



Statement by

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On behalf of

NTCA–The Rural Broadband Association, and
The Small Company Coalition

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*Expanding Broadband Access and Capabilities
to Small Businesses in Rural New York*

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INTRODUCTION

Thank you for the invitation to participate in today's discussion on expanding broadband access and capabilities to small businesses in rural New York. I am Director of Legal & Industry affairs and Assistant General Counsel for NTCA–The Rural Broadband Association (NTCA), which represents seventeen small, community-based rural telecommunications providers in the state of New York and nearly 900 similarly sized rural carriers nationwide. My remarks today are on behalf of NTCA, as well as the Small Company Coalition (SCC), which represents small rural broadband providers and vendors serving them, located in eleven states. Small, rate-of-return rural telecom providers (commonly called “RLECs”) serve about 5% of the US population and roughly 40% of the country's landmass. These companies operate in rural and tribal areas long ago left behind by larger service providers because the markets were too high-cost – too sparsely populated, too far from larger towns and cities, and/or just too challenging to serve in terms of topography or terrain.

As anchors in the communities they serve, these small businesses create jobs, drive economic activity, and connect rural Americans to the world. Moreover, these rural network operators have been at the forefront of the broadband and Internet Protocol (“IP”) evolution for years, making every innovative effort to deploy advanced networks that respond to consumer and business demands for cutting-edge services. In rural America, that translates into economic development that produces jobs, not only in agriculture, energy and other industries with a strong rural presence, but in the healthcare sector, and just about any other retail industry that requires broadband to operate in this day and age.

Much of the small business world is already demanding higher broadband speeds to help it interact with and sell to customers near and far, and rural telcos – which are small businesses themselves in nearly every instance – are leading the way in deploying high-speed, sustainable broadband to rural America; thereby providing an incubator for small business ideas in rural America to be implemented and to flourish. Fixed and mobile broadband, fixed and mobile voice, video, and Internet Service Provision are among the numerous telecom services that rural New Yorkers can access thanks to the rural industry commitment to serving sparsely populated areas.

Nearly all small, rural carriers in New York have deployed broadband to 99% or more of their rural service areas. Further, these small businesses have a brilliant track record of collaborating to build fiber networks that benefit wide swaths of rural New York. For example, the Adirondack – Champlain Telemedicine Information Network (ACTION) now delivers up to 1 Gbps fiber/Ethernet connections to 49 hospitals and healthcare facilities from Massena to the Tri-Lakes to Plattsburgh to Glens Falls all the way down to Hoosick Falls in Rensselaer County. The Development Authority of the North Country (DANC) served as the project manager for the ACTION build, with subsidiaries of Champlain Telephone Company, Nicholville Telephone Company, and Chazy Westport Communications providing service to individual locations.

The Independent Optical Network, more commonly known as ION, is an Albany, New York based, statewide fiber network that connects more than 100 upstate New York communities and their surrounding rural areas with its 3000+ mile redundant and diversely routed network. ION currently provides services to the four major cellular providers, national and regional telecommunications providers, hospitals and healthcare organizations, colleges and universities, governmental entities, and businesses across its robust fiber network. ION was founded through the vision and investments of fifteen small, rural telecom providers that have been supporting customers in rural upstate New York for decades. ION's state-of-the-art network was designed for geographic network diversity to ensure available and affordable telecommunications access for all, the ability to easily scale the size of the network for future growth and bandwidth requirements, and redundancy that drastically reduces network downtime. ION enables connectivity to over 190 national and international network providers, giving small businesses in rural New York the ability to compete nationally

and internationally. ION's carrier neutral approach allows all of New York to access the latest in voice, broadband and video services.

Through a recently completed \$50 million project that included a significant federal investment supplemented with state investments, ION can serve more than 300 anchor institutions, including libraries, state and community colleges, state and county agencies, and healthcare organizations. In addition to these organizations, the project makes broadband more readily available to 250,000 households and 38,000 businesses. It also provides much-needed investment and job opportunities in these communities. For example, for decades now, rural institutions have had an extraordinarily difficult time procuring reasonably priced broadband. With the new ION network, affordable broadband is now available to Alfred University and institutions across the state. The results have truly been transformational," said Gary Roberts, Alfred University's director of information technology. James Wright, CEO for DANC, has said the project "will provide new opportunities for business, new jobs and greater economic development for the entire seven-county region."

