LACK OF BROADBAND CONNECTION SPARKS A RURAL ADVOCATE

By Trenton Buhr, trentonb@cfra.org

Civic engagement can be an enriching activity that helps everyone around us. You may have experienced this through calling your senator or testifying before a committee. You may also know that advocating for your beliefs can be difficult, even scary.

Mike Tabbert has mastered the art of advocacy; championing causes that matter to him.

After growing up in Orchard, Nebraska, Mike moved around. Most recently, he lived in the Houston, Texas, metropolitan area. Last year, Mike and his husband, Brian, moved back to Nebraska, and settled in rural Antelope County.

They found an old farmhouse, fixed it up, and started a life in the new place. By and large, they are living the life they expected and wanted. Mike’s family lives near-by, they avidly support all of the surrounding communities, and for the last year, Mike has worked on economic development in Antelope County.

Needless to say, they’re invested in their home.

After moving back to Nebraska, Brian started working from home, which made having a consistent, strong internet connection vital.

Last year, Mike Tabbert settled in rural Antelope County, but ran into issues when looking for an Internet service provider. A lengthy process ensued, where Mike learned about broadband policy and connected with the Center for Rural Affairs. I Photo by Trenton Buhr

—See Rural Advocate on page 2

ADDRESSING OBESITY THROUGH SCHOOL WATER ACCESS

By Jordan Rasmussen, jordanr@cfra.org

We all know water is essential for life, but the sufficient consumption of water also has long-term health benefits. Increased water consumption has been found to reduce levels of dental decay, positively impact cognition, improve overall eating and physical activity habits, and reduce the risks for obesity.

In Nebraska, where the rate of obesity for high school students and adults both fall in the top quarter of all states, an increase

—See School Water Access on page 3
At the Center for Rural Affairs, all of our work ties into our set of values. One value in particular, “Genuine OPPORTUNITY for all to earn a living, raise a family, and prosper in a rural place” strikes a chord.

This is especially true when we focus on rural broadband. In our front page feature story, you’ll hear from a rural resident who had a tough time accessing this service, which is now a necessity of our lives. We use broadband for work, health care, education, leisure, and more.

Mike Tabbert’s story, unfortunately, is something we’ve heard over and over again. A story about someone who moves to a rural area and encounters this challenge. Mike just wants to live in a rural area and support his community.

We listened to Mike and to you. And, as our Policy Director Johnathan writes in his article on page 5, we are urging state lawmakers across the country to improve their broadband mapping. Because, right now, if one house in a Census block has internet, the internet service provider declares the entire Census block as served. That needs to be changed so that all rural citizens have an opportunity to live like they desire.

Do you have a rural issue, like broadband, that you want us to know about? Let us know at info@cfra.org.

For their family, internet access means a lot.

“It’s important for education,” Mike said. “When I was a kid, you picked up an encyclopedia to find something out—now you get on the internet.”

But, finding a way to obtain that service proved to be a challenge.

A short time into their efforts to get internet, Mike and Brian discovered that gaining access would take more than calling the local provider. To their surprise, no local companies claimed to service their home. One company, however, was willing to extend their line, but the cost would be steep.

So, Mike took to the phones. First, he called his representative in Lincoln, then the state’s Washington, D.C., envoys.

Along the way, he learned about rural broadband policy. Topics, such as dark fiber and public utility, suddenly became important. To muddy the waters more, Mike learned different government entities, such as the Federal Communications Commission and U.S. Department of Agriculture, have a stake in internet access.

“I Googled rural broadband and started talking to everyone who came up, to anyone who would listen,” Mike said.

Eventually, the Federal Communications Commission determined what company was required to service Mike’s home. The cost of installing a fiber line was still steep, higher than most people can afford. To tide themselves over, they used a fixed microwave wireless system that got a signal from the nearby town of Clearwater.

Although Mike had made progress on their own connection, rural internet access was a conversation around many kitchen tables.

In his attempt to solve this problem, Mike found the Center for Rural Affairs.

Soon, Mike was helping us gather stories from people about their rural broadband experience. He continues to contact his representatives and use social media to build momentum. Like most of us, Mike cares about many issues and uses his voice to show what matters to him.

“People ask me, ‘If I call my senator, what do I say?’ Tell them why this is important to you,” Mike said.

Making a difference begins by speaking up. As Mike will tell you, there are a lot of people who are worried about the same things.

