

## **NEBRASKA INFORMATION TECHNOLOGY**

Commission Community Council

Friday, May 12, 2017 9:30 a.m.-12:00 noon CT

Nebraska Public Service Commission

1200 N Street, Suite 300, Hearing Room Lincoln, Nebraska

Desk Top Video Sites Upon Request

University of Nebraska Extension-Sidney 902 Jackson Street, Sidney, Nebraska

### **MINUTES**

#### **ROLL CALL NOTICE OF POSTING OF AGENDA NOTICE OF NEBRASKA OPEN MEETINGS ACT POSTING**

Anne Byers called the meeting to order at 9:30 a.m. There were eleven members present. A quorum was present to conduct official business. A copy of the Nebraska Open Meetings Act was available on the wall. The meeting announcement was posted on the NITC Website and Nebraska Public Meeting Website on May 5, 2017. The agenda was posted on the NITC Website on May 8, 2017.

**Members Present:** Pam Adams, Jay Anderson, Rod Armstrong, Randy Bretz, Jessica Chamberlain, Steve Fosselman, Connie Hancock, Steve Henderson, Megan McGown, Cullen Robbins, and Holly Woldt

**Members Absent:** Chris Anderson, Brett Baker, Shonna Dorsey, Phil Green, Jacob Knutson, David Lofdahl, and Joan Modrell

**Alternates Present:** Charlotte Narjes

#### **APPROVAL OF SEPTEMBER 14, 2015 MINUTES\*, MARCH 31, 2016 MINUTES\* AND SEPTEMBER 19, 2016 MINUTES\***

**Mr. Anderson moved to approve the September 14, 2015, the March 31, 2016, and the September 19, 2016 minutes as presented. Mr. Bretz seconded. Roll call vote: Adams-Yes, Anderson-Yes, Armstrong-Yes, Bretz-Yes, Chamberlain-Yes, Fosselman-Yes, Hancock-Yes, Henderson-Yes, McGown-Yes, Robbins-Yes, and Woldt-Yes. Results: Yes-10, No-0, Abstained-1. Motion carried.**

#### **PUBLIC COMMENT**

There was no public comment.

#### **TV WHITE SPACE UPDATE**

Tom Rolfes, NITC, Education IT Manager

TV White Space uses portions of licensed UHF radio spectrum that licensees do not use. UHF radio frequencies are non-line-of sight (NLOS) and are able to penetrate trees and buildings. It can cover a 10 kilometer (6 mile) radius. The Office of the CIO met with interested parties, including the University of Nebraska, tribal entities, libraries and schools in March about interest in a possible funding opportunity for pilot projects in March.

Beatrice Public Library in cooperation with ESU 5 received a \$15,000 grant from the Gigabit Libraries Network for a project to use TV White Space as an extension of the library's network. The base station has to have an internet source but it can be located anywhere. Remote homework hotspots would include the Scott Street Ball Fields, Hannibal Park, and the Community Players Theaters.

## **BROADBAND AND LIBRARIES**

Tom Rolfes and Holly Woldt

In Nebraska, there are approximately 35,000 students who do not have internet in their homes. There is fiber in 100% of the school districts, however, over 75% of libraries have broadband below the FCC's definition of broadband of 25 Mbps down and 3 Mbps up. Libraries are foregoing federal dollars in support primarily due to the perceived complexity of eRate filing. Most communities are not aware that by forming a community consortium made up of the school district, the ESU and the library, the consortium would become eRate eligible. It could mean increased business for local providers and shared Internet would bring costs down. Mr. Rolfes will be working on public awareness and developing partnerships. He asked members to share the information.

The IMLS/Internet2 Toward Gigabit Libraries project targets small, rural and tribal libraries to improve library staff understanding of broadband and to help them develop a plan to improve the library's broadband access. Nebraska was the first state to pilot the IMLS/Internet II Toward Gigabit Libraries Toolkit with rural libraries. Public libraries in Wymore, Walthill, Atkinson, Valley and Gering participated in the pilot. Only one of these libraries had an IT staff person. The pilot process consist of the following:

- Pilot Site Selection
- Intake Survey
- Pilot Visit Toolkit
- Broadband Improvement Plan
- Post Pilot Survey

The toolkit includes the following sections:

- Technology Inventory
- Broadband Services and Activities
- Broadband Technology and Operations Support
- Broadband Funding
- Additional Resources and Best Practices
- Glossary

Oklahoma, Iowa, Kansas, Alaska and one other state are also participating in the project. The toolkit should be available by the end of summer.

