Statement of

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Chair Latta, Ranking Member Matsui, Chair McMorris Rodgers, Ranking Member Pallone, and Members of the Subcommittee, thank you for inviting me to speak about the importance of continued support for rural broadband and digital equity funding.

I'm Sara Nichols, a Senior Planner, who specializes in broadband and digital inclusion for Land of Sky Regional Council (LOSRC) a local government development district in Western North Carolina (WNC). We serve four rural mountainous counties in the Appalachian region of WNC. The 1,867 square mile region is dotted with small towns and communities with one urban center, Asheville, and has a strong agricultural production history. It is connected by the French Broad River, with its peaks and valleys, and borders states South Carolina and Tennessee with similar characteristics. Like many rural areas across the country and much of Appalachia, we suffer from healthcare disparities, a lack of affordable housing, and insufficient economic diversification. During the pandemic, we experienced rapid increases in population that drove up the cost of living for local community members and escalated the importance of our broadband connectivity challenges. While the pandemic exacerbated the challenges, communities in WNC

were already painfully aware that broadband is essential for participation in the 21st-century economy and society. It is how we work, learn, connect with friends and family, and access healthcare and government services--and yet 13,000 households[1] in our region and at least 1.1 million North Carolinians still lack access to affordable, reliable broadband.[2]

My work is to make sure these communities in WNC are seen, heard, represented, and have all the digital opportunity tools needed to thrive. While the LOSRC board has made broadband a top priority, these statements are based on my experiences implementing broadband and digital inclusion and not necessarily the views of LOSRC.

When we first researched the broadband and digital equity needs of the residents in our region, we found two main problems that kept WNC residents offline: a lack of infrastructure and affordability of broadband subscriptions. We also found, that while a lack of access plagued many residents, high subscription costs were the more prominent barrier, impacting more households than a lack of access. The digital divide can only be bridged by taking a holistic and comprehensive path that includes the removal of all barriers to connectivity. We address this by implementing a person-based approach that includes reliable infrastructure access, affordability of service, access to meaningful devices, and digital skills training.

Poverty is everywhere--from rural Appalachia to urban areas in California--yet 15.4 percent of households under the poverty line reside in rural areas vs. 11.9 percent in urban areas.[3] Perhaps this is why rural areas have embraced the Affordable Connectivity Program (ACP) and

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[1] North Carolina Broadband OneMap. https://www.nconemap.gov/pages/broadband
[2] North Carolina Department of Information Technology Division of Broadband and Digital Equity. https://www.ncbroadband.gov/
[3] USDA Economic Research Service. "Rural Poverty & Well Being." https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/#:~:text=According%20to%20the%20most%20recent,year%20peak%20of%2018.4%20percent

why 15 percent of all rural households have enrolled.[4] For instance, in NC-11, 39,013 of our 303,422 households are enrolled in the ACP program.[5]

Internet Service Providers in our region support ACP, and find that they can implement projects for less cost because they can anticipate higher adoption rates in low-income areas. ACP can reduce the amount taxpayers spend on broadband infrastructure deployment in rural communities by up to 25%.[6] Adoption of service increases infrastructure. Given the high expense of building infrastructure in our area, we take solutions that lower costs very seriously.

Providers also have to consider capital and future operating costs as they develop their service fees, and since it can cost more to bore through a mountain than along a road in a valley, we see a wide range of prices for basic service across our diverse region. In some cases, ISPs can offer plans where the $30 ACP subsidy covers the entire service package, while other ISPs have plans over $100 per month, which means a $30 discount is not enough for many of our households.

Yet as we stand here today, the future of the ACP program is in jeopardy. If Congress does not renew the ACP program by the end of this year, it is projected to run out of funds and cease to exist by the second quarter of 2024. If this happens, it will lead to higher-cost infrastructure projects that slow down our deployment--meaning rural folks across the country and my neighbors in Western North Carolina will have to wait even longer to have access to affordable broadband in their homes.

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[4] John Horrigan, "The Affordable Connectivity Program and Rural America," the Benton Institute for Broadband and Society, June 27 2023, https://www.benton.org/blog/affordable-connectivity-program-and-rural-america

[5] Digital Progress: The Affordable Connectivity Congressional Map. https://map.digitalprogress.tech/

[6] K. Clark et al., "Closing the Digital Divide Benefits Everyone, Not Just the Disconnected" (Common Sense and Boston Consulting Group, 2022), https://www.commonsensemedia.org/sites/default/files/research/report/2022-cs-bcg-closing-digital-divide_final-release-3-for-web.pdf.