“Whatever you’re passionate about, share it,” he said. “If one person reads it, maybe they will take a little action, too.”
FARM BILL COMMENTS NEEDED

BY ANNA JOHNSON, ANNAJ@CFRA.ORG

At the Center for Rural Affairs, we are deeply engaged on the farm bill because of the enormous impact it has on rural communities. This is particularly true for conservation programs. Even though Congress passed a farm bill last year, there is still work to do in submitting comments to the U.S. Department of Agriculture (USDA).

This winter, USDA plans to release rules that serve as guidelines and instructions for how working lands conservation programs will be implemented. For farmers, ranchers, and constituents who want to see working lands conservation programs strengthened, the open comment periods are a valuable opportunity to share feedback with USDA.

The Center for Rural Affairs is developing materials to help you submit a comment on these rules. In November, a rule was released for the Conservation Stewardship Program (CSP), and the deadline to submit a comment is Jan. 13. CSP is USDA’s leading stewardship and land management program. To participate, farmers and ranchers must demonstrate a baseline level of conservation and have a plan for how to increase conservation on their operations. CSP offers them financial and technical assistance to do so.

Visit our website to learn more, and consider submitting a comment today.

SCHOOL WATER ACCESS, CONTINUED FROM PAGE 1

in the consumption of water could help not only waistlines, but the state’s bottom line when it comes to health care costs.

To help reverse this public health trend, the Center for Rural Affairs is getting involved by working to improve access to water in Nebraska schools.

For our state’s school children, especially those in rural and underserved schools, access to clean, cold drinking water during the school day and activities is not always a right afforded.

Moreover, limited access to water can, in turn, leave space for the replacement of water with sugary drinks which can contribute to weight gain and dental caries. By increasing access to water during the school day for children, long-term health behaviors can be impacted and shaped, mitigating the prevalence of obesity-related health impacts in these communities.

Each obese child carries with them an estimated $19,000 pricetag in future health care and loss of productivity costs. Based on current obesity levels among Nebraska’s children, these lifetime costs will total more than $487 million.

Early interventions and the mitigation of behaviors, which contribute to obesity, are needed.

The solution starts at school. We can begin to address our state’s obesity epidemic by ensuring each child has access to clean water throughout the school day and during after-school activities and events.

The Center for Rural Affairs, along with partners, will work to introduce legislation in the 2020 Nebraska session to improve student access to water during the school day by increasing the number of water fountains installed in schools during new construction or major renovation projects.

We invite you to be a part of this policy-making process. Share with us your stories of water access or quality in your community’s school system or actions taken by your school board to improve water access.

Nebraska, it is time to sip up and require our schools to provide clean, reliable access to drinking water for our students.
The honey industry has experienced a drop in the number of bee hives in production in the past decade. This decline is a result of a number of pressures on bee health and beekeeper retirement.

However, beekeeping as a supplemental farm income has increased in popularity over the past several years. Among the new beekeepers entering this industry are women, senior farmers, and those with disabilities. These newcomers are likely to struggle with the most commonly used beehive structure, the Langstroth hive, which can be large and heavy.

**HISTORY**

The Langstroth hive was developed in the mid-1800s by Lorenzo Lorraine Langstroth, a native of Philadelphia. He developed the vertical boxes stacked on each other with consideration to bee space, and could be opened from the top of the stack.

Bee space is between 6 to 9 millimeters wide. This prevents bees from building honeycomb where it shouldn’t be, but also leaves enough space for the bees to move around.

**ABOUT THE HIVE**

Modern day Langstroth hives are very heavy. A deep box, which houses the brood, can be around 80 pounds. There are traditionally two of these boxes per hive, with honey supers on top. Each honey super can be around 40 pounds.

This summer, my most productive hives had two deeps and three supers for a total weight of 280 pounds. I am lucky that I have my father to help me team lift the deeps and supers when we need to either harvest or inspect. However, not all new or existing beekeepers have help.

**ALTERNATIVE HIVES**

Our project will research several alternatives to the Langstroth hive design that are much lighter, including:

- Top bar hives, which are a horizontal system. The beekeeper does not lift boxes of frames, but instead looks through them by moving them like files in a cabinet.
- The Long Langstroth. These hives are also horizontal, but use the same frames as a traditional Langstroth.
- And, keeping bees in supers and nuc boxes, both of which are about half the weight as deeps.

**TESTING THE HIVES**

We will track production and hive behavior in four apiaries, and plan to share the results with beekeeping associations, the newly established Great Plains Master Beekeeping program through the University of Nebraska - Lincoln, and through Center for Rural Affairs media outreach. The University of Nebraska - Lincoln’s Bee Lab staff will advise on this project.

