



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

STEM ADVISORY COUNCIL BROADBAND COMMITTEE

Co-Chair John Carver, Superintendent, Howard-Winneshiek Community School District
Co-Chair Robert von Wolffradt, Chief Information Officer, State of Iowa
Amy Kuhlers, Program Manager, Connect Iowa
Robert Denson, President, Des Moines Area Community College
Dave Duncan, President, Iowa Telecommunication Association
Philip Groner, Iowa Communication Network
Karl Hehr, Director of Technology Services, Ames Community Schools District
Galen Howsare, Chief Financial Officer, Iowa Association of School Boards
Karen Randall, Keystone Area Education Association
Michael Sadler, Assistant VP for Public Policy
Larry Siegel, Iowa School Finance and Information System Services
Jeff Weld, Executive Director, Governor's STEM Advisory Council
Josh Byrnes, State Representative, District 14
Steven Soddors, State Senator, District 36

STEM ADVISORY COUNCIL BROADBAND COMMITTEE

Meeting Minutes

October 22, 2013, 9:00 – 10:30
Iowa Utilities Board, 1375 E Court Ave, Des Moines, IA
Conference Room 1-2

Committee Members Present:

John Carver
Galen Howsare
Amy Kuhlers
Dave Duncan
Karl Hehr

Robert von Wolffradt
Phillip Groner
Michael Sadler
Jeff Weld (via phone)
Karen Randall (via phone)

Committee Members Absent:

Josh Byrnes
Larry Siegel

Rob Denson
Steve Soddors

Other Attendees:

Mike St. Clair, RIITA
Don Miller, NW Tele. Coop. Assoc.
Christine Cavil, IEDA
Gwen Nagel, Iowa Dept. of Education
Ryan Wise, IA Dept. of Ed.
Charles Bruggemann, Windstream Comm.
Beth Canuteson, AT&T
Adam Gregg, Iowa Governor's Office
Bill Beard, Mediacom Communications
Suzanne Smith, Iowa Utilities Board
Rodney Brown, HealthNet/BroadNet Connect
Joe Hrdlicka, ITA

Thomas Lampe, Dept. of Public Safety
Keri Schatz, Howard-Winneshiek CSD
Sheila Navis, Rural IA Ind. Tel. Assoc.
Wil Walling, Iowa Network Services
Curtis Dean, Iowa Assoc. of Mun. Utilities
Matt Gronewald, IA Dept. of Ag
Mark Kubik, Howard Cty. Board of Supervisors
Kristin Failor, NFIB
John Stineman, ICA, HTA
Wauneta Browne, AT&T
Rob Smith, Fiber Utilities
Jeff Berger, Iowa Dept. of Ed.





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Other Attendees (via phone):

Erik Skovgard, Lincoln Savings Bank
Art Spies, Iowa Hospital Association
Bill Green, Windstream Communications

Reid Koenig, CUNAWauneta Brown, AT&T
Ric Lombard, ICN
Thomas Jensen, USDA

I. Call to Order and Introductions:

Meeting called to order at 9:00 by Co-Chair, Carver. Committee members and guest attendees offered introductions. Carver provided a brief overview of the Committee mission and next steps.

II. Approval of 10-8-13 Minutes:

Sadler moved to approve the meeting minutes from 10-8-13, with a second from Groner. Motion carried unanimously.

III. Approval of 10-22-13 Agenda:

Duncan moved to approve the agenda, with a second from Howsare. Motion carried unanimously.

IV. Stakeholder Comments:

- a. Beth Canuteson, AT&T: (See posted comments).

Q & A / Comments:

Howsare: Can you give more information on what standardized cell siting entails?

Canuteson: Creating legislation that would standardize timelines and definitions of co-location based on new FCC information, For example, if they would like to co-locate on a tower, there would be a standard timeframe that cities would have to meet to approve the application, along with standard timelines for response.

Howsare: Does it include some type of grid where the towers would be placed?

Canuteson: No, it reflects the standardization of definitions and timelines.

Carver: So as an example, Dowling High has a couple of towers, and if they wanted to co-locate on those towers there would be certain municipal and state ordinances that would need to be met prior to placement?

Canuteson: Yes

Carver: You aren't talking about modifying the fee to locate on the tower?

Canuteson: There are several tower companies that own the towers and they lease to the provider, but a city ordinance might say 'you need to put down a set amount of dollars to process the application' or other, sometimes outrageous fees, etc.

Carver: This would help to streamline the process to co-locate on towers then?

