

A Path Forward To Address the Digital Divide

The FCC and a congressional committee are wrestling with recommendations to overcome the digital divide. Meanwhile, several innovative proposals before the Kansas House of Representatives offer simpler approaches to fund rural broadband.

By Tom Sloan / *Kansas State Legislature*

Affordable, reliable, high-speed internet service is not a luxury – it is an increasingly necessary part of daily life. Rural and small-town students need access to teacher-provided materials, as well as materials on such diverse websites as NASA and the Library of Congress, to be competitive with their urban contemporaries. State government agencies increasingly require electronic filing of data; telemedicine and telehealth monitoring capabilities require broadband connectivity; and farmers, merchants and small-town businesses increasingly transact business electronically to reach national and international customers and suppliers.

Unfortunately, even with the Connect America Fund, millions of Americans will not have access to affordable, reliable broadband. The touted 5G technology for wireless communications devices will not address the need for broadband services that adequately and affordably permit business, health care, education and government transactions.

Soon after his appointment by President Trump, FCC Chairman Ajit Pai established the Broadband Deployment Advisory Committee (BDAC) with several working groups to address the continuing digital divide and impediments to its resolution. The BDAC and working groups were composed of telecommunications industry officials, public utility commission representatives,

broadband technology vendors, consumer advocates and a single state legislator – me.

The State Model Code Working Group, in which I participate, was charged with developing a model code for states to use in addressing the digital divide. The model code was not intended to define best practices, because such practices change as technological capabilities and economics change. In addition, practices that might work in a state with miles of open space may not be appropriate for states with mountains, even if both have low population densities. Rather, model codes are paths for state legislators and other interested parties to consider as they develop legislation that reflects individual state policy preferences.

RURAL DEPLOYMENT RECOMMENDATIONS

The subcommittee's efforts addressed two types of digital divides: lack of access to any kind of broadband and lack of access to broadband as defined by technological capabilities and user needs. Broadband that met user needs was defined as 25/3 Mbps, less than 100 millisecond latency and at least 150 gigabits of monthly data capacity. A rural area was defined as having fewer than 100 people per square mile, excluding the county seat.

The subcommittee has a strong commitment to the above definition of broadband, instead of

10/1 Mbps or some other speed without latency and capacity factors, because the subcommittee's intent is to eliminate digital divides. Urban customer uses and the requisite broadband characteristics for those uses drove the standards adopted for rural residents.

During the State Model Code Working Group deliberations, a major point of contention was whether municipal broadband systems should be encouraged or prohibited. Though there was a separate BDAC Municipal Working Group, the State Model Code Working Group recognized that rural residents are much more likely to have interests similar to those of residents of smaller towns and regional cities than to residents of major metropolitan areas.

Several state legislatures have enacted laws prohibiting municipal broadband systems, and others have either defeated such efforts or have not addressed the issue. Rural subcommittee members recognized the interdependence of rural and small-town residents and saw that connectivity is a shared need.

MUNICIPAL ISSUES

Broadly speaking, working group members believe municipalities should not be permitted to unduly restrict the use of public rights-of-way, issue moratoriums on the deployment of broadband facilities or unduly delay consideration of applications. They agree that costs associated with an applicant's filing must be commensurate with actual municipal costs, and they endorse statewide broadband franchise capability.

These proposed limitations on municipalities reflect a diversity of interests among working group members. Some with a strong commitment to rural communities and residents view access to municipal rights-of-way and infrastructure as a means to reach rural residents cost-effectively. Others perceive this access as a way for private-sector broadband providers to more easily enter new markets.

The working group's preference is that private-sector companies build, own and operate broadband networks.

A bill before the Kansas legislature requires broadband subscription-based services to help fund rural deployments.

However, the group recognizes that in rural areas, the economics of building such networks may be economically less viable than in more populated areas; consequently, private industry interest in deploying broadband facilities may not exist in time frames or at prices that municipalities find acceptable.

Prior to establishing a fully funded and operated municipal broadband network, the working group recommends that municipal officials evaluate at least four other options for providing broadband services for feasibility and sustainability:

- 1 Privately led investment with public assistance – a private entity constructs, maintains and operates the broadband network, and the municipality assists by facilitating permitting, promoting customer sign-ups and providing other services.
- 2 Balanced public-private partnerships – a municipality provides some or all of the capital funds to construct the network, and one service provider is granted an exclusive franchise for a finite period of time.
- 3 Public assets, open access – one or more broadband providers contract for access to a community-owned infrastructure that is developed through a local improvement district, fees for services, donations, grants or other non-tax-revenue sources.
- 4 Publicly led contracting – the community serves as the lead entity and broadband provider by constructing, financing and owning the network, and a private-sector partner provides crucial network operations and other negotiated services.

At the time of writing, the FCC commissioners and staff have

not received or reviewed these recommendations.