Across the country, ACP is gaining momentum as communities learn about the opportunity and how to share it with those who can benefit. While still in its infancy the program has connected nearly 21 million households to broadband.[7] Participants in our region are now able to search for jobs, attend classes, acquire skills, and pursue healthcare remotely. It's a program we simply can't afford to lose.

Five years ago, broadband funding was limited and very few Internet Service Providers showed interest in pursuing available broadband grants. The lack of private investment from ISPs left unprofitable areas unserved, and the lack of public funding options left a widespread "Swiss cheese approach" to connectivity. The holes are often in the most rural parts of the region. This left local leaders to assemble lower-impact projects because something was better than nothing, but when the available technology doesn't meet the needs of the people, this sends a message that suggests that people in rural areas don't deserve real solutions.

Now, thanks to the American Rescue Plan and the Bipartisan Infrastructure Law, we have the opportunity to meet these needs. Last year, 21 proposals from our region were submitted to the North Carolina Growing Rural Economies Access to Technology (GREAT) grant, providers are actively building projects, and there is excitement around future funding rounds.

Due to low population density and rocky geography, we have slim margins on the most expensive broadband fiber deployment projects in North Carolina. Other cost-effective strategies have limitations in our region that vary by season, require deep fiber backhaul, have signals that can't make it through mountains, and can be unreliable. Technologies like wireless can work for some, but not for all, and can break up contiguous areas from the profitability of a

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[7] Universal Service Administrative Co. ACP Enrollment and Claims Tracker
https://www.usac.org/about/affordable-connectivity-program/acp-enrollment-and-claims-tracker/

more sustainable solution. Ultimately, increasing middle-mile fiber into communities will help support the diversity of technology offerings needed.

These features present unique challenges that we work creatively to solve.

I call it "Barn Raised Broadband". In the way that rural America doesn't work alone, but rather together in their community to collectively build something beautiful that will last.

The first broadband infrastructure project I was a part of was in an isolated and unserved section of Madison County, NC that I was told would never be served because it was too expensive. This community was worried their children wouldn't be able to stay because of a lack of connectivity and jobs. Further compounding these fears, the community lost its elementary school due to the declining population. Residents have long commute times to access healthcare causing additional missed work caring for loved ones. Some students had to travel 45 minutes to find the nearest public hotspot to do homework in a library parking lot.

This community rallied around the understanding that having fiber would provide the opportunities they needed not just to survive, but thrive. These members astutely asked for fiber by name because they knew it would provide a safe, stable connection, where other technologies have failed them. The county had economic development projects asking for fiber they couldn't win and emergency management needed increased backhaul for public safety communications to protect citizens.

In order to solve these challenges, Madison County identified a federal grant and helped the French Broad Electric Membership Cooperative (FBEMC) with components of their application for a fiber-to-the-home project. Madison County's leadership attended the local fire department's annual BBQ and collected hundreds of letters of support for the project. In 2018 it was funded and through a partnership with the Laurel Community Center, we raised this barn together.

In less than two years the trajectory for this community had reversed. Visit us today and you'll see new local small businesses, children's opportunities, art studios, a science research center, and a public computer lab with a free open Wi-Fi network.

This is the heart of "Barn Raised Broadband". A community with a vision, that works together, to create a better way of life.

The best part of this story is that the FBEMC learned how to leverage funding to continue to grow its network and now has a service coverage spanning almost the entire county. Madison County went from being our least connected county to being the most connected with 98% of households connected in less than 5 years.

FBEMC also knew that by participating in the Affordable Connectivity Program (ACP) they would increase adoption, allowing their investment to continue to grow and serve their members holistically. However, despite gigabit speeds, Madison County still ranks highest in our region for digital distress due to limited device access, aging populations, and poverty levels.[8] Infrastructure by itself does not bridge this digital divide.

We are extremely grateful for the immense support from Congress toward closing the digital divide. These investments pay dividends in a community's ability to transition from surviving to thriving. But, the fight to close gaps is not over.

We need more funding to build fiber, not just in the last mile but in middle-mile networks that create more efficiencies, improve resilience, and make communities more competitive. We need to continue to support the ACP program and make the affordability of service tangible to all residents. I urge you to continue to invest in broadband, ACP, and digital equity because the

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[8] North Carolina Department of Information Technology Division of Broadband and Digital Equity. https://www.ncbroadband.gov/digitalequity

work is not over, it needs to evolve. By making these investments in broadband infrastructure and the ACP program you are showing rural communities like mine that our futures, our children, our safety, and our quality of life is worth investing in.

Thank you for your time, raising awareness, and having this important conversation.