



ICN Insider

Iowa Communications Network
January/February 2015 Newsletter

INSIDE THIS ISSUE:

ICN Launches Broadband Matters	1
FirstNet Initial Consultation Meeting in Iowa	2
New Telemedicine Program Benefits First-Year Nurses	2
Connected Nation Presents 'Federal Broadband Policy and Iowa'	3
Back to the Basics: The Difference Between 99.999% and 99%	3
Employee Spotlight	4
PBS LearningMedia	4

ICN's Fiscal Year 2013 Annual Report Released

The annual report outlines the activities for July 1, 2013 through June 30, 2014.

Throughout the report readers will find stories explaining how network services have evolved and continue to provide value to our authorized users.

[View the Report](#)

ICN Launches Broadband Matters

In December, we launched an awareness initiative called 'Broadband Matters' to showcase the importance of delivering broadband to all corners of the State. ICN's mission with this initiative is to advocate for true high speed broadband to provide Iowans 'connections that matter.' As part of this initiative, we launched a new website at www.broadbandmatters.com.

Broadband Matters will show the importance of broadband access for education, public safety, healthcare, and government, along with focusing on economic development and residential aspects. Ric Lumbard, ICN Executive Director explains statewide network connectivity, "Broadband will be the vehicle that will empower economic development. It's the next wave of commerce. But it won't just be for one sector, it will be for every aspect of our lives including education, government, public safety, and healthcare."

**BROADBAND
MATTERS.COM**

We invite you to learn about the Broadband Matters awareness campaign, and how broadband access is transforming the lives of Iowans. Videos are available that explain why Broadband Matters to a number of sectors directly affecting Iowans. The videos include statements from:

- Bob von Wolffrad, State of Iowa Chief Information Officer
- Debi Durham, Iowa Economic Development Authority Director
- John Carver, Superintendent at Howard-Winneshiek CSD
- Gregg Cruickshank, Superintendent at Sidney CSD and South Page CSD
- Sergeant Tom Lampe, Department of Public Safety Interoperability Officer
- Daren Relph, CEO at Wayne County Hospital in Corydon
- Ken Bosier, Judicial, Director of Information Systems & Technology
- Ric Lumbard, Iowa Communications Network Executive Director

We are committed to supporting the development of public/private partnerships that will overcome the obstacles preventing statewide high-speed broadband access. Broadband Matters is a campaign initiative to educate Iowans on the importance of this effort.

Visit www.BroadbandMatters.com to learn more about this statewide initiative.

Twitter: <https://twitter.com/BroadbandIowa> #BroadbandMatters

Facebook: <https://www.facebook.com/BroadbandMattersIowa>



Iowa Communications Network | Grimes State Office Building
400 East 14th Street | Des Moines, IA 50319
Phone: 515-725-4692 | Toll Free: 877-426-4692

Visit us on the web at www.icn.iowa.gov

Connected Nation Presents ‘Federal Broadband Policy and Iowa’

On December 16, Connected Nation provided an overview to the STEM (Science, Technology, Engineering, and Math) Broadband Committee Meeting on the topic of ‘Federal Broadband Policy and Iowa’. The following is a highlighted list of the various topics discussed:

Connect America Fund (CAF): Phase II

- Phase II: \$1.75B/year to areas unserved by 3 Mbps/768 Kbps
- FCC voted on 12/11/2014 to increase broadband target speed to 10 Mbps/1 Mbps (first set by National Broadband Plan at 4 Mbps/1 Mbps)
- FCC argues that 99% of urban U.S. households have access to 10 Mbps
- Result: all CAF subsidy recipients must build networks capable of delivering new target speed
- In Iowa, 80.62% of households can access broadband at 10 Mbps/1 Mbps - based on industry reported advertised speeds and availability
 - 236,715 households unserved

Connect America Fund: Rural Broadband Experiments

- FCC Announces 40 Provisional Winners
- \$100 million pilot project to underserved high-cost and

extremely high-cost rural areas

- 40 provisional winners from 25 States and Puerto Rico announced on December 5, 2014
- Three winners from Iowa
 - 100 Mbps/25 Mbps
 - LTD Broadband, LLC in IA and MN – 10,122 Census Blocks - \$20,000,000
 - Skybeam, LLC in IA, NE, IL, KS, and TX – 2,839 Census Blocks - \$8,839,194
 - 10 Mbps/1 Mbps
 - Allamakee-Clayton Electric Cooperative, Inc. - 209 Census Blocks - \$1,453,593

