



ICN Insider

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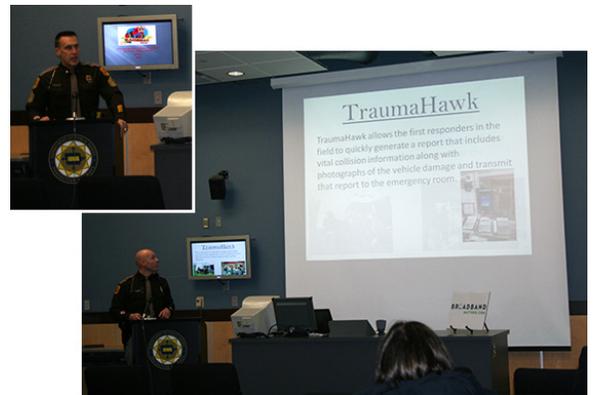
BROADBAND MATTERS.COM

Iowa Law Enforcement Hold Forum to Discuss Need for Enhanced Broadband Capability in Iowa

As part of ICN's ongoing campaign 'Broadband Matters,' members of Iowa's law enforcement community gathered in Des Moines on January 20 to discuss with lawmakers the need for enhanced broadband throughout the State. The legislative forum, held at the Iowa Department of Public Safety building focused on the need for law enforcement to have uninterrupted broadband capabilities especially in times of emergency. Lawmakers in attendance were briefed on an initiative known as FirstNet. The future first responder network will ensure uninterrupted broadband access for all first responders throughout the State. FirstNet will allow for live streaming video access from first responders to dispatch and other public safety entities including hospitals.

Iowa DPS Interoperability Officer Tom Lampe talked about the benefit of the future FirstNet system for first responders in Iowa. "The more public safety uses broadband the more we have to compete with commercial providers to get access, so FirstNet is the network exclusively used for public safety."

Iowa State Patrol Trooper Korey Reule gave an overview of the TraumaHawk cell phone application that connects first responders at the scene of motor vehicle collisions to the trauma team at the hospital. The first responders in the field can quickly generate a report that includes vital collision information along with photographs of the vehicle damage and transmit that report to the emergency room.



Upper left: Sergeant Scott Bright
Lower right: Trooper Korey Reule

Iowa State Patrol Sergeant Scott Bright talked about the future benefits of FirstNet during a disaster, such as a tornado or other crisis at a large event such as RAGBRAI. "If you've ridden RAGBRAI before you know there are tents everywhere. If we have a major event in one of those overnight towns where you have a population that goes from 5,000 to 35,000, how are we going to get out on the system? The system's going to be completely locked up. Cell phone coverage - we're not going to have it. We need a [network] system that is actually going to work and that's what FirstNet will help us through."

For more information regarding FirstNet visit: www.firstnet.gov. For more information about ICN's Broadband Matters campaign visit: www.BroadbandMatters.com



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Innovation, Imagination, & Creativity at Howard-Winneshiek Community School District

With robust and reliable Broadband Internet, students at Howard-Winneshiek CSD are getting a chance to work with technology that is the future of manufacturing in rural Northeast Iowa! Howard-Winneshiek Community School District's mission is to prepare and empower students to think creatively, serve, contribute, and succeed locally and globally. In order to ensure students can compete on a global level, John Carver, Superintendent, recognizes that one vital component of the School District's mission entails the need to install better broadband infrastructure, especially in the more rural areas of the district.

Carver explained the goal is for the community and state to have instruction no longer limited by zip codes, and to do that, broadband can't degrade when the students go home.

Technology transforms learning, and Howard-Winneshiek CSD is in its second year of supplying all students (K-12) with portable computers or tablets (1 to 1 program). At school students are able to incorporate the cutting edge technologies in the classroom.

- With technology and reliable high-speed Internet, fourth-graders are learning how to code and program robots, and seventh and eighth graders are learning and working on 3-D printers. The 3-D printer gives kids a broad understanding of engineering and helps make them

aware of what's out there in the industry, which helps capture students imagination and interest in the field.