Bee lab staff will also visit the test apiaries twice each year for technical assistance and will be on call for questions from the participating beekeepers.

Funding for this project was made possible by the U.S. Department of Agriculture and the Nebraska Department of Agriculture.
The Pew Research Center finds that only 63 percent of rural Americans have a broadband internet connection at home, and 24 percent of rural adults consider access to high speed internet a major problem in their local community. Recent policy developments are designed to address this. But, will they be enough?

In July, the Federal Communications Commission released a Report and Order establishing the Digital Opportunity Data Collection program. This new program will collect geospatial broadband coverage maps from Internet service providers, the results of which will be used for direct funding to fill “gaps” in broadband coverage. This is a marked improvement over the commission’s current approach, which relies on Form 477 to make broad access generalizations at the Census block level. That method has led to dramatic overstatements of coverage and is responsible for many of the rural access challenges we see today.

The Report and Order calls upon states to help ensure accuracy by validating provider data. This can be done through “crowdsourcing,” collection, and submission of fixed broadband availability information, or the establishment of a state-based validation process. The logic behind this request is sound. The commission recognizes that it is well suited to serve as an information clearinghouse, but poorly positioned to verify the accuracy of this information at the local level. That task must belong to the states.

The Digital Opportunity Data Collection program is unlikely to meaningfully improve data accuracy without this state action to validate provider information. That is why rural states must proactively establish a Broadband Data Validation Program.

A Broadband Data Validation Program should be designed to complement the broadband availability data submitted by service providers. It should empirically validate the accuracy of this data, and challenge its validity on behalf of the state at least once per year. The program should also target resources where public feedback, crowdsourcing, or other evidence suggests that federal data may be inaccurate, giving priority to data validation in rural areas.

State governments must have accurate data if they are to meaningfully improve broadband access in rural areas. Accuracy is also essential to ensuring states receive their due share of funding from the Federal Universal Service Fund and other federal programs. The states that establish a Broadband Data Validation Program will be in position to outcompete those who mistakenly cede their role to the Federal Communications Commission, all while better serving citizens and holding providers accountable.
Tom Wahl and Kathy Dice, owners of Red Fern Farm, have built resiliency in their operation to overcome challenging weather.

Nestled in a heavily wooded area just south of Grandview, Iowa, Red Fern Farm offers a unique experience for customers to harvest their own Iowa-grown fruits and nuts.

The owners grow a variety of fruit and nut trees—including chestnuts, persimmons, heartnut, pawpaw, and Asian pear. Their primary market is a “you pick” business throughout the summer, where customers schedule a time to pick from the trees and pay per pound harvested.

“Chestnuts are our cash cow—we have 50 to 800 pounds a day harvested in good years,” Tom said.

Tom and Kathy met at Iowa State University where they both earned degrees in fisheries and wildlife biology. To get their start in this business, they went on a journey of purchasing land and envisioning the future for that land, which needed to include protection for wildlife and the environment.

“Our ‘aha’ moment was when we were thinking of our little bit of wilderness and how we could be good stewards to the land, and maybe make a living off of the land we own and manage,” Kathy said. “We wanted to put permanent ground cover in place, but put in a species that provides income as well.”

After realizing the intense upkeep chestnut trees require—due to invasive species and the lack of protection for the trees, Tom and Kathy were overcome with happiness when a neighbor offered to sell them land containing established fruit and nut trees. In 2000, the farmers purchased the land and trees, which began the journey to their current operation.

Soil health on their land is important to Tom and Kathy. They make certain there is ground cover underneath all of their trees so the soil does not erode during rain events. The farmers also avoid monocultures by planting a diversity of species, which improves the health of organisms in the soil, as well as the soil itself.

“We are proud of our work and the fact that we are sustaining a living off of this land,” Kathy said of the progress they’ve made with their operation.

They also pride themselves on sharing their story, in hopes they can assist others who are interested in how tree crops build resiliency and how an operation can be successful.

Tom’s advice for others trying to start a business like Red Fern Farm is simple.

“Start small, grow gradually, and keep your day job,” he said. “It takes a minimum of 10 years to be able to quit off-farm jobs and farm full-time.”
Connecting Housing, continued from page 8

STAFF SPOTLIGHT

RURAL IS IN SANDRA’S PAST, PRESENT, AND FUTURE

BY LIZ DAEHNKE

Sandra Renner has spent nearly five years focusing on assisting rural Nebraskans.