## **PUBLIC-PRIVATE PARTNERSHIPS/COOPS AND BROADBAND**

Connie Hancock University of Nebraska Extension; Timothy Lindahl, Wheat Belt Public Power; Eric Carstenson, Nebraska Telecommunications Association

Nationally, there is a drive to implement broadband. It is estimated that 5-7 customers per mile are needed in order for broadband to be cost effective. Currently, the business case is just not there in many areas. Public private partnerships need to occur to provide cost-sharing and cost-savings to the customer. Public power can possibly be a partner.

Mr. Carstenson indicated that the Nebraska Telecommunications Association would like to see broadband deployment in rural Nebraska. The average cost is \$20,000 per mile for fiber on the ground. NTA researched what it would cost to run fiber on a pole. Due to added needs of the fiber on a pole, it was really not cost-effective. There are federal funding sources such as the Connect America Fund (CAF) in addition to the Nebraska Universal Service Fund which are supporting the deployment of broadband.

Mr. Anderson stated that providers and consumers can also work to be more efficient in their use of broadband. He has a 3 Mbps down connection and can run multiple devices. NebraskaLink approached Google, Amazon, and Netflix and asked if they would put servers on NebraskaLink's network to better manage network traffic.

## **MEMBERSHIP**

Commissioner Jerry Vap has left the Public Service Commission. Ms. Byers e-mailed Jeff Pursley and Commissioner Schram to ask the PSC to name a new representative. Ms. Byers has not received a response.

## **NEBRASKA AND THE DIGITAL DIVIDE INDEX 2015**

Roberto Gallardo's report on the Digital Divide Index provided some interesting figures on broadband deployment and adoption in Nebraska. Nebraska fares fairly well on socioeconomic indicators, ranking 21 out of the 50 states and District of Columbia and 35 on the composite index for both socioeconomic and infrastructure measures. However, the report ranks Nebraska 48<sup>th</sup> on infrastructure measures, ahead of only Mississippi, Montana, and Alaska. Ms. Byers discussed some of the findings:

- Broadband availability in Nebraska is improving. Broadband of at least 25 Mbps down and 3 Mbps up was available to 84.6% of Nebraskans in 2015, up from 79.3% in 2014. Nebraska ranked 34<sup>th</sup> out of the 50 states and the District of Columbia on this measure—certainly a far better ranking than the Digital Divide Infrastructure ranking of 48.
- Average advertised download and upload speeds in Nebraska also lag behind the United States and most neighboring states. Nebraska had an average advertised fixed download speed of 20.4 Mbps compared to the U.S average of 32.6 Mbps and an average advertised fixed upload speed of 8.5 Mbps compared to the U.S. average of 12.8 Mbps.
- There are significant differences in average upload and download speeds between the state's more populous and less populous counties. Nebraska counties with populations greater than 20,000 had an average advertised fixed download speed of 36.5 Mbps and an average advertised fixed upload speed of 16.2 Mbps. In comparison, Nebraska counties with populations less than 20,000 had an average advertised fixed download speed of 16.8 Mbps and an average advertised fixed upload speed of 6.8 Mbps.
- Although the data seems to indicate that there is an urban-rural divide in Nebraska, this paints an overly simplistic picture of Nebraska.
- Additionally, affordability and adoption of broadband at higher speed tiers—especially in some of the state's more rural counties—may be exacerbating the Digital Divide in Nebraska. Nebraska lags the U.S. and our neighboring states in the subscription rate to higher speed tiers of broadband (10 Mbps down and 3 Mbps up or greater). In over half of the counties in Nebraska, fewer than 20% of households subscribe to broadband at speeds of 10 Mbps down and 1 Mbps up or greater.
- There are limitations to any method of ranking states. The Digital Divide Infrastructure Score was derived by first calculating county scores for broadband availability, average download speed, average upload speed, and subscription rates. The state score for each indicator was calculated by averaging the county scores. Using this method McPherson County which has no incorporated towns is given the same weight as Douglas County. This method provides a good picture of a measure across the geography of the state—but not the population of a state. Because Nebraska's population is highly concentrated in a few counties in eastern and central Nebraska

and has more counties with fewer than 1,000 people than any other state, this method probably disadvantaged Nebraska to a greater extent than other states.