Congress is also considering legislation to address broadband expansion, but it has not yet acted on any of it. On January 30, 2018, the U.S. House Energy and Commerce Committee's Communications and Technology Subcommittee held hearings on rural broadband and closing the digital divide. Twenty-five resolutions addressing broadband expansion to unserved and underserved areas are before the committee. Members of both political parties representing most of the states have been quoted as saying that without funding, there will be no broadband expansion.

NEW PROPOSALS FOR KANSAS

In the absence of FCC or congressional action, I proposed several rural broadband measures in the Kansas House of Representatives. HB 2563 presents two funding options that can be considered separately or in combination. The first option reduces the existing contributions for voice services provided through the Kansas Universal Service Fund (KUSF) and uses the "savings" to invest in rural broadband support. This is a very traditional approach, similar to the FCC's approach in creating the Connect America Fund. It has elicited opposition from telecommunications providers that receive support from the KUSF and will not raise more than \$20 million per year.

The more innovative proposal requires all advanced telecommunications service entities to contribute to the KUSF to help deploy broadband to unserved and underserved rural areas. These entities include not only broadband internet service providers, such as telephone and cable companies, but also providers of

subscription-based voice, data, graphics or video services that generate annual intrastate net retail revenues of \$500,000 or more, such as Netflix or Hulu.

Traditional providers have great difficulty building acceptable business plans that will support buildouts and sustainable operations in rural communities and to farms and ranches. But traditional providers aren't the only businesses that profit from broadband networks – application providers do, too. That's why HB 2563 requires those who benefit commercially from infrastructure investments to also contribute financially.

The analogy that seems to resonate with legislators is that if highways were constructed to accommodate interstate trucks but only intrastate drivers paid for the highways, interstate vehicle owners would benefit from the investment in infrastructure without making a financial contribution. Every state recognizes that highway construction standards to accommodate the impact of interstate truck traffic require those vehicle owners to pay prorated fuel and other taxes to support the infrastructure they use.

As expected, there was great skepticism among stakeholders that expanding the base of entities that pay into the Kansas Universal Service Fund is legal. However, despite the assumptions of some opponents, the bill does *not* tax the content that the subscription services provide; rather, it requires those who financially benefit from the infrastructure investment of others to contribute to making that infrastructure and those services ubiquitously available.

BROADBAND AND STATEWIDE FRANCHISE

Another Kansas bill, HB 2449, seeks to redefine the term “competitive video service provider” to mean either an entity that provides video service or one that provides a packet delivery system for video service. The existing state statute defines video service as video programming services provided through facilities without regard to delivery technology, including internet protocol technology.

Many broadband providers do not want to provide content, and they reportedly face obstacles to deployment in some smaller communities because of community leaders' lack of knowledge about broadband deployment issues, unusual fees or other requirements to receive a franchise, and requests to pay for municipal services unrelated to rights-of-way access through the franchise agreement. HB 2449 seeks to address those concerns by making the packet delivery technology, not the video product, subject to a state franchise agreement process.

Many municipal governments object to another statewide franchise; in addition, many video service providers also object, presumably because of the threat of increased competition. Legislators almost unanimously support a competitive marketplace as a means to stimulate innovation and control price increases; at the same time, legislators are elected officials and may place great weight on the opinions of local officials and organizations that support legislators' re-election.

Objectively, a statewide franchise for the underlying technology that enables video services makes more sense than a franchise for the service itself.

ACCESS TO PUBLICLY OWNED FIBER

Finally, Kansas HB 2462 provides that dark fiber owned or operated by a state or local government shall be leased to any private sector broadband provider on a cost-plus basis upon request from the private sector company. State and local governments may retain enough dark fiber to meet reasonably anticipated 50-year needs and are not required to enter into any leases that impinge upon such capabilities.

Cost-plus is defined as the prorated cost to install fiber within an existing fiber optic cable and any relevant supporting equipment plus a reasonable lease payment for the use of the fiber.

The objective of this bill was not to usurp local government or state agency control of its infrastructure; rather, it reflected the realization that

reaching unserved and underserved rural Kansans (using the broadband definition referenced earlier) is less expensive when existing fiber is used.

However, as expected, local governments objected to the usurpation of their authority, and some broadband providers wanted to expand the measure to include greater access to above-ground municipal infrastructure, including poles and buildings. I deliberately restricted the bill's focus to dark fiber because I saw this measure as a cost-effective way to reach rural residents rather than as a means to improve competition within urban communities.

CONCLUDING THOUGHTS

The State Model Code Working Group and the resulting Kansas legislative initiatives attempt to reduce administrative impediments and provide financial incentives in a technologically neutral manner to make broadband deployment in rural areas affordable for providers and customers.

The initiatives also address minimal performance standards necessary for rural residents to have the same economic, social, health care, educational and recreational opportunities as residents of larger communities with competitive marketplaces.

Finally, the goal is to ensure that the two digital divides – availability and capability – are substantially reduced, if not eliminated, in a manner that maximizes private sector opportunities and minimizes the need for government subsidies.

This summer, the FCC commissioners will determine which of the State Model Code Group's recommendations are included in a Rural Broadband Deployment Incentives Code for states to consider in 2019. ❖

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