Newly appointed as the Farm and Community Program director for the Center for Rural Affairs, Sandra began as a project associate engaging in food systems work, in particular with Farm to School programming.

She has since immersed herself in projects across the organization.

In her new role, she plans to stay just as active in her quest to help better rural America.

“The Center is already doing work that serves as a national model right here in Nebraska,” she said. “I want to continue that record of excellence, while striving to create programming that aids us in attracting new audiences that can also be served by our work.”

This past year, she has worked to expand Farm to School programming, along with leading work to support the launch of the Nebraska Food Council.

Also, Sandra has been connecting women non-operator landowners with one another, as well as with resources on risk management, conservation practices, and estate planning.

Sandra has taken her many responsibilities in stride, and looks forward to the opportunity to branch out even farther. She would like to see the Center continue to seek opportunities that expand offerings in farm and food systems, community inclusion, and Native communities.

Before coming to the Center, Sandra worked in local marketing, was certified in holistic health coaching, and held a position at a state agency in the health and human services field. When she worked one-on-one with clients, she was focused on health and nutrition with those who had barriers to those things.

“I began to see there was something very wrong with the food system,” she said. “Many were living in food deserts in a state where agriculture is the top industry.”

Now, Sandra spends each day serving those Nebraskans, and wants to continue learning from the challenges she has faced and build upon her successes.

“Rural America is changing in so many ways, and we want to provide resources, education, and training for that changing landscape,” she said. “Many rural communities are seeking ways to attract and retain youth, and when there are opportunities within their own communities, they are seeing successes. The Center tackles work that is making a difference for an equitable, sustainable future in Nebraska.”

And, as a fifth generation Nebraskan, Sandra feels very strongly about continuing this work for future generations.

“I’m grateful to get to do work that I love that also gives back to a place that has given me so much,” she said.

In her free time, Sandra, her husband, and their three kids enjoy spending time in nature. Sandra loves working in the garden or yard, and stays busy attending her kids’ activities.

Sandra can be reached at her office in Lyons at 402.687.2100 ext. 1009 or sandrar@cfra.org.

• Housing rehab — In our home region of the country, an aging housing stock is in need of tender loving care. Where the cost of new construction outpaces market values, existing home rehabilitation offers an alternative. Again, local developers as well as financing opportunities must be aligned for the strategy to work.

• Engage local businesses — Local business leaders are often acutely aware of the impact of housing on their workforce. We see businesses in rural Nebraska getting involved in housing development. A systematic approach to engaging business leaders and economic developers in housing can unlock new resources. Are business leaders engaged in housing in your community?

In addition to these ideas, financing for both developers and individuals, innovative approaches to materials, multifamily housing, smaller square foot options, increased direct government investment, and changes in public policy all offer promise.

For local economic development to succeed, communities need housing stock that is adequate for market expectations and affordable to local residents.
The Center has long focused
on strategies to support
economic vitality for small
communities. Our work
to assist small business-
es, develop value-added
agriculture, and improve policy
all focus on creating widespread
opportunity for people who live in
rural areas.

Increasingly, we see small town
housing as an economic develop-
ment issue. While adequate and
affordable housing is a quality of
life issue, it also plays an impor-
tant role in economic development.
A lack of local housing can under-
cut successful business start-up
or business growth strategies.

Small towns often have less
available housing stock than larger
towns. The smaller the place, the
larger the challenge. A shortage
of appropriate housing leads to
the loss of economic development
opportunities.

When a business is growing in
a small town, this growth may be
constrained by workforce short-
falls because employees cannot
find nearby housing. Or, if em-
ployees choose to live in a larger
town and commute to the small
town, the local economic develop-
ment potential of business growth
is diminished. In the most perni-
cious instances, business growth
is curtailed or businesses relocate
to or invest in expansion in larger
communities where housing is a
lesser issue.

Aging housing stock, misalign-
ment between available housing
and market needs, and affordabili-
ty all have the potential to become
a drag on small town economic
vitality.

Understanding that housing and
local economic vitality are linked
can help focus local and state
efforts on the housing challenges
rural communities face. The solu-
tions are multifaceted. Consider
some options:

- Local and nonprofit developers
  - For-profit developers often pass
  over small markets; they can make
  more money elsewhere. Encourag-
ing developers who care not just
  about profit but also about the
  community is an important strat-
egy. Local developers as well as
  nonprofit developers are more mo-
tivated to figure out strategies that
  work locally. What more can you
do to encourage the emergence of
these developers in your

—SEE CONNECTING HOUSING ON PAGE 7