

RESOLUTIONS FOR RURAL BROADBAND IN 2018

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Date:

January 3, 2018

Starting several years ago, and with an ever-increasing drumbeat since then, policymakers of all political persuasions and at every level of government have voiced concern about a lack of robust and affordable broadband access in rural America. This drumbeat hit unprecedented levels in 2017, as it seemed like every congressional office and state or local official wanted to talk “rural broadband” and craft solutions for the challenges presented. NTCA was delighted, honored and grateful to participate in so many of these conversations on behalf of its members – the companies and cooperatives based in the communities they serve with an unparalleled track record of delivering on the promise of broadband for rural America. Unfortunately, with a problem this complex, it can be hard to coalesce around common solutions. Every rural area is different in terms of distance, density and topography – making a “one-size-fits-all” solution elusive, if not impossible. Moreover, with a problem this significant, there is often a race to come up with “the best new idea” on how to solve it, resulting in multiple, competing efforts that may ultimately conflict with, rather than complement, one another or existing initiatives already underway.

Identifying Problems to Craft Solutions

The good news is that there is shared recognition that some “rural broadband problem” exists and shared motivation to overcome it. As we enter 2018, and especially as a broader debate about how to tackle our nation’s infrastructure challenges (including broadband) looms at the federal level, NTCA believes it may be helpful to step back and define more precisely the problems of rural broadband before identifying comprehensive and carefully-coordinated prescriptions for those problems:

- ***Availability is a real problem in some rural areas.*** Regardless of how one defines broadband, there are rural areas where consumers, businesses and anchor institutions lack meaningful access. [According to the Federal Communications Commission](#) (FCC), as of 2015, 39% of rural consumers lacked access to 25/3 Mbps broadband, and 31% lacked access to even just 10/1 Mbps broadband. Many unserved customers reside in the territories historically served by larger providers, who lacked sufficient incentives to justify investments as compared to the more urban communities they also serve. Of particular concern, the federal high-cost Universal Service Fund (USF) mechanism overseen by the FCC (which now includes the Connect America Fund) for many years failed to drive broadband network investment in these areas.
- ***But availability is not just a problem in rural areas served by larger providers.*** Even though the federal USF program historically did a better job of enabling broadband network deployment by smaller providers (like those in NTCA’s membership), the job is not done in the rural areas served by such smaller providers. Despite their productive track record in delivering rural broadband, these small businesses have not been able to reach all of the locations in their rural areas. [As NTCA’s annual member survey found](#), as of 2016, 33% of consumers served by NTCA members lacked access to 25 Mbps broadband, and 13% lacked access to even just 10 Mbps speeds. Furthermore, as the 10 Mbps number attests, even where NTCA members and carriers like them have delivered broadband in the past, many of these networks need upgrading to keep pace with tomorrow’s (or even today’s) demands and the kind of broadband access that urban consumers take for granted. In many cases, the networks still rely at least in part upon old copper that is aging badly or otherwise limits the speeds that users can receive.

- ***And availability is not the only problem.*** Once a network is built in rural America, that is not the end of the story. The costs of constructing a network in rural areas are significant, and they can take decades to recover given the relatively few users that can be reached. (The average density of a rural telco serving area is about seven subscribers per mile, or roughly 0.03% of the density of San Francisco.) In addition, the costs of operating a network spread across dozens or hundreds of miles are substantial; the concept of “windshield time” to drive hours between individual trouble calls is undoubtedly foreign to those that deliver broadband only in metropolitan and suburban clusters. These higher construction and operating costs, paired with a much smaller customer base from which to recover such costs, would result in rural broadband prices that are tens of dollars – or even tens of times – greater per month than what urban consumers pay for the same service. While often lost in the drive to overcome the availability challenge, this affordability concern is a “rural broadband problem” that can make or break the business case for investment in the first instance or sink networks once built. Sustainability and affordability are just as important as availability; put another way, it’s not just about getting networks out there – it’s about keeping them there, and keeping them affordable and up-to-date for the consumers that need them.
- ***The two primary barriers to sustainable rural broadband deployment are insufficient funding and uncertainty.*** NTCA members have an unparalleled track record of deploying rural broadband (even though the job is not done). So, what do these providers who live and work in rural America see as the barriers to broadband deployment? Two answers [rise to the top consistently](#) – insufficient USF support and regulatory uncertainty.
 - ***Insufficient USF Support*** – USF support has been and remains critical to make the business case for investment in rural broadband networks in the first instance. Although many confuse USF support with grant programs, the USF program does not provide grants, and it does not provide upfront financing for rural network investments. Instead, USF support aims to ensure that services delivered on rural networks are “reasonably comparable” in price and quality to those in urban areas. In other words, USF support does not “pay for” the network upfront, but rather provides a recurring revenue stream to help make the business case for private use of capital – whether a provider’s own cash on hand or loans – that actually then pays for the construction of a network in rural areas. In rural markets served by smaller operators like those in NTCA’s membership, the USF program was historically a substantial success, enabling tens of billions of dollars of private investment that in turn provided the levels of broadband access described earlier.