Canuteson: Yes, and this would also relate to new tower builds as well.





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- b. Dave Duncan, Iowa Telecommunications Association: (See posted comments. Additionally, comments provided by ITA were also reflective of CenturyLink and RIITA, unless noted below in the Q & A section.)

Q & A / Comments:

Sadler: Specific to CenturyLink, there are a couple of clarifications regarding loans, grants, and incentives. Loans are not particularly useful to CenturyLink, as we have a high credit rating and are able to acquire funding, and we would not likely borrow money to invest in areas that would not be profitable, so this might not be as useful to my organization as it might be to ITA or RIITA members. Regarding grants, we would like the state to appropriate money into a fund to offer grants from, we are not interested in raising or creating new fees to generate that money, such as having a state USF fund. Also, talking about modifying the USF and Connect America Fund, it's important that the state be aware of what is happening, but it is a federal issue, and CenturyLink might disagree some with the perspectives of the ITA and RIITA members. Lastly, in terms of regulations, AT&T comments were interesting regarding how wireless has grown under the light touch regulatory environment, and sobering regarding the decrease in landline connections.

Navis: I would reinforce comments relating to overbuilding. As a state we should look at what we currently have available. There is a lot more fiber available than what people realize and we should capitalize on that and not duplicate existing infrastructure.

Weld: A platform that would include neutral loans, grants or incentives, if that became a competitive RFP, how would that play out when awarding build out monies to contractors based purely on merit, and how would that affect your members?

Duncan: To clarify, I was talking about a platform and technology neutral program, but at some level there needs to be some additional preference for fiber, because that is what is being scored in the TechNet Index. In terms in what I've seen work in other states, individual providers are encouraged to submit applications for specific areas and would specify in the application how they'd serve the customers, how many would be served and what platform would be used.

Weld: If this were open to a peer RFP competition, do local providers have enough advantage so it wouldn't squash them to have a major provider come in and win bid and blanket the state?

Duncan: If someone comes in and they can follow through with what they indicate they can do, they might be eligible for assistance, but there needs to be due diligence so you don't have someone coming in for the money, but not fulfilling commitments.

Navis: The amount of investment is significant. Small telco have invested 5-7 million in a fiber network in their area. Another point is we are talking about unserved and underserved Iowans as it relates to broadband deployment, so there are distinctions that could be made when talking about a forgivable loan or grant program - there would be other criteria considered.

Carver: In reference to adoption, with the number of 1:1 schools in Iowa, I see this as helping the adoption rate, when students have a device, many times you'll see parents then get an updated smart phone or another personal device for the home. It seems adoption is now happening organically, so having an adoption awareness program as well as digital literacy is important. Also, twice I've heard 'light touch regulation' mentioned, so looking at regulations is something the committee will need to look at. Also, noting that wireless connections are growing at a much faster pace than wired, it would be beneficial to study regulations for wired connections versus wireless.

Howshare: How does the ICN fiber backbone play fit into the entire state fiber network?





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Duncan: I believe ICN was put in place to serve education and government needs, and that's what it should focus on. I don't believe it is a good idea to look at expanding ICN usage to include all Iowans or growing the number of authorized users beyond what it currently is. The footprint of the ICN is not suited to serve our needs. It doesn't have a lot of end points to the consumers. Private networks are better able to satisfy those needs.

Hehr: What about the school districts that can't be served by ICN? There are no incentives for a business to provide connectivity at the same speed/cost as can be provided by the ICN. Would the districts that aren't served by ICN be at a disadvantage because they have to participate with a private organization if we support not building the ICN to serve all educational facilities?

Duncan: It's my understanding that all districts have access to ICN if they choose, and I know of several that have opted not to use ICN, but use a private provider. While the majority of the high schools are connected, not all of the elementary and middle schools are, so I would be open to looking at how we get better service there, whether ICN or through a private provider – it's a case by case basis. The ability for a school to opt out of the ICN is difficult, and that process should be easier.

Hehr: Those districts that have moved to the private sector are small enough, that the local providers are providing service for free (noting Eagle Grove). It would be interesting to see those schools that have opted out of ICN and have a local telco to work with (so competition), what that structure looks like.

Carver: Echoes that we need to look at this on a case by case basis. Something to consider from our last meeting was the discussion on who the authorized users were for the ICN.