- VREP, "Virtual Reality Educational Pathways" is a program that got its start at the Howard-Winneshiek CSD about three years ago. VREP helps kids learn valuable engineering skills that colleges and businesses tend to seek in students and employees. Students create student-directed virtual reality and three-dimensional (3D) projects, by using 2D and 3D computer software. Partnering with Northeast Iowa Community College, Howard-Winn students will have opportunities to learn and create in a "state of the art" Computer Numerical Control (CNC) lab.

Many of the Districts' students live in rural areas, and they do not currently have the same access to the reliable Internet that they do at school. Meanwhile, many do not have the same access to the Internet that those who live in the more populated communities have. This creates a culture of "haves" and "have nots."

Carver encourages the concept that learning doesn't have to stop just because school is not in session. Not all students have reliable Internet access outside of school, which happens to be a problem for which Carver is actively pursuing a solution.

Broadband Provides Educational Opportunities at Van Diest Medical Center in Webster City

With rural broadband, Webster City's hospital staff is receiving exceptional educational opportunities provided by experts via video conferencing in their own community. Attending classes can become an issue when the education needed is provided only in the larger urban cities, which most likely involves hours of travel time and transportation costs plus taking time off from the job and away from family. Without sufficient broadband, most medical professionals in rural settings feel that keeping their knowledge current is somewhat of a challenge; however with technology, medical staff can access the latest trends in medicine for their entire professional life.

Prior to joining the Midwest Rural Telemedicine Consortium (MRTC), medical staff at Van Diest Medical Center in Webster City, were required to pick and choose the classes they attended, which limited the expertise received. The partnership with MRTC made a tremendous impact on the availability of quality education for medical professionals in Webster City and nearby communities. The video conferences are held at the hospital, which invested in portable equipment that can be setup in three different rooms.

With broadband, video conferencing has allowed staff to participate in various conferences and hear a variety of experts, which would have normally not been available.

The broadband connection gives the ability to attend the conferences, because of reduced travel time and costs. The variety of education the medical staff is exposed to is much better than if they enrolled in one or two classes a year in Des Moines. Staff hears and views the lectures and interacts in dialog with instructors, the same as anyone actually at the conference. The variety of conferences include: Sudden Infant Death Syndrome (SIDS), Workplace Violence, Diabetes, Oncology, Geriatric Trauma, Pediatric Inflammatory Bowel Disease, Palliative Care, Chemotherapy, Pediatric Snoring, Autism, Brachial Plexus Injury and Pain Management.

Van Diest Nurse Educator Vicki Roby explains, "I live and work in a small, rural Iowa community. It is where I want to be, where I've raised my family and where I want to live my life." Roby added, "Keeping in mind that in the past I would only choose one or two conferences to travel to the city to attend."

This is a win/win situation for all involved and can be attributed to a reliable broadband connection. "Our medical and hospital staff has access to quality education right here in our own community, but our patients are the real winners. Because of broadband in rural Iowa, our patients are cared for by qualified medical personnel who have access to the latest, quality education on a wide variety of subjects," Roby said.

Iowa's Rural Health Telecommunications Program Completes 200th Location Connection

CHI Health Mercy Corning Hospital's satellite Alegant Clinics in Bedford, IA and in Lenox, IA are the 199th and 200th healthcare locations added to the healthcare broadband network owned by a consortium of Iowa and South Dakota hospitals. The development of electronic medical records (EMRs) and the need to quickly transmit clinical and administrative information between hospitals and physicians fueled the development and growth of the Iowa Rural Health Telecommunications Program's (IRHTP) healthcare broadband network.

IRHTP is a joint effort consisting of a consortium of 86 Iowa rural and urban hospitals, two South Dakota hospitals and the Iowa Communications Network (ICN) with the purpose to connect willing Iowa hospitals and hospitals in surrounding states to a dedicated broadband fiber network using existing ICN infrastructure.

Previously the Bedford and Lenox clinics were connected using DSL or similar technology, which created obstacles with EMR implementation and the ability to expand services to both locations. Debra Goldsmith, President at CHI Health Mercy in Corning said, "The speed of the EMR has been less than ideal at the new locations. We hope to improve efficiency of our use of the EMR at both locations along with now allowing us to increase the use of telemedicine to bring additional services to these communities."

