

Senate Committee on Finance
"Broadband and Economic Development in Rural America"
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Prepared Remarks of Dr. Jan I. Fox, Marshall University

Mr. Chairman, members of the Committee, thank you for the opportunity to testify before you today. I am Dr. Jan I. Fox, Vice President for Information Technology/CIO at Marshall University in Huntington, WV. For the past 18 years, I have been directly involved in rural education, telemedicine, and economic development throughout Appalachia. By serving on many state and national committees, including the Technology Council of the Southern Growth Policies, WV PSC State Telecommunications Committee and chair of our state's Policy Board for Telecommunications (WVNET), I have been directly involved in discussions of the major telecommunications barriers that are limiting our rural communities. While I was on executive loan to Governor Bob Wise as his Special Technology Assistant, I worked on several broadband projects that were tied to state economic development strategies. It is a pleasure to share insights on the impact of broadband telecommunications services on economic development and its importance in maintaining the economic health of rural communities.

Advanced telecommunications capabilities are crucial to the future of an increasingly interconnected America. These advanced capabilities mean that data can be delivered at rates that far exceed what can be carried by an ordinary telephone voice circuit. Access to computers and the Internet, along with the ability to effectively use this technology, are becoming increasingly important for full participation in America's economic, political, and social life. People are using the Internet to find lower prices for goods and services, work from home or start their own business, acquire new skills using distributed learning, and make better informed decisions about their healthcare needs. The ability to use technology is also becoming increasingly important in the workplace, with jobs in the rapidly growing information-technology sector paying wages almost 80 percent higher than the average private-sector wage. Broadband Internet

access is going to be a key competitive factor for all states, and the regions that do not have this capability are going to be left behind in the New or Next Economy.

Because technology has permeated almost every aspect of our lives, a strong telecommunications infrastructure is now critical for success in all sectors, particularly economic development. It is imperative that a cost effective, flexible, dependable broadband solution for all of our communities continue to be developed. High-speed network and Internet services that are accessible to all state agencies, businesses and homes are now a basic need for success. It is critical that rural communities are not isolated from current regional broadband telecommunication strategies. We must have the appropriate cost effective infrastructure to retain and attract new businesses.

West Virginia is a very mountainous and beautiful state. Our rugged topology traditionally has been a challenge for many telecommunications providers. Our state must make major changes in our economic and telecommunications infrastructure if we are to succeed in any current or next economy. The goal of a learning society will be to give people the tools to adapt to changes in their personal lives and in their career paths. For most individuals, this process will combine formalized instruction and self-directed learning. Our state is actively involved in many distributed education projects that provide educational resources directly to our citizens, regardless of location. This can be in the form of online education or video linkages. Advanced capabilities are becoming ever more important as sophisticated applications incorporating audio and video which require sustained high information rates. A major limiting factor in access to these resources is bandwidth restrictions in the home or even at the community level. We have addressed part of this issue with community learning centers, but this is merely a stop gap until bandwidth is available.

Telemedicine represents a marriage of advanced telecommunications technology and new approaches to improving medical and health care. Be it through online consultations between rural clinics and specialists at major medical centers, telehomecare for homebound frail patients, or access to comprehensive databases of

health and medical information for consumers over the Internet, telemedicine holds the promise of using telecommunications to improve the lives of all Americans.

Telemedicine encompasses a multimillion-dollar industry with rapid growth predicted over the next five years in many parts of health care. However, the promise of telemedicine will go unfulfilled for rural America without access to high speed, affordable telecommunications. The deployment of telemedical links to rural medical centers requires communications networks that are affordable, reliable and capable of handling large amounts of data in a short time.

New business formation and creation flow directly from research, development and commercialization of new technologies. Creating unique competitive advantages rooted in the science and technology institutions of a state advances attraction of industrial clusters. Research intensive industries, such as biometrics and biotechnology, require advanced telecommunications networks.

Professional fields not only require network access from formal work settings, but will also need access from home. We are still struggling with DSL or Cable Modem access beyond our major cities. Additionally, it may take more than six months for a business to acquire broadband service, even in our major cities. We still have major areas in our states where broadband is not on any installation calendar. Despite the recent growth of alternate bandwidth choices such as wireless (cellular, satellite), as well as terrestrial (cable, DSL), rural communities are still limited in the availability of high-speed communications and where available, have problems with reliability and cost.

The U.S. has a history of providing incentives to offer utility services in those areas where costs are high and subscription densities are low. These are places where for-profit companies are reluctant to go if they cannot build a business case for economic investment. An example is the providing of low cost loans to member cooperatives for electric and telephone service in the 1930s. These areas could lose jobs and investment from industries that they desperately need, because affordable broadband Internet services are passing them by. When companies that depend on e-commerce

are evaluating expansion opportunities, they look for areas with skilled labor and access to broadband.

Cost concerns have many high-speed Internet providers targeting lucrative business customers rather than residential customers in order to recover their investments as quickly as possible, leaving consumers with fewer choices. Those who live in a poor suburban neighborhood, inner city, or rural area are at risk. Moreover, providers that have spent years building their broadband infrastructure do not come back and fill in the underserved areas, which leaves businesses and individuals in these communication infrastructure-poor areas less likely to be integrated into the national electronic marketplace. Their absence would put a damper on the growth of the digital economy for everyone - not just for those in rural areas. While this may be shrewd financial strategy, the social impact is devastating. Community access to affordably priced broadband digital networks is critical to long-term economic development. Not taking an active approach on this issue could leave rural communities in economic ruin.

It is for this reason that I would urge the Committee, and the Senate, to act on S.88, the Broadband Internet Access Act of 2001, sponsored by Senator Rockefeller and cosponsored by many members of this Committee, including the Chairman and the Ranking Member. This legislation would provide tax credits to encourage deployment of broadband facilities in areas where such technologies have not -- and, without Congressional action, perhaps will not -- be made available. With the help of the tax credit, people and businesses in these areas will be able to more fully benefit from the networked economy, and from the kinds of opportunities like distance learning and telehealth that I have been discussing. Moreover, this bill would help not just rural and areas. All of us will benefit if broadband can be more fully used to combat geographic and social isolation in such areas. Passage of this bill would be a good first step towards ensuring that all Americans are able to participate in our increasingly digital world.

Thank you. I will be happy to answer any questions you may have.