



**Testimony of the Honorable Jim Matheson
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United States House of Representatives, Committee on Agriculture
“Closing the Digital Divide in Rural America”**

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Chairman Thompson, Ranking Member Scott, and Members of this Committee. Thank you for inviting me to testify today. My name is Jim Matheson and I serve as the Chief Executive Officer of the National Rural Electric Cooperative Association. NRECA is the national service organization for more than 900 rural electric cooperatives that provide electric service to approximately 42 million people across 48 states. Rural electric cooperatives are member-owned, not-for-profit, and formed to provide safe, reliable electric service to their member-consumers at the lowest reasonable cost. They have a longstanding commitment to improving the communities in which they serve, and many are actively engaged in rural economic development efforts that go beyond electrification.

Today, more than 200 electric cooperatives are involved in rural broadband deployment efforts, recognizing the impact that a reliable high speed internet connection can have on their communities and the challenges of deploying this infrastructure in low density, rural, and remote areas. For many cooperatives, the story of rural broadband deployment today mirrors the story of rural electrification nearly 100 years ago. The cost of building and maintaining networks in sparsely populated areas with difficult terrain is prohibitive for many providers. It is a cost-intensive process with little return on investment. Since cooperatives are owned by the people they serve, they understand the need for broadband in these areas and the challenges associated with deploying this infrastructure, which is why some have chosen to expand their services to include broadband.

As this Committee works to develop the next Farm Bill, electric cooperatives believe there are great opportunities to make improvements to broadband programs at the U.S. Department of Agriculture. Specifically, we encourage the Committee to:

- Make the ReConnect program permanent and easier to access
- Provide robust funding for rural broadband through USDA
- Prioritize symmetrical speeds and scalable networks in any future rounds of federal funding
- Invest in middle mile infrastructure

Broadband is Critical for Rural America

An affordable and reliable internet connection is critical for the growth and development of rural America. Broadband is no longer a luxury, but instead a necessity for business, education, and healthcare access across the country. The Coronavirus pandemic highlighted the ongoing disparity between urban and rural access to a broadband connection and made clear how critical a high-speed internet connection is for rural economic development and quality of life. Without these connections, families may choose not to return to the small towns where they grew up, businesses choose to locate elsewhere, and farmers struggle to access the latest technologies that help lower input costs and improve yields. Internet based services are a routine part of modern life, and it is increasingly clear that bandwidth and capacity must meet the needs of today and anticipate the needs of tomorrow.

For many rural communities, the U.S. Department of Agriculture (USDA) has been a longtime trusted partner for rural economic development efforts. Rural electric cooperatives have been partnering with the agency for more than 80 years on efforts to build reliable electric networks in rural areas. What started in the 1930s as a partnership between rural communities and the Rural Electrification Administration has evolved into a much-needed, modern financing tool to build, maintain, and modernize electric, water, and telecommunications infrastructure through today's Rural Utilities Service (RUS). Federal programs administered by RUS are designed to address the unique challenges facing rural communities, such as low population densities and vast terrain, providing financing and technical assistance to improve the quality of life in hard-to-reach areas.

Many cooperatives have started deploying broadband in their service territories in large part because no one else will do it. Since cooperatives are owned by the people they serve, they understand the need for broadband in their rural service areas and the challenges associated with deploying this infrastructure. Electric cooperatives of all sizes are entering the broadband business due to demand from their members, who in many instances have no other alternative for a reliable internet connection. Despite these challenges, many cooperatives have built reliable, future proof networks capable of providing symmetrical speeds to both consumers and businesses.

For electric cooperatives, investments in broadband have produced significant benefits both internally and externally. Electric cooperatives are increasingly deploying fiber optic infrastructure as part of their electric network builds, which enables a high bandwidth, low latency internal communications system to support utility operations. Via this infrastructure, co-ops can monitor their systems in real time, improve response times to outages, and better manage utility resources. It also allows the co-op to improve the resiliency of the electric network and deploy smart grid technologies, such as advanced metering infrastructure, which can help reduce the overall costs to consumers. Beyond lowering energy costs, a fiber backbone allows co-ops to expand other technology offerings, such as distributed energy resources, electric vehicle access, or retail broadband service.

Through USDA's Electric Loan Program, electric cooperatives and other utilities can invest in smart grid technologies to improve grid security and reliability. The program allows recipients to

use up to ten percent of the loan to construct broadband infrastructure in areas lacking a minimum acceptable level of broadband. This program correctly recognizes the dual-use nature of assets used for broadband communications services and electric cooperative smart grid technologies.