Groner: By state code, the ICN can serve state and federal government, public and private higher education accredited schools, public and private K-12's, public libraries, Post Offices, National Guard and hospitals and clinics. It is correct that the ICN does not reach all K-12 school locations, and are required by law to lease the part 3 connections (K-12's and libraries), from the private sector –not part of the state-owned backbone. Also, K-12's in Iowa are not certified users and don't need to apply for a waiver, only certified users do. Certified users are Area Education Agencies, community colleges and the Regent's institutions. It's not the intent of the ICN to serve residential or commercial customers; the private sector is in a much better position to serve these areas. The ICN is in a good position to leverage public/private partnerships. The Governor has talked about repurposing the ICN and there are some ways this could be done to serve both private sector and to allow bandwidth to be delivered throughout the state. At our next committee meeting ICN will provide more information.

Carver: Clarify how the ICN use for hospitals compares to a patient.

Groner: It's the difference between an authorized and non-authorized users. A hospital is an authorized user of the ICN so while a resident cannot access connectivity through the ICN, a hospital can, on behalf of that resident (patient), use the ICN to transfer that patient's data, records, etc.

Carver: So a resident is responsible for their own Internet connection to the hospital, but once at the hospital, the ICN would provide that connection?

Groner: Yes

Sadler: Back to comment about free service being provided to a school district – there is nothing that is free, someone, somewhere, is covering that cost.

Hehr: We are really looking at two discussions – there is the business and private sector, then K-12 education. The issue is that when we talk about incentives, there is not an incentive for a provider to try to compete at a price point that the ICN can provide. How do we incentivize companies to decrease cost to make it competitive to something that a school can already get? The incentive isn't there, but schools





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need the connectivity as much, if not more, than private businesses, and you can charge businesses more. As a committee, we need to consider how we can honor the competitive nature on the business side, yet be able to promote education access.

- c. Charlie Bruggemann, Windstream Communications: (See posted comments.)

Q & A / Comments:

Carver: A reoccurring theme seems to be access to poles, towers and municipal poles.

Bruggemann: Government entities are looking for a revenue source, and these are opportunities for revenue, which makes it challenging for providers in trying to lower costs.

- d. Will Walling, Iowa Network Services: (See posted comments.)

The following are some points made during the presentation that were not included in the written comments:

- As part of his role with INS he has had the opportunity to talk to many of the underserved and unserved in communities. INS is owned by the rural Iowa independent telephone companies, so are very familiar with what it takes to serve the rural areas of Iowa.
- We support many of the comments provided by ITA earlier today (distinctions are outlined in the written comments.)

Q & A / Comments:

None.

- e. Curtis Dean, Iowa Association of Municipal Utilities: (See posted comments.)

Q & A / Comments:

Carver: How many communities in Iowa are Gigabyte cities?

Dean: Cedar Falls is currently the only community that has advertised gigabyte connectivity, but Hawarden and Oskaloosa might be. Noted that basically any community served by fiber to the home would have the capability to offer this level of connectivity, but that doesn't mean the provider might offer the service. We will see gigabyte capability coming from hybrid fiber/coax platform that cable operators provide, as advances in that technology increase.

Carver: To clarify, gigabyte connectivity means the end user has that access to the Internet.

Dean: They have a gigabyte connection to the backbone. Once you get out to the backbone it will depend on the level of traffic on that connection.

Sadler: You talked about adoption and affordability, for GB connectivity, do you have any idea what the take rate is?

Dean: Not sure, Cedar Falls just deployed a few months ago and he hasn't visited with them. At the time of deployment they had one customer, but not sure how many now. It should be noted that while





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there might not be many users now, we are talking about policies that are looking to the future and what the needs will be then. Public and private dollars should be invested into networks that will meet the needs of end users in decades to come.

Sadler: In the 28 communities that offer broadband services, do you know what the rates have done?

Dean: Believes they have risen as they have for all providers, but they are generally lower than in areas where there isn't a municipal network, in many cases significantly. In others what has primarily happened in those markets that are served by multiple providers, when competition is introduced (municipal broadband), the subscription costs from the other providers go down. This may be reflective for a period of months, but as that provider needs to cover their end costs, the prices go up over time. Believes most members have rates that are below the market rates for similar services.

Duncan: In the 28 communities, are the residents served all inside of city limits?

Dean: Mostly inside the city limits. There are some extensions built outside limits where a business case can be made to build to a cluster of homes. Those that are telephone providers have certificates of necessity and may have chosen to build networks out to certain areas with their own facilities. There are some serving outside areas with wireless.

von Wolfradt: Were most investments for infrastructure built by municipalities done through referendum or votes?