Now under construction, the \$4.5 million, 127-acre Finger Lakes East Business Park in Cortland County is counting on the ION fiber build to draw future tenants. Also, the Otsego County Wireless Network will leverage the ION fiber backbone to deploy last-mile, wireless broadband to 24 towns, 9 villages and 1 city in Otsego County. The provision of affordable broadband will enhance the services offered by the educational, medical, commercial, and governmental entities within Otsego County, thus improving the overall health, welfare, and living conditions of all residents.

Similarly, Allegany County – where nearly 50,000 people reside in 38 towns and villages spread across 1,000 square miles – has plans to create a county-wide platform for providing access to the ION fiber optic network, delivering quality broadband to Allegany County operations, municipalities, libraries, residential neighborhoods, businesses, farms, emergency responders, and last mile communications providers. This will include 17,400 households that are currently without broadband service. Public safety will benefit tremendously, with capacity to deploy Next-Generation 9-1-1 equipment and develop mobile data services, video backhaul and Automatic Vehicle Locator (AVL) capability. The network will hand-off broadband access to the small, rural telecom providers to support their competitive capability.

Delhi Telephone Company in Delaware County, NY has more success stories, including a redundant fiber service built to a manufacturing facility that will remain in the Delhi area thanks in part to the availability of robust, advanced broadband. Many home-based businesses have relocated to Delaware County based on the increased fiber-to-the-home connectivity offered by Delhi. Anchor institutions benefit as well with fiber rings for both the Delaware County office buildings and the SUNY Delhi off-campus buildings. Delhi has already built fiber to half of its population, with 20 Mbps offered to every home – scalable to 1 Gbps in the future depending on customer demand.

One more example is Slic Network Solutions which is a wholly owned subsidiary of Nicholville Telephone Company, a 110 year old RLEC. Slic has been able to construct over 1000 miles of last mile fiber to previously rural unserved/underserved areas of northern New York passing more than 6,000 homes in some of the most rural areas of the Adirondack mountains. In addition, the network has brought affordable high speed connections to businesses, municipal office, libraries and other anchor institutions. It has also connected military personnel to their loved ones at home, enabled telecommuting and distance learning and reduced isolation of rural seniors bringing a higher quality of life to these previously unserved areas.

Clearly, small, rural telecom providers in New York and around the country are aggressively pursuing ground-breaking broadband solutions through innovation and creative partnerships. These initiatives use broadband networks to enable applications that rural communities can leverage for innovative economic development and commerce, blue-ribbon education, first-rate healthcare, cutting-edge government services, robust security and more efficient energy distribution and use. Broadband-capable networks facilitate greater interconnection of the community's resources and can enable citizens' participation in the global economy.

RURAL BROADBAND BENEFITS THE ENTIRE U.S. ECONOMY

A series of recent studies confirms that significant benefits flow from rural broadband investment to broader urban and statewide populations. The rural telecommunications industry supported \$14.4 billion of economic impact in 2009, with \$9.5 billion occurring in urban areas, and more than 70,000 jobs, 45% of which were placed in urban areas.¹ In Colorado, rural telecom helped create 428 jobs, adding over \$21 million per year to state payrolls.² North Dakota saw an additional \$18 million in Federal tax revenue and \$31 million in state tax revenue arising out 1,100 direct jobs and 800 secondary jobs generated by rural telecommunications activity.³ The converse holds true, however, from adverse changes – “reforms” that cut investment in rural broadband hurt state economies. In Kansas, for example, potential cuts in Federal rural telecom programs led to projections of \$1.4 million in personal income tax and \$1.3 million in retail sales tax losses.⁴ A personal income loss of \$14.1 million was projected for 2012 alone in New Mexico from the same proposed cuts.⁵ Studies examining the impact of rural communications activity – including purchasing, employment figures, and projected tax revenues – confirm rural communications to be a powerful generator of urban economic growth and federal and state tax revenue. In short, rural broadband is an investment with real benefit and returns for the nation as a whole.

