

"We are here because we want to be," Angie McCully said about living in Mullen, Neb. But now she and her husband, Kevin, plan to leave Mullen for someplace with better broadband Internet service for their businesses.

"That's just one of the factors," Angie McCully said. "But it's a considerable one."

Some of the Web sites she builds and maintains for Sand Hills businesses include catalogs for bull and horse auctions. But working on PDF files as big as a catalog takes speed and bandwidth that the McCullys say two providers they've tried in Mullen can't handle well. With one, frequent service outages were a problem. With the other it was lack of capacity.

A rural town without adequate broadband faces the same fate as towns that railroads and highways bypassed, Kevin McCully said. He and others say Mullen needs good service as much as Omaha.

Aid for extending and improving broadband service to rural towns, farms and ranches is included in a \$7.2 billion program that is one of the pieces of the Obama administration's economic stimulus package.

Not all that money is for infrastructure. Much of it is for mapping Internet service, identifying unserved and underserved areas and planning how to both spread broadband and create demand for it.

Nebraska must compete with other states for stimulus money and may have to wait because whatever shortcomings there may be in its broadband services, the state's rural areas are considered among the better served in the nation.

Nebraska is one of the top five states in terms of broadband availability, said Eric Carstenson, president of the Nebraska Telecommunications Association, a phone industry group.

Broadband is available in all but two of the state's 534 incorporated cities, some with populations of fewer than 100, and in 60 of 66 unincorporated communities, said Roger Hahn of the Nebraska Information Network, a rural phone industry group.

That means 99.9 percent of people in incorporated cities have access to some form of land-based broadband -- phone lines, cable, fiber or tower-based wireless, he said. Outside those cities and towns, 82 percent of Nebraskans have access. That's without counting satellite access, which is available everywhere.

Nebraska providers all offer speeds of at least one megabit per second, Hahn said, and most offer faster speeds.

The Federal Communications Commission's basic definition of broadband is far slower -- 200 kilobits per second in at least one direction, uploading or downloading. However, even the FCC acknowledges that its standard is outdated.

How fast service must be to qualify as broadband and definitions of what constitutes "unserved" and "underserved" areas -- the broadband stimulus law's targets -- could make a difference in how much money Nebraska gets.

"That's where the rub is going to be," Carstenson said. "It's all going to come down to what the definitions are."

Rep. Lee Terry, R-Neb., figures Nebraska will be hurt because of what he said is the good job local phone companies have done in extending broadband.

"We're going to be penalized, in a sense, because there likely will be rural areas that will be deemed adequately served and get no dollars," Terry said.

It's happened before that agency rulemaking has shortchanged states like Nebraska when it comes to doling out federal telecommunications aid, he said.

Carstenson said the terms federal officials put on the aid could determine whether phone companies ask for it. "They're interested," he said, "but uncomfortable until they know the conditions."

For example, if the government wants a role in determining how a company's other resources are used the companies will be reluctant to go along, Carstenson said.

Nebraska may stack up well compared with other states, but it still has areas that don't get the quality of service Omaha, Lincoln and other cities get. And even Omaha and Lincoln have pockets not far outside city boundaries that lack broadband service other than satellite.

Angie McCully has taken to using the Internet services of friends in other towns after she was put on "probation" by the satellite service provider in Mullen for exceeding her allowed bandwidth. For a month she had to operate at 70 percent below normal bandwidth. She likened it to a "timeout" for preschoolers.

DSL provided higher-speed service, she said, but she didn't subscribe to it because the monthly price of \$130 to \$140 was too high for her small business.

Kevin McCully, who has a real estate business, said the couple can get the service they need in Valentine, 75 miles away.

Meanwhile, release of the federal money to upgrade and extend broadband awaits federal rules.

The \$7.2 billion is divided between the Agriculture Department's Rural Utilities Service (\$2.5 billion) and the Commerce Department's National Telecommunications and Information Administration (\$4.7 billion).

The public comment period ended Monday. The agencies now must write rules on how the program is to function, how applications can be made and who and what will be eligible for the funds.

Todd Foje, CEO of Great Plains Communications in Blair, Neb., said funds for infrastructure improvement and extension might begin flowing in the last half of this year. For-profit companies, government and public-private partnerships are among the entities eligible for grants.

Great Plains' expansive coverage area for phone, cable and broadband services points up the problem for rural providers. With 14,000 square miles of territory, it averages two customers per square mile. Federal aid can help deliver broadband to remote farms and ranches "where a traditional business plan would never support it," Foje said.

The broadband piece of the economic stimulus law, which Congress passed and President Obama signed in February, stipulates that a map be drawn of the nation's broadband coverage and lack of coverage by Feb. 17, 2010. It allocated \$350 million for the mapping, without saying how or who would do it.

ConnectedNation, a nonprofit group based in Washington, is volunteering for the job.

It would like to do Nebraska's map, said Brent Legg, a vice president at the company. In fact, he said, the ConnectedNation model, already used in several states, is the basis for the requirement laid out in the stimulus bill for a survey of supply and demand initiatives.

In a corner of Appalachia composed of eastern Kentucky and Tennessee and southeast Ohio, ConnectedNation found that lack of demand, due to a low level of computer ownership, was the deterrent to expanding broadband. Providers like phone companies are reluctant to extend broadband to areas where little demand appears to exist, he said.

Demand was created in those states by setting up public computer centers in places such as libraries, and expansion of broadband resulted, Legg said. The stimulus bill provides \$250 million for developing strategies to increase demand.

Legg said it remains to be determined whether individual state maps will be rolled into a national one or the National Telecommunications and Information Administration will do its own.