While retail broadband offerings have been successful for some cooperatives, others are choosing not to provide retail service, but instead are leveraging excess fiber capacity from their internal communications systems to provide middle mile broadband access to other third-party providers, such as local cable providers, small telephone companies, and wireless internet service providers. This provides a critical link between the internet service provider's local network and the broader internet ecosystem. Access to this infrastructure can make a big difference in reducing the cost to deploy last mile networks in rural areas, however many rural providers lack access to a robust middle mile connection. In the 2018 Farm Bill, this Committee recognized the importance of middle mile networks and authorized a program at USDA to expand middle mile infrastructure into rural areas. Unfortunately, the program has not moved forward. We encourage the Committee to consider reauthorizing the program, as strong middle mile access is critical to last mile deployment and ensuring that every American receives reliable internet access.

As electric utilities, cooperatives own and maintain utility poles and rights of way for the safe and reliable distribution of electricity to their members. Ensuring the safe, affordable, and reliable delivery of electricity is the first priority for every electric cooperative. When safety, space and capacity allow, co-ops lease out excess space on their poles for the delivery of telecommunications services by third party providers, or even their own broadband subsidiary. This relationship provides communications companies with cost-based access to an existing pole distribution network for a small fraction of the significant costs that co-ops have incurred to build and maintain these systems.

Some within the communications industry have called for a one-size-fits-all rate for cooperative pole attachments. NRECA and all electric cooperatives strongly encourage the Committee to reject any proposals that would implement this type of regulation. As locally owned and democratically governed entities, electric cooperatives work in good faith to negotiate reasonable rates for pole attachments so that the burden of financing rural broadband deployment does not unfairly fall on rural electric customers. On average, electric co-ops serve 7 customers per mile, compared to approximately 34 customers per mile served by larger investor-owned utilities. A one-size-fits-all approach does not accurately reflect the unique cost of building and maintaining a pole distribution network in low density, hard-to-reach rural areas that can differ from state to state and co-op to co-op.

The “Broadband Internet Connections for Rural America” Act

Last Congress, this Committee advanced the Broadband Internet Connections for Rural America Act¹, which would make USDA's ReConnect program permanent and provide consistent funding moving forward. As discussions continue around the future of this and other broadband programs at USDA, I'd like to offer some recommendations.

¹ <https://www.congress.gov/117/bills/hr4374/BILLS-117hr4374rh.pdf>

First, Congress must prioritize scalable, future-proof networks in any future rounds of federal funding. Without the ability for networks to grow in response to increased bandwidth needs and consumer demands, the challenge of solving the broadband gap in rural America will persist. In urban areas, gigabit speed networks are becoming increasingly common, yet in many cases the discussions around rural access seem to focus on what is “good enough.” Broadband services should be equitable no matter where an individual chooses to live, and taxpayer dollars will be best spent supporting networks and technologies that can meet current and future needs, rather than investing in standards that are or soon will be obsolete.

Second, the definition of an area unserved by broadband should be raised to include areas that do not have at least 100/100 Mbps. Building networks in low density, hard to reach areas is challenging, but Congress must prioritize networks that can meet consumer demand and ensure that residents in these areas are able to receive quality service regardless of whether they are considered unserved or underserved.

Third, the program must be streamlined. The ReConnect application process is time consuming and difficult. The submission portal is not user friendly, and some have commented that attempting to fill out the program application is like having a second job. For small providers with limited resources, this is incredibly challenging and can be prohibitive. The application also lacks so-called “safeguards,” meaning that if an applicant forgets to attach necessary information, such as their audited financial statement, the application platform will still certify and allow the applicant to submit rather than giving a warning that the required documentation has not been submitted. If that happens, there is no ability to go back and submit the missing documentation, which disqualifies the application. As Congress considers opportunities to modify or improve the application process moving forward, providing pathways to correct easily rectifiable errors or omissions would be helpful.

The Broadband Internet Connections for Rural America Act also includes robust funding for the USDA Community Connect Program. While a smaller and less popular program than ReConnect, cooperatives who have used this program have found it to be easy to manage and are typically able to complete the project within the program’s three-year build requirement. The program also includes an 80/20 grant/match ratio that is incredibly helpful for projects in low density rural footprints. However, one of the challenges that cooperatives have faced with the program is the requirement to facilitate a community center within the proposed funded service area. Due to the inherent rurality of these areas, there are not typically existing facilities conducive to hosting such a site. Flexibility to allow the community center to be facilitated in areas adjacent to and within a reasonable distance of the proposed funded service area could provide the dual benefit of expanding broadband access in rural areas while also facilitating an internet connection at an existing community facility, such as a library.