The rural telecom industry has always been at the forefront of technological innovation, being the first segment of the industry to completely convert to digital switched systems, provide wireless options to their hardest to reach customers, offer distance learning and tele-health applications, provide cable-based video, then satellite video, and now IP video to their markets, and it was a member of the RLEC community that first deployed an all-fiber system. The rural industry continues to lead in the deployment of broadband capable infrastructure.

To not have access to high-speed Internet in this day and age is unimaginable to most people, yet millions of Americans live in areas – mostly in rural territory served by carriers other than RLECs – where there is no robust broadband that enables meaningful access to the countless economic and educational opportunities

¹ Kuttner, Hanns, *The Economic Impact of Rural Telecommunications: The Greater Gains*, HUDSON INSTITUTE, at 6, 8 (2011).

² Shields, Martin, Cutler, Harvey, and Marturana, Michael, *The Impacts of Colorado Telecommunications Association Members on the Colorado Economy*, REGIONAL ECONOMICS INSTITUTE, COLORADO STATE UNIVERSITY, at 9 (Oct. 26, 2011).

³ McKee, Gregory, *The Effect of Changes in Universal Service Funding on the Economic Contribution of Rural Local Exchange Carriers to the North Dakota State Economy*, DEPARTMENT OF AGRIBUSINESS AND APPLIED ECONOMICS, AGRICULTURAL EXPERIMENT STATION, NORTH DAKOTA STATE UNIVERSITY, at 16-19 (Dec. 2011) (“Like other RLECs, North Dakota RLECs buy many specialized products and services not available in state economies. National and international markets typically provide these products and services.”).

⁴ *Kansas Rural Local Exchange Carriers: Assessing the Impact of the National Broadband Plan*, W. FRANK BARTON SCHOOL OF BUSINESS, CENTER FOR ECONOMIC DEVELOPMENT AND BUSINESS RESEARCH, WICHITA STATE UNIVERSITY, at 11, 12 (2011).

⁵ Peach, James, Popp, Anthony V., and Delgado, Leo, *The Potential Economic Impact of the National Broadband Plan on the New Mexico Exchange Carriers Group*, OFFICE OF POLICY ANALYSIS, ARROWHEAD CENTER, NEW MEXICO STATE UNIVERSITY, at 18 (2011)).

available through the Internet. These people have small business ideas that need broadband to succeed and they need jobs that small businesses can provide. Yet, as important as it is to deliver broadband to the unserved, it's just as vital that those already receiving broadband remain served – the benefits that flow from broadband are ongoing. If a network is built but then becomes unsustainable or the services over it unaffordable or of poor quality, such developments deny the benefits of broadband for small businesses and all consumers.

THE IP EVOLUTION AND UNIVERSAL SERVICE

The Communications Act's timeless goal of making advanced nationwide and worldwide wired and wireless networks available and affordable for all Americans is as important as ever in an increasingly interconnected and competitive broadband-based economy. This broadband revolution presents major opportunities for small businesses to innovate and grow, but the business (or entrepreneur with an idea) must have broadband access to take full advantage. "Market-based" frameworks will ensure many consumers realize the full benefits of innovation at the lowest possible prices, but in rural areas there are often no such "markets" to speak of.

Deployment and ongoing operation of communications networks in high-cost rural areas has to date relied on a combination of revenue derived from fees paid by subscribers, intercarrier compensation paid between carriers, universal service support, and privately-sourced capital. The latter includes an effective partnership of loan and grant opportunities administered by the U.S. Department of Agriculture's Rural Utilities Service and other agencies that help to finance in the first instance the deployment of networks to the benefit of the whole community. These programs were originally designed to provide cost recovery for voice oriented systems, but today support broadband deployment as well. Similarly, the universal service program needs to be reoriented to support broadband-capable networks. Though the FCC, with great encouragement from the telecom industry, has moved to establish such a fund for price cap regulated (large and mid-sized) carriers, it has yet to create a similar fund for rate-of-return regulated (small) carriers. As a result, RLECs are still forced to leverage the legacy voice USF program for broadband-capable network deployment, while larger price cap carriers have the Connect America Fund that is being designed to incentivize broadband investment. Though small, rural providers have been leaders in broadband investment even under the current statutory and regulatory regime, further law and policy changes will be necessary to ensure high cost rural areas remain served while providers edge out into unserved areas.

