Why States Should Support **Broadband**

Local choice doesn't have to be a partisan issue. Policymakers can seek common perspectives on broadband policies and practices.

By Tom Sloan / Kansas State Legislature

ost state policymakers support a competitive broadband marketplace because competition tends to result in more innovation and lower prices for consumers. Most policymakers also believe that competition is an imperfect means of protecting consumer interests. For example, poor system performance in a multiyear service contract is unlikely to be fixed without government intervention.

Disparity in service quality has traditionally not been acceptable for public utilities, as laws mandate that services be provided and priced on a nondiscriminatory basis. If broadband truly is essential in the 21st century for economic development, health care, public safety and other societal goals, then policymakers and broadband providers must address disparities in availability, speed, bandwidth, affordability and reliability.

Broadband providers often deliver lower levels of service at higher prices in some parts of their service territories than in other parts. Rural residents frequently experience this second-class status, though it also exists in low-income urban neighborhoods and in neighborhoods with low take rates.

Similar price and service disparities exist when only one grocery store or other retail marketer serves a geographically isolated or low-income population. When a competitor arrives, customer choices increase, and prices generally decline. Stimulating development of a competitive marketplace has measurable

benefits to consumers; the key question is whether or how government should provide the necessary incentives or competition within the broadband market.

MINIMUM BROADBAND **STANDARDS**

Members of the public, public officials and representatives of the infrastructure and content industries must decide what basic broadband service levels should be in terms of broadband speed, system capacity, and message priorities. Though some providers offer high-performance options to economically selected customers, basic service remains unacceptable for persons in low economic strata, in sparsely populated areas or even in areas in which providers have not sufficiently marketed.

When the competitive marketplace does not provide adequate protections for persons with few assets, then a legitimate role for government exists – protecting consumers' interests. The minimum performance and customer service standards must not become static, or the problem simply perpetuates itself.

The FCC and the states have used universal service funds to ensure all residents access to minimal service capabilities. Minimal broadband speed and quality of service may be sufficient to run smartphone apps - which policymakers are all too often enamored of – but they foreclose many opportunities for residents receiving them.

For example, students might write better term papers if they had access to NASA or Library of Congress resources, and stay-at-home parents might be able to operate home-based businesses if they could transmit large files quickly. Businesses, too, rely on broadband that goes beyond smartphone apps.

Thus, the question for governments at all levels is whether taxpayer-funded intervention to develop a competitive marketplace is appropriate. If a truly competitive market does not develop independently, and the American economic philosophy supports the marketplace, then government's responsibility may be to create such a competitive market directly or indirectly, especially for citizens who do not live in densely populated, highincome communities.

NET NEUTRALITY

Net neutrality has real consequences for state interests. For example, if content providers can pay to improve the performance of streamed videos, can the infrastructure simultaneously handle other traffic at acceptable speeds? If a vacationer is hospitalized out of state and that patient's home hospital is unable to send a previous CAT scan for comparison to the medical center in which the person is hospitalized because streaming entertainment videos occupy the system's capacity, should there be a health care data transmission priority? Policymakers must consider how to protect the public's health, economic opportunities, safety and welfare while permitting customers to choose how to spend their money.

Net non-neutrality and governmentsupported construction of broadband infrastructure reflect the same problem: The demand for capacity exceeds the private sector's ability or willingness to invest in infrastructure capacity expansion. Rising customer expectations propel both government and corporate decisions. The question becomes which sector acts more quickly to address these expectations. Prioritization of messages is the market's attempt to manage load without capacity expansion. In the short term, this can be acceptable; in the long term, it will result in government

regulation or investment to protect consumer interests.

MARKET ENTRY

Despite the capitalist principle of allowing the market to determine who will succeed, government often steps in to protect startup businesses that are initially weak but may ultimately offer better products (for example, wind and solar energy).

Consolidation of telecommunications providers to achieve operational efficiencies and negotiating strength with content providers may prevent startup providers using new or alternative technologies from entering the market without assistance because of the sheer cost of developing the necessary infrastructure. Protection within the telecommunications industry is not unprecedented - for example, "Ma Bell" was provided rights of way, monopoly status and government-sanctioned rates to recover and earn on investments.

ROLES FOR PUBLIC POLICY

Policymakers are concerned with which, if any, aspects of broadband service are so vital that government should exercise regulatory oversight and how much of a digital divide is acceptable. A digital divide does not mean that some customers have greater opportunities than others; it means that some customers do not have the capabilities to fully function in today's and tomorrow's digital world. Developing the networks necessary to sustain educational and economic capabilities requires society to ensure that no one is involuntarily left behind in terms of access to the broadband highway.