Federal programs such as the Connect America Fund should support the continued buildout of broadband in underserved areas. The contribution base of both the federal and state universal service funds has been shrinking and needs to be modernized.

### **NEBRASKA BROADBAND TODAY!**

Eric Carstenson

The 2017 Nebraska Broadband Conference will be held on October 26, 2017 at the Cornhusker Marriott in Lincoln. This is a collaborative project with the Nebraska Telecommunications Association and the Nebraska Broadband Initiative. The goal is to bring together economic developers, community leaders, telecommunications providers and others to better understand how communities and telecommunications providers can work together. As plans develop, more conference details and information will be available at [www.ntaonline.net](http://www.ntaonline.net).

### **FIRSTNET UPDATE**

Bob Wilhelm

Congress enacted the public law 112-96 on February 22, 2012. The vision of the law is to provide emergency first responders with the first high-speed, wireless nationwide public safety broadband network (NPSBN) in full operation by 2022. AT&T was awarded the national contract. It was challenged and taken to court. The court awarded the contract. All law enforcement, first responders, and emergency entities will be able to communicate via this network. At the end of summer, the federal government is scheduled to release the guidelines for states to develop their state plan. States have the option to buy into the plan or develop their own plan to build the system according to the FCC requirements. The public law states AT&T must provide "significant rural coverage." If AT&T does not provide coverage, there are financial penalties. Currently, the state is paying \$40 per device for our Public Safety Radio System. When Nebraska's plan has been finalized, it will go to the Governor to decide to opt in or opt out.

### **MAKERSPACE UPDATES**

**Sidney Create!** Ms. Hancock reported that the kickoff was in March. Summer activities have been planned with 4H. These will end up being exhibits for county fair. Fall activities are being planned. The project will be applying for a mobile maker space grant.

**Blair Public Library and Technology Center.** Ms. Byers reported that the Blair Public Library & Technology Center and the Creative Commons (makerspace) opened to the public on April 1, 2017. Policies and procedures are being developed and ventilation systems are being installed. Library staff also plan to work with Metropolitan Community College to begin training classes for the new Cube Pro 3-element 3D printer and Laser Systems 50 watt laser cutter / engraver.

### **Nebraska Library Commission Grant, Library Innovation Studios: Transforming Rural Communities.**

JoAnn McManus, Grants Coordinator, Library Commission

Partners for the grant are the Library Commission, the University of Nebraska-Lincoln Innovation Studio, Nebraska Extension and the Regional Library Systems. The Library Commission and the University of Nebraska are providing a 1 to 1 match. The project kickoff is scheduled for July 1st and will be complete in June 30, 2020. This multi-faceted effort will:

1. Establish local Community Action Team in 30 rural communities;

2. Purchase equipment and related materials for four rotating Innovation Studies;
3. Develop instructional materials and equipment certification processes
4. Employ sustainability strategies for permanent studios
5. Provide training on the use of the equipment, including Train the Trainer strategies
6. Provide marketing efforts and programming/events, including Open Houses and Maker Showcases; and
7. Host annual Inventors Showcases in Lincoln.

Three goals will guide the project:

1. Rural community residents will be empowered with the tools and guidance to explore, collaborate, create, learn and invent.
2. Libraries will transform their rural communities through participatory learning spaces, while establishing themselves as strong community catalysts for community change.
3. Libraries (and communities) nationwide will have access to a replicable model.

The 30 libraries have not been selected yet. There will be an application process. Half of the participants will be picked for the first round. Second round will occur a few months later. Communities have to be under 25,000. That leaves out only 6 communities in Nebraska. The Library Commission and Nebraska Innovation Studio have hired additional staff to assist with this grant.

#### **NEWSLETTER IDEAS**

Ms. Byers stated that she is always looking for newsletter ideas. She plans are to publish the next issue sometime during the summer. Mr. Armstrong suggested the upcoming October conference as well as an update on the FirstNet plan. Members were asked to send Ms. Byers their ideas.

#### **ADJOURNMENT**

With no further business, the Mr. Armstrong adjourned the meeting at 11:46 a.m.

Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Anne Byers, Office of the CIO/NITC.