The Communications Act mandate of universal service, which builds upon decades of national policy, has been – and remains – essential in enabling small rural providers to deploy and upgrade cutting-edge networks over time where no other carrier or entity could find a business case to do so. Indeed, this mandate has already helped these small, community-based businesses deliver at least DSL-speed broadband to over 90% of rural America (even as there is more to be done and sustained). Furthermore, not only does this long-standing national policy promise rural Americans an opportunity to participate in the economic, educational, and public safety benefits of the broadband economy, but it allows the entire country to benefit from the ideas and ingenuity of rural residents and the resources and business opportunities that exist in rural and remote areas.

The delivery of voice and nearly every other telecom service is undergoing transformative change through the IP Evolution – that is, telecom and information services are increasingly converging as IP applications that run over broadband. This phenomenon has rendered the current legal regime outdated, as it regulates the same service differently based on the technology platform the service rides on. IP, wireless, and other technological advances are changing the marketplace in ways unimagined even a few years ago, but technology alone will not miraculously solve the high costs of rural broadband deployment. Indeed, the IP

Evolution that is already occurring under existing regulatory frameworks will be promoted and sustained only through careful, focused statutory and policy updates that are guided by the Communications Act's core principles of consumer protection, competition, universal service, and public safety. Similarly, NTCA's IP evolution petition filed with the FCC in late 2012 called for a careful regulatory approach to the transition that considers what rules make sense in this broadband age if we're to remain true to those same core principles. Given the challenges to serving rural areas, the answer is probably not going to be the legal and regulatory status quo, nor will it be complete deregulation.

A faithful and disciplined approach to the core Communications Act principle of universal service must ensure that, even in the event of any statutory or regulatory update, those areas served through support from federal and state USF mechanisms not only "become" served in the first instance but that they "remain" served, and that consumers and businesses everywhere can make full use of advanced communications services at affordable rates. Further, Congress should ensure that specific, predictable and sufficient support will continue to be provided to help ensure reasonably comparable services at reasonably comparable rates in rural, high-cost areas, as mandated by current law.

A perfect example of a legacy regulation that makes no sense in the broadband age, and part of the fallout from the FCC's incomplete USF reforms, is the rule that essentially forces some rural customers to purchase regulated voice service just to make broadband affordable. Universal Service support should not be tied to a limited service, but available instead to advanced networks that provide consumers with access to a variety of essential, high-quality services from which each consumer may choose. Small, rural carriers need support designed to promote broadband investment – as large carriers receive through the Connect America Fund – that doesn't penalize customers for taking only broadband service.

Congress should also consider an express directive to the FCC to ensure that all who use our nation's networks – by whatever service or technology – are responsible to contribute to the universal well-being and availability of those networks on an equitable basis. USF is still funded by assessing interstate and international long distance telephone service. The pool of assessable telecommunications service revenues is shrinking even as overall communications-related revenues grow. As a result, the USF program effectively has an artificial funding ceiling that lowers a bit each day due to the failure to broaden the contribution base and to stem the incentives (and abilities) that are in place today which encourage or allow entities to avoid contributing. This de facto cap on the USF program will handicap severely our nation's ability to fulfill the statutory core principles of universal service, competition, and public safety, unless changes are made. Indeed, broadening the contribution base to include the information services that USF already supports has previously received bipartisan backing in the US House.⁶

Finally, the recent Comcast/Netflix deal made clear that, while peering is the name of the game in the IP world, small businesses could be forced by larger providers to haul data traffic long distances and pay significant sums to interconnect in the absence of a backstop to ensure fair dealing in interconnection agreements. With the massive demand for data set to grow exponentially in the coming years, networks of all kinds must seamlessly interconnect, and clear "rules of the road" must be in place to promote universal service and prevent recurrence of consumer-affecting disruptions such as the persistent "rural call completion" epidemic described below.

Entrepreneurial small rural carriers have leveraged private capital, universal service support, intercarrier compensation, and public-private partnerships to lead the ongoing IP Evolution. A Communications Act update and attendant regulatory changes that adhere to the core principles of consumer protection,

⁶ See H.R. 5828 § 102(a), 111th Cong., 2d Sess. (2010).

competition, and universal service will ensure that Americans already served remain served and will promote future innovation, investment, and adoption across the nation, independent of underlying technology.

