

Summer 2016

County Farm Bureau Issue Backgrounder
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Rural Broadband

The next piece in this country's advancement of rural America

Background

Anyone who understands the social and economic impact that high-speed broadband can bring to a farm, manufacturer, school or community, clearly understands the need for rural Wisconsin to be technologically connected to the rest of the world.

We are essentially in the fourth phase of rural America's progression towards social, economic and technological advancement, yet there are many shortcomings to achieving this as it relates to rural broadband.

President Lincoln's signing of the Homestead Act in 1862 led to opening 270 million acres of government land to individual ownership and subsequent farming throughout the Great Plains and the West by the 1930s. Exactly 74 years later to the day, President Roosevelt put his name to the Rural Electrification Act (REA) of 1936 and authorized \$410 million in low-cost loans for non-profit cooperatives to bring rural electricity to an agricultural community that was yearning to modernize.

With the deterioration of rural telephone systems after World War II, amendments to the Rural Electrification Act in 1949 made long-term, low-interest loans available to rural telephone systems and therefore sparked a new era of growth for rural telephone services. More importantly, the availability of high-quality electrical and telephone services at reasonable rates improved the quality of life for millions of rural Americans.

Two generations later, we have entered the next phase of rural modernization but for many it is not coming fast enough without high-speed broadband.

Broadband Expansion at the Federal Level

It is a basic economic truth that it is not very profitable, if profitable at all, for telecommunication companies to expand broadband service in many rural areas. Recognizing this truth, and with tens of billions of dollars having already been invested on 'advanced telecommunications capabilities' during the last decade, the Federal Communications Commission (FCC) is now using a 'carrot and stick' approach to help subsidize a \$9 billion-plus investment to bring high-speed broadband to more than seven million customers in 45 states.

Approved in 2015, the FCC's Connect America Fund (CAF) Phase II six-year allocation plan is being financed through the annual \$4.5 billion Universal Service Fund. Wisconsin, second in total funding only to California, is set to receive \$570 million during the next six years. The three

Internet service providers (ISPs) that agreed to the FCC's rules and terms for receiving the funding were CenturyLink, Frontier Communications and AT&T, Inc., with the intent of reaching an estimated 230,000 unserved or underserved Wisconsin customers. They must build 40 percent of their expansion commitments by the end of 2017 and 100 percent by the end of 2020.

Because Internet speeds are getting exponentially faster, the FCC's CAF Phase II order also redefined broadband as 25 Mbps/3Mbps (megabits per second). So even though the minimum speed requirements for CAF Phase II are now 10 Mbps/1 Mbps and obviously come up short with the new FCC definition, it does allow Phase II funding to build networks for rural America that will be capable of upgrading to broadband speeds available in urban communities.

Broadband Expansion at the State Level

The 2013-14 state budget created the Broadband Expansion Grant Program to be administered by the Public Service Commission (PSC). Its purpose is to help fund broadband expansion projects in unserved or underserved areas around the state. Original funding was set for \$500,000 annually but the 2015-16 state budget increased the appropriation to \$1.5 million annually and those monies come from a one-time transfer of \$6 million from the Universal Service Fund.

A number of proposals were introduced during the last legislative session to allow the PSC to spend the entire \$6 million in the 2015-16 state budget, or increase the overall appropriation for broadband grants to \$10 million, or to expand eligibility requirements for applicants; however, none of them passed.

In light of continued interest by numerous legislators and stakeholder groups, the Wisconsin Legislature's Joint Legislative Council created a Legislative Council Study Committee on Rural Broadband to study the issue of broadband expansion in underserved areas of the state.

The committee, made up of state and local public officials and private members representing varied interests, will meet throughout the summer and fall to discuss whether the Broadband Expansion Grant Program is effectively meeting the intent of the Legislature's decision to invest in rural broadband. Something for them to discuss will be the recent decision by the Minnesota Legislature to allocate \$35 million for broadband expansion and whether Wisconsin should consider such an investment.

Where Do We Go from Here?

Wisconsin's Broadband Expansion Program and the Federal CAF II funding are small steps toward bringing broadband to our communities, but the lack of high-speed broadband and the lack of service providers in many areas throughout the state is impacting the stability of our rural farms, businesses, schools and communities.

Our current policy supports the installation of fiber optic cable but that is very expensive for private ISPs to install, upwards of \$30,000 per mile. Even though dial-up service may be the only option for many, its use and application is analogous to telling someone the easiest and best way to listen to music is on a cassette tape. The technology simply cannot meet the demands of today's faster and more competitive world.

Fiber optic lines may be the best option but there are other delivery options including digital subscriber line (DSL), cable, wireless and satellite to name just a few. Ultimately, what is critical to users is the speed of the broadband, but cost (including installation of infrastructure and customer rates) is a crucial factor in determining availability of speed. The FCC may have redefined broadband to be 25 Mbps/3Mbps, but speeds of 50 Mbps, 100 Mbps or even 1 Gbps (gigabit per second) are quickly becoming the standard in many urban areas and some smaller communities in the United States.

Current WFBF Policy on Broadband

We support installation of rural fiber optic cables because fiber optic broadband is the fastest, most energy efficient, secure, dependable and safest method for providing rural broadband. We support expanded cellular and broadband telecommunications coverage for rural areas.

Questions to Consider

1. Is current WFBF policy realistic considering the availability, expansion and speed of wireless and satellite Internet technology and other technologies that may be developing?
2. Should WFBF support a significantly greater allocation of funds for the Broadband Expansion Grant Program to meet the needs of unserved and underserved areas of the state?
3. Should WFBF support a state government mandate requiring all households that use/demand Internet service be provided no less than 10 Mbps service speeds? If so, how would that mandate be funded?
4. Other suggestions?

Quick Facts about Broadband in Wisconsin

- Average statewide speed is 23.8 Mbps.
- 23rd most connected state in the country (based on percentage of population with access to 25+ Mbps wired broadband).
- 86 percent of the state has broadband coverage (percentage of population with wired broadband at speeds of at least 25Mbps/3Mbps).
- 745,000 people DO NOT have access to 25Mbps/3Mbps service. More than 200,000 people DO NOT have any wired Internet providers available where they live.
- 20 percent of the population is underserved (percentage of population with access to less than two wired providers).
- 4.9 percent of Wisconsin residents have access to fiber optic service (44th in United States)
- 84.5 percent of Wisconsin residents have access to cable service, 86.7 percent have access to DSL and 99.7 percent have access to mobile broadband service.

Source: BroadbandNow.com and Federal Communications Commission