Prioritize Scalable, Future-Proof Networks

For many rural consumers, the promise of a broadband connection has gone unfulfilled. Recent federal programs have defined “unserved” as areas lacking service at 25/3 megabits per second (Mbps) and “underserved” as areas lacking service at 100/20 Mbps. However, the Federal Communications Commission (FCC) today still defines broadband as 25/3 Mbps – a definition

that was put in place nearly 10 years ago with limited consideration of raising that definition to be more reflective of current consumer demands. This must change. According to recent reports², nearly 70% of US homes receive internet service offering speeds of 200 Mbps or more, and more than 25% of homes are subscribing to gigabit or faster speeds. Other reports indicate that we are trending toward multi-gigabit networks by 2030³. It is clear that technology and user demand for bandwidth are exponentially increasing, which is why networks built in rural areas must be able to keep up with these growing demands.

The FCC has recognized this fact itself. In the FCC's 2021 Section 706 Report⁴, it noted that, as of December 2019, the vast majority of Americans had access to fixed terrestrial broadband service at 250/25 Mbps. Specifically, the Report states, "Between 2018 and 2019... the deployment of 250/25 Mbps also increased from approximately 86% to over 87% of the population." If over 87% of the population has access to fixed terrestrial broadband service at 250/25 Mbps, it is difficult to comprehend why the Commission continues to maintain that the current dated definition of 25/3 Mbps is sufficient. This fact also begs the question of why most broadband programs and general consensus has landed on updating the definition of broadband to 100/20 Mbps, a definition that is well below what more than 87% of the population had access to in 2019. The Universal Service provisions in the 1996 Telecommunications Act requires comparable services at comparable rates between urban and rural areas. Rural communities should not be treated as second class citizens and be relegated to "good enough" broadband.

For farm communities, adoption of precision agriculture technology enables farmers and ranchers to optimize their operations, lower input costs, and increase product yields. Incorporating new technologies into farming operations allows for the adoption of automatic irrigation, soil health monitoring, improved weather forecasting, and real time monitoring of facilities. Some applications, such as the use of sensors in farm equipment, require low bandwidth but a wide range of field coverage. Other tools, such as the use of drones for the application of fertilizer or herbicides, require high bandwidth and low latency. New technologies to aid and improve agricultural operations are constantly being developed and released to market, creating a growing demand for bandwidth in and around the farm and underscoring why a robust and scalable network connection is essential.

As Congress looks at USDA's broadband programs via the upcoming Farm Bill, scalable, future proof networks must be prioritized. The economics of deploying reliable, high-speed internet infrastructure in rural and remote areas is challenging for any provider, with low population densities and difficult terrain presenting little opportunity for return on investment. However, consumer demands for broadband speeds and capabilities continue to grow⁵. With that in mind, minimum build to speeds in any future rounds of federal funding should be at least 100/100 Mbps symmetrical, and reevaluated on a consistent and regular basis to ensure that rural communities and families receive adequate broadband service both now and into the future. This will also eliminate the need for Congress to fund incremental network upgrades down the line.

² https://openvault.com/wp-content/uploads/2023/02/OVBI_4Q22_Report.pdf

³ <https://www.fiercetelecom.com/telecom/fba-tips-household-broadband-speed-need-to-surpass-2-gbps-by-2030>

⁴ <https://www.fcc.gov/document/fcc-annual-broadband-report-shows-digital-divide-rapidly-closing>

⁵ <https://www.broadbandtechreport.com/test/article/14293999/openvault-finds-usagebased-broadband-consumption-par-with-flatrate>

Recently, Reps. Zach Nunn and Angie Craig introduced the ReConnecting Rural America Act, a bill that would codify the ReConnect program, prioritize symmetrical network speeds, and would provide the flexibility for the Secretary of Agriculture to reevaluate the minimum acceptable level of broadband service provided to rural areas. These flexibilities are important in ensuring that rural communities and families receive adequate broadband service now and into the future.

Reevaluate How Overbuilding is Defined

Duplicating federal support to build broadband networks is a serious concern. However, the level of service that federally supported networks provide must be considered when discussing the topic of overbuilding. As previously discussed, federal programs acknowledge anything under 25/3 Mbps to be considered “unserved,” and anything under 100/20 Mbps to be considered “underserved,” yet it was only recently that these standards were adopted for some broadband programs. For example, the 2018 Connect America Fund Auction at the FCC allowed providers to bid in a 10/1 Mbps speed tier, and those winning providers will continue to receive support through 2028. Similarly, the first two rounds of ReConnect, which made awards in 2019 and 2020, respectively, had a minimum build to requirement of 25/3 Mbps⁶. Federal programs do not move quickly, which is why future-looking standards must be put in place.