CALL COMPLETION

The scourge of rural call completion failure encompasses many of the fears of what consumers can expect in the absence of a clearly defined, time-tested regulatory backstop that requires network operators to interconnect with one another on reasonable terms and precludes service providers and network operators of all kinds from blocking data. Despite the problem having been brought to its attention three years ago, the FCC has been unable to stem the tide of dropped and/or misidentified calls to rural areas, with their efforts bearing two enforcement settlements and a recording and reporting mandate that has yet to be implemented and is currently being challenged by some.

This widespread problem is seriously and negatively affecting not only consumers, but also public safety and the viability of businesses located in rural areas. The problem often appears to stem from choices made by originating long distance carriers to use the cheapest possible route to transmit calls to rural areas – with the apparent sense that, if the calls should happen not to get there because a contractor in the middle (often called a “least-cost router” in the telecom industry) fails to deliver the call, there is little regulatory or economic consequence (if any) for such failures. The solution to this problem would require the originating long distance carriers to better police their service quality and the contractors they use. Greater transparency into the least-cost routing market would also help, but unfortunately scant information is available regarding who provides such services and when and where they do so.

This is not to say that the FCC has done nothing to address this – we just need the agency to immediately do more in terms of enforcement. Congress has sent a number of letters to the FCC already urging quick action. The FCC is working to implement an Order that would force carriers to retain information so that the scope of the problem could be ascertained on a company-by-company basis and enforcement action could be pursued. While having access to such data would be an important step forward, complaints of calls failing to reach rural America continue. The agency has entered into consent decrees on the subject with a couple of companies, but this has done little to stop the problem. Unreliable and/or dishonest routers appear to be the crux of the problem, and resolution will require addressing the problem directly. Thankfully, Sen Tim Johnson just introduced the Public Safety and Economic Security Communications Act (S. 2125) to do just that by requiring least cost routers to register with the FCC and commit to abide by basic service standards in order to be part of the voice call system.

REGULATORY FLEXIBILITY

While the Regulatory Flexibility Act directs executive agencies to consider more flexible approaches that could save small businesses money without undermining the purpose of regulation, in practice the FCC has been able to get away with minimal adherence to the form of the Act while disregarding its spirit and intent. Greater devotion to the intent of the RFA could direct millions toward investment as small businesses save the costs of battling and eventually complying with poorly drafted rules. The best example in recent years would be the USF Transformation Order that created a broadband fund for large carriers and left the small, rural industry with legacy USF support capped in opaque and unpredictable ways, costing millions in broadband investment while Congress pushes the agency to change the rules – something Chairman Wheeler agreed to do in December 2013. The rural industry remains hesitant to invest while it awaits a more predictable and investment friendly replacement for the much derided caps and continues to seek its own broadband-focused fund that supports standalone broadband.

Other examples of FCC rules that hinder small business growth include numerous, costly, and sometimes redundant reporting requirements that providers must wade through on a regular basis. Although NTCA and its RLEC members recognize the importance of accountability in the use of USF resources and the delivery of quality, affordable services to consumers, there is a need to strike a clear balance and take meaningful account of the costs associated with such reports. To the extent that small businesses are compelled to devote substantial employee or consulting resources to preparation of plans and reports, this necessarily detracts from the deployment of those resources for service delivery, network operation, and customer service. Stricter guidelines for action on waiver requests would also be welcomed. Currently, the FCC can sit on waiver requests indefinitely, leaving providers and investment waiting for years.

Thankfully, the Regulatory Flexibility Improvements Act of 2013 (H.R.2542) would improve the rulemaking process – for example, by requiring an agency, before publishing a proposed rule, to provide the Small Business Administration (SBA) with more information about a proposed rule. SBA could then solicit input on the rule from small businesses and convene a panel with the agency that results in a report on the rule's potential impact and a discussion of alternatives. Also, the Federal Communications Commission Process Reform Act of 2013 would implement a number of common sense process reforms such as publishing rules before adoption and soon after adoption.

