come, while also promoting meaningful competition among providers of all kinds to seek to win such awards and serve these customers.

2. Identifying Eligible Areas

Close coordination among federal and state agencies is essential to avoid deploying duplicative government-funded broadband networks in a rural area that cannot support even a single network without such funding. The Farm Bill should specify the ways in which ReConnect funds will interact with funds already awarded under other programs; specifically, ReConnect funds should not be awarded to any provider in an area where a different provider is already the recipient of: (a) an RUS telecom program loan or grant (so that the agency does not put at risk its own prior committed awards); (b) support from federal universal service programs that is being used to deploy 100/20 Mbps or better service (so that RUS does not undermine the FCC's important sustainability initiatives); and/or (c) an award under any other federal or state broadband grant program where the recipient is obligated to deliver 100/20 Mbps or better service and is meeting those obligations.

---

[9] "100 Symmetrical ReConnect Coalition Letter." March 13, 2023. Letter. https://www.ntca.org/sites/default/files/documents/2023-06/100SymmetricalReConnectCoalitionLetter.pdf

Relatedly, to ensure that broadband deployment funds are targeted to where they are most needed, an area should not be deemed eligible for ReConnect funding unless 90% of locations in that area lack at least 100/20 Mbps service. To be clear, networks built in eligible areas should be required to meet a minimum threshold of 100/100 Mbps speeds as noted above – in other words, 100/100 Mbps should be considered the minimum of ***what*** *to build*. But using 100/20 Mbps as the criterion for determining ***where*** *to build* – what areas will be considered unserved – will help in making the most of government broadband funding and bringing as many Americans as possible up to better standards of service.

3. Project Delays After Notice of Awards

The 2023 Farm Bill should address historical preservation requirements and environmental reviews that often result in significant delays between notice of awards and receipt of the funds necessary to commence construction. While RUS can take certain steps on its own to mitigate such delays to some degree by, among other things, allowing providers to work toward seeking approval of environmental and historical reviews prior to an award, Congress should consider other means of streamlining network deployment while still providing reasonable protections for important historical and environmental concerns that apply in certain contexts. We appreciated the opportunity to testify before, and the recent work by, the House Energy and Commerce Committee regarding bills to address broadband-related permitting delays, and NTCA is supportive of that legislation. We encourage this Committee, however, to consider additional means of providing relief specific to deployments pursuant to USDA and RUS programs, including promoting programmatic agreements and evaluating other measures that the agency could implement to streamline preservation reviews and environmental clearances.

4. Matching Funds

The Farm Bill should make clear that providers receiving grants need not spend matching funds in full prior to drawing down grant funds. The obligation to expend all matching funds prior to receipt of any grant resources is onerous and unnecessary to ensure providers have "skin in the game" with respect to grant-funded deployment. Consideration should also be given, as it has been in the Broadband Equity, Access, & Deployment program, to reducing the need for matching funds in deeply rural areas that often present the most significant economic challenges to serve.

5. No Provider Preference Based Upon Corporate Structure

The Farm Bill should codify that providers seeking grants or other funding will not be favored based merely upon their form of organization or commercial status. Providers of all kinds should be allowed to apply to programs on a level playing field where they can meet the substantive standards for doing so.

CONCLUSION

In an era of transformative technological developments, regulatory challenges, and marketplace competition, NTCA members are advancing efforts to close the digital divide by delivering robust and high-quality services over networks that are built to last. Their commitment to building sustainable networks makes rural communities fertile ground for innovation in economic development, e-commerce, health care, agriculture and education, and it contributes billions of dollars to the U.S. economy each year. The rural broadband industry and our nation as a whole can tell a great story of success to date in delivering service, but we still clearly have much work to do both in deploying networks where they remain lacking and operating networks where they have already been built – and this is where public policy plays an important role in helping to build and sustain broadband in rural markets that would not otherwise justify such investments and ongoing operations.

I thank the Committee for its leadership on and interest in these issues, and I look forward to working with you on behalf of NTCA members and the millions they serve to realize a shared vision of a rural America that gets and stays connected.