Any discussion of reforms or constraint against overbuilding should be coupled with an evaluation of ongoing federal support programs, and the quality of service those programs are supporting. Rural Americans should not be relegated to sub-par, “good enough” broadband service simply because an area is already receiving or has a commitment to receive support to build a network that does not meet current federal definitions of broadband or consumer demands. Similarly, continuing to provide federal support for networks that no longer meet the definitions of “served” is not good public policy nor is it a good use of taxpayer dollars. Instead, this will leave many rural residents without adequate service unless another ISP is willing to tackle the high costs associated with building this infrastructure in hard-to-reach areas without any additional support.

Permitting Reform is Needed

The National Environmental Policy Act (NEPA) regulations present a significant challenge to rapid infrastructure deployment, often delaying projects and driving up costs. Co-ops face NEPA requirements when seeking a variety of federal permits, approvals, and financial assistance, such as access to power line rights of way on federal lands. In some instances, NEPA has been applied differently by federal agencies, or even within different field offices of an agency.

For example, when a cooperative in Colorado won a USDA ReConnect award to provide broadband service, they planned to use existing electric infrastructure for the project and did not anticipate any permitting problems. However, the project sought to cross land managed by the U.S. Interior’s Bureau of Land Management (BLM), which required full oversight and review of the proposed USDA funded infrastructure project simply because the project involved broadband service rather than electric service. As a result, the co-op was required to undergo an expensive,

⁶ https://www.rd.usda.gov/sites/default/files/foa_2_awards_report_508c.pdf

time consuming, and onerous permitting process through BLM that added months of delay and an unanticipated, and unbudgeted, \$800,000 to the project. For electric service, the existing rights of way are sufficient, and the co-op can upgrade their facilities without the added time and expense. But because this co-op was attaching broadband infrastructure to their existing poles in the existing right of way, BLM treated the project as a greenfield build which triggered a full environmental review.

In many instances, existing rights of way and easements only apply to electric service and not to broadband, which impacts not only cooperatives deploying broadband but any electric utility seeking to lease out excess fiber capacity to third-party telecommunications providers. Many cooperatives are including fiber to support electric operations or implement smart grid technologies. Fiber installed to support electric operations is typically allowed in electric utility rights of way, but if a co-op leases excess fiber to a third party for retail broadband, or chooses to provide retail broadband themselves, it could trigger a violation. Often, the utility must renegotiate the right of way or easement agreement with each state or federal agency, local jurisdiction, or private landowner, which can take years and can cost millions of dollars.

The National Broadband Map Still Presents Challenges

In November 2022, the Federal Communications Commission (FCC) released the pre-production drafts of the National Broadband Maps, which are required to be used by the National Telecommunications and Infrastructure Administration (NTIA) to calculate how much states will receive in BEAD based on the number of unserved and underserved locations in each state. The maps released by the FCC display a more granular, location by location picture of where broadband service exists across the country and are a significant step forward from the previous maps, which tracked broadband deployment on a census block level basis.

As part of the ongoing mapping process, the FCC collects self-reported, location level data from Internet Service Providers (ISPs) through the Broadband Data Collection (BDC), which happens twice per year. This data reflects the advertised availability of broadband service or where it could be installed, as reported by the ISPs in those areas. Once the maps were released, the FCC invited the public to review the data displayed and submit challenges highlighting inaccuracies.

NRECA worked to organize a multi-pronged response to the new maps, coordinating with cooperatives to submit over 260,000 availability challenges across multiple states, in addition to a grassroots education campaign to help cooperative members understand the map data and how to submit an individual challenge. Given the historic amount of funding made available through the upcoming BEAD program, it is critically important to NRECA and its members that this data is correct. Inaccuracies could mean that cooperative members miss their chance at a broadband connection through this historic funding opportunity.

Despite significant progress in improving the map's accuracy over the past six months, it is clear that there are still discrepancies between what the map displays and the realities on the ground. The continued reliance on advertised speeds instead of actual speeds opens the door to gamesmanship with mapping data and could prevent rural areas from receiving a high-speed internet connection.

Continued coordination between the FCC, NTIA, and USDA on broadband mapping initiatives would help ensure map accuracy. USDA is a uniquely focused agency with substantial knowledge of rural issues and areas, and has relationships with rural communities. USDA is a valuable partner for communities seeking to access and implement federal programs, and increasingly the agency is playing a key role in helping to connect rural areas with the broadband resources they need to thrive. Given their rural focus, increased coordination with USDA on mapping accuracy and challenges could prove beneficial to ensuring rural communities are accurately reflected in mapping updates.

Conclusion

Rural electric cooperatives are deeply committed to bridging the digital divide and connecting rural homes and businesses with reliable and sustainable high-speed broadband service. As this Committee considers opportunities to connect all rural communities, I appreciate the opportunity to provide the cooperative perspective on USDA's broadband programs, and your attention to this important and timely issue. NRECA and the nation's electric cooperatives look forward to working with this Committee and others in Congress to address these issues and close the digital divide once and for all.