RURAL UTILITIES SERVICE FINANCING

Another important tool helping advance state-of-the-art networks is the ability of small rural communications companies to obtain financing from RUS, which has been lending for broadband capable plant since the early 1990s. RUS lending and USF support are inextricably linked as 99.2% of RUS Telecommunications Infrastructure borrowers receive high cost USF support. The presence of high cost recovery is crucial to the RUS telecom and broadband loan calculus. RUS programs have helped rural providers deploy modern networks in many rural areas where the market would otherwise not support investment. Reliable access to capital helps rural carriers meet the broadband needs of rural consumers at affordable rates.

Unfortunately, the success, momentum, and economic development achieved from the RUS's telecommunication programs were put at risk as a result of the regulatory uncertainty arising out of the aforementioned USF reforms. It will be all the more important to continue providing RUS with the resources it needs to lend to the rural telecom industry it knows so well as demand for financing will inevitably increase when reforms are improved and carriers are given certainty, hopefully through a program like the Connect America Fund that is designed to promote broadband investment. As Congress continues to grapple with where to best direct scarce resources, it's important to note that the RUS Broadband Loan Program and the traditional Telecommunication Infrastructure Loan programs are funded with loans that must be paid back with interest – creating a win/win situation for rural broadband consumers and taxpayers. Rural providers look forward to building on an already successful partnership with RUS.

MOBILE VOICE AND BROADBAND

Rural consumers require access to a strong and reliable wireless network and rural carriers are attempting to meet that demand despite monumental challenges. Essential to a robust wireless market is an interconnected wireline network. The demand for high capacity fixed wireline broadband to support wireless networks will only increase as usage of handheld devices grows. But rural carriers must also know they will have opportunity to fully compete in the wireless marketplace before they will attempt to continue expanding their networks through effective use of spectrum. A lack of interoperability across the 700 MHz spectrum may

lead to spectrum lying fallow or islands of rural service with devices that cannot be used outside of a customer's home service area. A lack of fair and reasonable data roaming agreements with large carriers compounds the problem, creating barriers even when spectrum is interoperable. Furthermore, rural carriers often lack access to the equipment and handsets that are available to larger carriers. At a time when carriers are trying to diversify and make good use of spectrum assets, the lack once again of clear "rules of the road" leaves smaller operators largely at the mercy of larger carriers.

Finally, as the FCC moves forward with the upcoming 600 MHz auction plan it is essential that the agency allow meaningful participation by small rural and regional carriers. Most importantly, the FCC should allow carriers to bid on small license areas that will promote competition throughout the country. NTCA, the Rural Wireless Association (RWA), and the Competitive Carriers' Association (CCA) just announced a consensus proposal for the use of smaller geographic licensing areas in the upcoming 600 MHz auction. The proposal represents a historic industry collaboration and builds upon the FCC's proposed map of licensing territories by incorporating feedback from respective memberships and input from a variety of other industry stakeholders. The proposal consists of aggregated partial economic areas reflecting 416 territories. The best scenario for small wireless providers and greater deployment would be smaller cellular market area (CMA) licenses (over 730 territories). The consensus proposal was offered as a compromise between CMAs and earlier licensing proposals that contained oversized license areas that would significantly limit smaller carriers' ability to participate in the auction and leave rural consumers and businesses unserved as larger bidders focus on more densely populated markets.

CONCLUSION

Small businesses play an essential role in deploying broadband to rural areas, and the services enabled by broadband are essential to the startup, operation, and growth of other rural small businesses. Rural America has a bright future powered by smart technologies that promote affordability, sustainability, and efficiency in the operation of rural industry and the delivery of essential services such as healthcare, education, and public safety – all key to rural population growth. The benefits that some rural communities are already experiencing will only be possible for all if robust broadband is available and affordable.

Small, community-based rural telecom providers are eager to continue deploying advanced networks and delivering the advanced services that rural areas need to participate in a broadband economy, but the Core Principles of universal service, consumer protection, and competition are critical to the success of this mission. Universal service and interconnection have worked to enable deployment of advanced, affordable communications services. These principles are as valid today as ever. As statutory and regulatory updates that reflect the IP marketplace are considered, these principles must not be abandoned; to the contrary, they must be renewed and reaffirmed expressly as part of any reform.

Thank you for the opportunity to testify, and for the House Small Business Committee's commitment to bringing about an environment conducive to broadband investment and small business growth.