E-Rate Transformation

- FCC increased E-rate support by \$1.5 billion/year to \$3.9 billion
- First substantial increase since program’s inception in 1997 and will be third largest federal source of funds to K-12 education
- Designed to help FCC achieve goal of 100 Mbps per 1,000 students and staff with comparable capacity at libraries
- Funding for Category 2 services (i.e. – internal connections such as Wi-Fi) increased by \$1 billion/year for 5 years

Back to the Basics: The difference between 99.999% and 99%

A telecommunications carrier has a responsibility in ensuring that its Network is reliable and highly available when delivering its service to its users 99.999% (five 9s) of the time. To calculate this concept, one takes the minutes in a year, then the minutes in a hour, times 24 hours, times 365, which equals 525,600 minutes in a year (Equation: 1 year = 365 days = 365 x 24 hours = 365 x 24 x 60 minutes = 525,600 minutes). In other words, it means that there can be no more than five minutes total downtime per year. Five 9s reliability ensures that users will receive the highest level of service possible within the industry.

Commercial grade reliability standards are usually at 99%. The difference between five 9s and 99% reliability is significant in network availability. 99% availability translates to 5,256 minutes (87.4 hours or 3.65 days) of

potential downtime. Network downtimes can occur as a result of emergency situations (floods or tornados) that directly impact a network. These are the times when a reliable/redundant network is critically needed. During these downtimes a provider usually has eight hours of battery backup, however battery backup is expensive, but crucial for continued connectivity.

Availability	Per day	Per month	Per year
99.999%	00:00:00.4	00:00:26	00:05:15
99%	00:14:23	07:18:17	87:39:29

Five 9s is considered public safety grade reliability, which is important for Iowa and the FirstNet initiative. To learn more about FirstNet visit www.firstnet.gov.





Employee Spotlight Joe Tjaden

Joe Tjaden works as an Account Consultant in the Business Services Division. He has been with the ICN for 16 years. His duties include: managing all aspects of a relationship with key customers, working with ICN's business development manager, marketing analysts, and research and development personnel, to assure effective new product developments meet customer needs. Joe says the best part of his job is, "Being able to provide what a customer needs that no other provider could." Joe received his Bachelor's degree in Business Management and Marketing from Upper Iowa University.

Joe has been a native to Iowa all his life. In his leisure,

Joe spends time with his family, wife Teresa, daughter: Amelia (7), and son: Caleb (4). Also he likes getting together with his brothers' families and wife's siblings families whenever possible. Joe in addition enjoys golfing and fishing in Canada. His favorite color is green; favorite travel destination is Vienna, Austria; and favorite food/best place to order it is Italian at Galleria de Pacoand.

Joe's motto is to "convince people to treat each other kindly" and that "life is too short". He learned those life lessons at the early age of 17 by living through a near death experience. When asked what his aspirations were Joe said, "To remember where I came from, so I know where I want to go in the future." If there was one person in history Joe would like to meet it would be Abraham Lincoln, to ask him what he thinks of the world today.

PBS LearningMedia Online Curriculum through Iowa Public Television

ICN is partnering with IPTV to bring you PBS LearningMedia (<http://iptv.pbslearningmedia.org/>), offering enhanced educational opportunities for educators and students in Iowa. Sign up for a [FREE account](#) and start using PBS LearningMedia today!

The Art of Creative Coding | Off Book

Audience: **Grades 9-12**

Programming plays a huge role in the world that surrounds us, and though its uses are often purely functional, there is a growing community of artists who use the language of code as their medium. The work includes everything from computer generated art to elaborate interactive installations, all with the goal of expanding the sense of what is possible with digital tools.

[Learn More...](#)

Mission US: For Crown or Colony?

Audience: **Grades 6-8**

Mission US is a multimedia project featuring free interactive adventure games set in different eras of U.S. history. The first game, For Crown or Colony, puts the player in the shoes of Nat Wheeler, a 14-year-old printer's apprentice in 1770 Boston.

[Learn More...](#)

PBS LearningMedia Contacts:

Angela Hiatt - angela.hiatt@iptv.org - (515) 725-9722

Abby Brown - abby@iptv.org - (515) 725-9721

(800) 532-1290 - iptv.pbslearningmedia.org

To be added to or removed from ICN's newsletter distribution list please submit the [Newsletter Request form](#) on ICN's website.

Visit us on the web at www.icn.iowa.gov