Bedford and Lenox are two communities that do not have hospitals. Mercy Corning Regional Hospital has been in those communities providing primary care for many years, and is now looking at expanding the services by using telemedicine and other technologies. "The IRHTP connections will allow us to increase the use of telemedicine and increase the speed of sending x-rays to be read by radiologists. It will serve two fold, improve the efficiency of our current technology and allow additional use of telemedicine," said Goldsmith.

Utilization of the IRHTP network includes clinical image and data transmission, administrative data transmission, system administrative services and Internet connectivity. Applications developed and initiated by IRHTP participating hospitals, systems and providers include: transmission of various image files, PACS (picture archiving and communication system) consolidation, remote radiology reads, specialty consultations (e.g. cardiology, dermatology and psychiatry), remote intensive care unit (e-ICU) & pharmacy monitoring (e-pharmacy), administrative (for example, billing) & clinical data (such as EMRs) transmission, various patient portals, health care intranet, clinical and non-clinical education and training programs provided on a network-wide basis (distance learning) and consolidation or centralization of various back-office and information technology functions (remote server hosting, remote server back-up and storage, health IT service, centralized billing and accounting).

Back to the Basics: Standby and Protect

A Standby & Protect arises when a contractor notifies the ICN Outside Plant (OSP) that a buried ICN fiber cable has been reported within or near a project area that requires extensive and/or precise digging near the ICN cable. At that time, an OSP team member will verify the presence of an ICN cable within/near the project area. If the ICN is impacted, a Standby & Protect plan is coordinated with the contractor.

Once on the job site, a locator is hooked up at the nearest ICN located pedestal. The locator will provide location and depth readings of the fiber cable. At that time, we begin communicating this information with the contractor. For example, if the ICN cable is located 36"

deep, we would instruct the backhoe operator to take a scoop or two of dirt off of the surface. At that time, we would approach the excavated area and get a new/updated location and depth reading. This approach would continue until the backhoe operator has excavated within 8-12 inches of the ICN cable. At that time we would hand-dig the remaining dirt with a shovel to expose the cable.

Once the fiber has been exposed, our responsibility is to make sure that the contractor does not damage our fiber while completing their project.



The ICN, a state agency, is the country's premier fiber-optic Network, committed to continued enhancement of distance learning and providing Iowans with convenient, equal access to education, government, and healthcare.



Employee Spotlight Karen Alessio

Karen Alessio is the voice of the State of Iowa operator and secretary for the ICN. She has been with the ICN for 1.5 years after previously working for the State at the Woodward Resource Center and the Department of Transportation. Her duties include: answering the phone, staffing the front desk, transcribing the ITTC and FirstNet meeting minutes and updating internal staff documents. Karen says the best part of her job is, "interacting with customers, vendors and coworkers at the ICN. I also have fun assisting callers who call in. Everyone has a story and something to offer."

Karen is a native lowan but loves to travel to the Caribbean and enjoys snorkeling. In her leisure, she

loves spending time with her husband and sons, whether it be traveling, watching them play sports, or just hanging out. "Being together is key!" Karen enjoys spending time with friends, listening to music, being outdoors, and exercising; running, cycling, and tennis. "I also have taken up growing orchids which can be challenging," says Karen.

If she could have a super power it would be to eat anything and as much as she wants without raising her cholesterol or weight! Speaking of food, her favorite is the signature salad at Centro, not to mention their brick oven pizza! "Tasty!"

If there was one person in history Karen would like to meet it would be Jesus to "thank him for giving his life for me." Karen aspires to "be the best I can be each day and be kind to others."

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!

I Wanna See the States

Audience: **Grades 2-6**

Pop band HelloGoodbye sings about the 50 States of America. All 50 states are mentioned in one song that focuses on the people, culture, or geography of each region; use the lesson plan and worksheet attached below to bring this video into your classroom today!

[Learn More...](#)

Wolves of Yellowstone: Lesson Plan

Audience: **Grades 7-13+**

This set of activities, inspired by the Wolves of Yellowstone | EARTH A New Wild video, introduces students to the ecological impact of wolf reintroduction and the controversy surrounding the wolves. The lesson plan is divided into four parts that each focus on a different ecological or environmental topic surrounding animal reintroduction and trophic cascades.

[Learn More...](#)

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