Performance differences due to technology rollout schedules, population density and other factors will always result in at least a short-term digital divide. The issue is how large a divide is acceptable and for how long.

Policymakers, the public and broadband providers should determine what an acceptable difference between the highest capability and the lowest should be. For example, it may be appropriate for the government to ensure that the lowest up and down speeds

offered should be no less than one-third the maximum up and down speeds a provider offers to other customers and that the length of time to implement upgrades should be no more than three years from rolling out a new top speed to raising the minimum speed.

Download speed increases are easier to achieve and are important for streaming videos and gaming, but ensuring sufficient bandwidth and up speed enables rural areas, lowincome neighborhoods and small-town businesses to be competitive with those in larger and more affluent markets with multiple provider options.

These capability and timeline recommendations may be arbitrary (though not capricious), but they offer a starting point for discussing technology development, deployment, cost recovery, affordability and performance needed to achieve health, safety, economic and other benefits. If the minimum standards are dynamic and meet the needs of health care, public safety and economic opportunities in a manner that is affordable to customers and sustainable to providers, the digital divide will close.

AFFORDABILITY

Affordability is a subjective issue as much as an economic one. One person may decide that smoking, drinking alcohol and buying lottery tickets are higher priorities than paying for broadband or electricity. Others who prioritize rent, taxes, other utility bills and food may find broadband unaffordable because no competitive marketplaces exist in their locations, and they are subject to monopolistic prices.

Government cannot and should not determine what price structures should be. Rather, policymakers have the responsibility to save society money. For example, electronically monitoring the vital signs of people with chronic health problems has been demonstrated to significantly reduce the need for hospitalization. Because public and private health insurance premium rates are determined by health care expenses, facilitating broadband access through the competitive market or through

BROADBAND POLIC

subsidies can benefit society's health and economic health.

State and federal universal service funds for voice and broadband are based on comparisons of a provider's cost of service with an average cost for multiple providers. Perhaps the broadband subsidy discussion should center around the level of service required to meet societal goals (improved health care, access to educational or economic opportunities) as well as customers' ability to pay.

CREATING A COMPETITIVE MARKET

Local and state governments generally are not interested in operating broadband systems; most prefer to provide regulatory and financial incentives for private-sector carriers to make the necessary investments. However, more than 2,000 municipalities own and operate electric and natural gas utilities, and almost all

municipalities operate water utilities. These municipalities earn enough revenues to operate the utilities and often earn surplus funds that pay for other community needs, such as street lights and trash collection.

Thus, if the private sector will not or cannot provide the broadband capabilities that communities desire, municipal governments are capable of doing so. One way is to construct and operate such a system directly; another is to issue a request for proposals from broadband providers. Such an RFP could include incentives, for which the incumbent provider as well as competitive providers would be eligible, for meeting or exceeding target speeds, deployment areas and other criteria. A municipality could also require winning broadband providers to integrate other technologies into their proposals, such as fixed wireless at the end of the fiber or cable, to reach more under- and unserved rural residences.

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CONCLUSION

This discussion summarizes why public officials intervene in the broadband marketplace and how the private sector can forestall such interventions or develop public-private partnerships to meet evolving customer expectations. The process must begin by establishing minimum broadband standards, providing access to all persons who want it, recognizing and acting on the need to continually upgrade infrastructure capabilities, determining how to manage affordability and investment recovery issues, and replacing the permanent digital divide with one that is minimal and evolves over time.

Partnerships help providers market broadband. State extension services, Boy Scout and Girl Scout troops, AARP, public libraries and other trusted organizations effectively reach out to large segments of the population every day. Broadband providers may find them reliable partners in identifying and educating potential customers.

The proliferation of apps for smart devices does not eliminate the need for a robust infrastructure to provide the economic, health care, education and other services citizens increasingly expect. Policymakers will act in response to constituent demands for infrastructure improvements if traditional broadband and content providers do not. �

Rep. Tom Sloan (R-Lawrence) is serving his 11th term in the Kansas House of Representatives. He is a member of the FCC's Intergovernmental Advisory Committee and has served two terms on the U.S. Department of Energy's Electricity Advisory Committee and the GridWise Architecture Council. He is a member of the National Conference of State Legislatures' and Council of State Governments' committees on energy and telecommunications. He has organized three telecommunications summits in Kansas in which federal and state officials, consumer advocates and privatesector providers have sought common perspectives on policies and practices.