Dean: All had to start with referendum to establish the utility, and after that they need to decide how to pay for the network.

von Wolfradt: So what is the predominant source of funding?

Dean: Most of the networks have been funded through revenue bonds or inter-utility loans, or in some instances, general obligation bonds were sold. It's up to the community.

Kuhlers: Are there regulatory barriers the municipalities face? For example when the staff from the electrical utility can't cross over and provide service for the broadband utility.

Dean: There are rules in place, however his organization feels those regulations are appropriate. If an electric lineman is going to work on a telecommunications facility, that utility should cover those costs. The barriers are more on the side of finance.

- f. Jeff Berger, Iowa Department of Education: (See posted comments.)

The following are some points made during the presentation that were not included in the written comments:

- Schools are dealing with technology natives who require speed and do not understand why they can't get access to broadband, and they are using more and more technology.
- State of Iowa has provided some support for schools in the past for technology upgrades. Some districts have included in their purpose statement for local sales tax revenue for fiber upgrades, but no consistent resource.
- Students grade 3-8 and 11 are taking the tests for accountability, all at the same time, which will strain capacity.
- Feel that if districts had to utilize only private infrastructure they might lose access to E-Rate funds.
- Believes there is 700 million dollars in SILO revenue that schools are banking or bonding against this fund for long-term construction projects, and feels this should be available for technology.





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- More and more, statewide Dept. of Ed. data collection is built on access to the Internet. During the last cycle to collect financial data on the certified annual reports, those numbers are used to create the Governor's budget and allocations in appropriations, and there was difficulty with many districts because the capacity wasn't allowing them to use the system effectively.

Q & A / Comments:

Hehr: A lot of this overlaps with FCC dollars with the E-Rate program. As a school district, there are FCC E-Rate dollars available for the building infrastructure, but it is based on low socioeconomic status percentages, so a large number of districts aren't going to qualify. So having the ability for state dollars assessable to districts is enticing. Also, I think the 100 MB per school is too low, rather should be looking at a minimum of 250 per school as a target. Overall, I would agree with your comments.

Duncan: Appreciate comments about the costs to upgrade existing infrastructure inside a school. As a board member for the state's fastest growing district in the state, we had difficulty affording staying up with those internal costs – routers, etc.

Carver: From an educational perspective, with more devices available, the demand will increase. Howard-Winneshiek is at 300 MB up and down. Many schools would like to be there as a starting point, but looking into the future, more will be necessary. Is there a timeline for implementation of the online assessments?

Berger: We are piloting this year, so a 20% selection of the affected grades, statewide will be done this year. Iowa is one of the governing states for this assessment so we will continue to move the pilot forward.

Carver: It's important for committee to note that it will be expected that affected grade levels will be taking online assessments. Right now, other superintendents I spoken with indicate they would have to stagger test times in order to have the capacity for the tests to be taken, which will be a challenge.

Berger: We used the Connect Iowa speed test, with about half of the districts participating, and of those 15% failed the test. We are a bit nervous about moving ahead with the plan, because we don't think our schools are ready.

Hehr: Is the target start time the 2015-2016 school year?

Berger/Wise: 2016-2017 is the legislative date for the assessment to be in place.

Hehr: One other item, all of the new RTI based assessments are also online as well, with 20% of the schools starting this year.

- g. Kristin Failor, NFIB: (See posted comments.)

Q & A / Comments:

Carver: This is an untapped market then?

Failor: Absolutely

Carver: I'm reminded of Diane Smith, an entrepreneur in Montana who has a book out called the NewRural.com, which I'd suggest your members might like to take a look at. In it, she writes about how business startups in rural Montana have risen to multi-million dollar entities with the use of broadband access.





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Failor: Also, more and more of our small businesses promote telecommuting, which is another benefit of broadband .

Carver: So you do see this as a generational concern then?

Failor: Yes, our younger business owners are adopting at a much higher rate.

Kuhlers: A recent Connect Iowa business survey indicates that those businesses that have some type of an active web presence do generate significantly higher revenues than those that do not, so another factor to consider in the importance of connectivity.

V. Housekeeping Items:

- a) The next meeting will be held Friday, November 8 at the Iowa Utilities Board.
- b) There is a new Connect Every Iowan website available which can be accessed at <https://broadband.iowa.gov>. All meeting information, stakeholder comments, and other information is accessible there, in addition to the ability to provide online comments or contact the committee.

VI. Adjournment:

Meeting was adjourned at 11:00.