In recent years, however, a too-small and arbitrarily capped USF budget is driving both substantial declines in investment and increases in prices for rural consumers. NTCA members report that, for the 12 months ending June 2018, USF support cuts that average \$536,000 per company will lead to an average \$943,000 decline in future investments and cause average standalone broadband rates for many companies to be \$50 higher per month than they would be with sufficient support.

Thus, while access to capital for rural broadband can be a challenge, the even greater challenge is making the business case in the first instance for use of capital – and the USF mechanism has been and remains the linchpin to making or breaking that business case.

- Regulatory Uncertainty – Unpredictability in the USF program (in the form of never-ending reforms and fluctuating support levels), paired with uncertainty in other areas of regulation, has only exacerbated rural broadband investment barriers.

The high-cost USF program has been the subject of two significant reform efforts since 2011 – each creating varying degrees of uncertainty. Reforms adopted in 2011 included caps that vacillated from year to year, deterring investment and driving demand for network loans to all-time lows. These caps were ultimately eliminated due to their unpredictable nature, but a budget control mechanism enacted in 2016 operates in a similarly uncertain nature due to the insufficient budget. In the 15 months since taking effect, the average USF budget control has risen rapidly from 4.5% to 9.1% to 12.3%, resulting in larger and larger support cuts for smaller operators. Indeed, the only thing predictable about the budget control is that it yields ever-increasing cuts – even as the exact level of the cuts remains a “guessing game.” And if there is anything that stymies investment in long-term infrastructure assets, it is the notion of a “guessing game.”

Regulatory uncertainty is not limited to the USF program, however. The FCC has taken steps in recent months to dispel some of the uncertainty that would have applied to the delivery of retail broadband services by smaller providers, but other uncertainty persists. Most significantly, roadblocks and high costs to obtain permissions to build networks present challenges to network deployment. Reconciling and rationalizing the various methods that must be pursued to build on government lands and through or under railroad crossings will be essential to promote timely and cost-effective broadband infrastructure deployment.

Four Common-Sense “Resolutions” for Successful and Sustainable Broadband Deployment in 2018

With the problems facing rural broadband falling broadly into categories of availability, affordability, and effective regulation, it is important to craft solutions – or “resolutions”, in the New Year’s spirit – that work in concert to address these issues. New ideas to tackle one aspect of these problems or another can be helpful, but if such ideas do not account for the full breadth of the problems presented or consider comprehensive solutions, they can hinder, rather than help, the cause of rural broadband. Similarly, new ideas to tackle these problems are important, but they must not conflict with or undermine existing initiatives that are already working well to promote and sustain rural broadband.

With this backdrop, NTCA puts forward a simple **four-part policy prescription** for 2018 as a coordinated and comprehensive package to tackle rural broadband challenges right now and generate solutions that can be sustained for years to come:

1. Make Universal Service Work Again – As noted above, the high-cost USF has been and remains the linchpin to making or breaking the business case for rural broadband investment; it has underpinned the successful deployment of basic levels of broadband for millions of rural consumers. By contrast, even where capital is readily available in the form of reasonable loans or cash-on-hand, it is difficult, if not impossible, to justify investing in rural networks if the only means of recovering such costs is by charging rural customers multiple times what urban counterparts pay for comparable broadband. For years, a high-cost USF budget that grew at roughly the rate of inflation was sufficient to enable continued investment and sustain operations and reasonable rates on rural networks. But once that budget was frozen at 2010 levels, the effectiveness and long track record of success of the high-cost USF program started to be undermined. **Taking steps like those taken for the E-Rate USF program several years ago – where that program’s budget was recalibrated after years of hard caps and an inflationary adjustment was attached going forward – is a common-sense approach that can help get the high-cost USF program moving forward again.** Right-sizing the high-cost USF budget is an essential foundation and necessary first step for the other measures that follow to have a meaningful positive impact on rural broadband.
2. Provide Complementary and Carefully Coordinated Financing Vehicles for Rural Broadband – If sufficient and more predictable USF can be made available once again, this will renew the business case for rural broadband and unleash private capital. Some providers may have cash-on-hand to self-finance their network builds, and the restoration of a well-functioning USF program would also open financing doors through private lenders or the Rural Utilities Service under the U.S. Department of Agriculture (USDA) that have been only slightly cracked or even closed altogether in recent years. **Instead of creating new grant or loan programs from whole cloth – rather than trying to “build better mousetraps” – it would be far more efficient for policymakers to leverage and build upon the USDA and other capital programs already in place. Moreover, if any new programs are put into place to provide capital for rural broadband, these must be carefully coordinated with existing USDA programs and the high-cost USF mechanism to avoid the risk of duplicating or undermining the respective efforts of these initiatives. Finally, to reiterate the importance of a business case for rural broadband, it cannot be assumed that a loan program or even a grant initiative will enable rural broadband deployment in the absence of sufficient ongoing revenues in the form of customer revenues and USF support.**
3. Rationalize and Streamline Infrastructure Permitting – Although a sensible business case is an absolute prerequisite to commencing any rural broadband network project, obtaining permits necessary for construction can represent a significant “time and cost” barrier once projects are greenlighted. NTCA members have reported permitting delays on federal lands, for example, that result in months or even years of delay in construction, at times with already-purchased supplies sitting idle; other providers across the industry have reported similar delays and/or burdens in seeking approvals to deploy broadband networks in certain areas. Fee schedules for access can also be difficult to comprehend and at times appear arbitrary in assessment. Such procedural delays and additional costs hinder delivery of broadband in a timely and cost-effective manner – and while recent debate has often focused on how such barriers affect 5G wireless deployment specifically, next-generation wireless services will be increasingly dependent upon small cells *and* robust wireline/fiber backhaul that will typically need to be within several hundred feet of the areas in which services are being delivered. **A comprehensive strategy is therefore needed to address infrastructure permitting issues for wired and wireless networks alike; NTCA believes that the**

efforts of the Broadband Deployment Advisory Committee to develop recommendations under the oversight of the FCC should ultimately guide further regulatory and legislative efforts to rationalize and streamline permitting requirements and fee structures to the extent possible at the federal, state and local levels.

4. Provide Improved Access to Spectrum Dedicated for Rural Use – While mobile broadband represents a complement to fixed broadband rather than a replacement for such services, improved access to spectrum is important both to facilitate greater use of mobile broadband by rural users specifically and to enable targeted use of fixed wireless services where more robust services cannot yet be deployed. Unfortunately, spectrum resources are often concentrated in the possession of providers focused mostly upon deployment in more populated markets, leaving outlying rural areas as relative afterthoughts in terms of network coverage and service availability. **To enable greater access to spectrum that will be actively deployed and used in rural areas, spectrum resources should be parceled out in “right-sized” licenses that do not combine rural and urban markets. Moreover, there should be incentives for those providers that hold “fallow” spectrum in rural areas to partition that resource and provide access to providers interested and willing to undertake rural wireless broadband buildout.**

Conclusion: A Four-Part Plan for Rural Broadband Success

To be sure, the challenges of deploying rural broadband are significant “out in the field,” where distances, density and topography present diverse issues for operators to overcome. NTCA members and small operators like them know this better than anyone, living and working in the rural communities they serve and having achieved unparalleled success in delivering on the promise of broadband in rural America.

From a policymaking perspective, the fundamental problems presented can be summarized as issues of availability and affordability. Fortunately, solutions to these challenges with a proven track record of success are already in place – if they can just be “shored up” through sufficient funding and coordinated effort, rather than neglected, tinkered with repeatedly, or overridden by new potentially conflicting initiatives.

The track record is clear that the business case for rural broadband can be enabled – and our national broadband goals furthered – through a simple four-part plan that: (1) restores sufficiency and predictability to the current high-cost USF mechanisms; (2) leverages effective existing programs that already complement ongoing USF support by providing upfront loan or grant financing for rural broadband network construction; (3) rationalizes and streamlines infrastructure permitting; and (4) provides greater access to spectrum for use dedicated to rural communities. Resolving as a nation in 2018 to make progress on these four specific points would go a long way toward deployment of robust and sustainable rural broadband networks – for the benefit of rural consumers and communities, and the nation as a whole.