

MINUTES
Approved by the Committee
Broadband Access Study Committee
Tuesday, October 06, 2015
8:00 A.M.
EW42
Boise, Idaho

Co-Chair Dean Mortimer called the meeting to order at 8:00 a.m. Co-Chair Mortimer requested an audible roll call. Members present were: Co-Chairs Representative Luke Malek and Senator Dean Mortimer, Senators Shawn Keough, Bart Davis, Bob Nonini, and Dan Schmidt; Representatives Lance Clow, Rick D. Youngblood, Greg Chaney, and John Rusche. Legislative Services Office (LSO) staff members present were: Brooke Brouman, Paul Headlee, and Shelley Sheridan.

Others in attendance: Brad Richy and Rob Feeley, Bureau of Homeland Security; William Goodman, Idaho Education Technology Association; Ann Joslin, Commission for Libraries; Greg Zickau, Department of Administration; Marilyn Whitney, Office of the Governor; Renee Wills, Frontier; Shannon Barnes, Idaho Transportation Department; Jeff Kling, InSite; Kevin Kempf, Department of Corrections; Daniel Chadwick, Idaho Association of Counties; Mike Field, Idaho Rural Partnership; Seth Grigg, Association of Idaho Cities; Dan Blocksom, Idaho Association of Counties, John Adame, NCSL; Chris Campbell, Idaho State Department of Education; Randy Gaines, ISU; Max-Davis Johnson, BSU; Daniel Ewart, UofI; Jeff Sayer, Department of Commerce; Richard Armstrong and Chris Brigg, Idaho Department of Health and Welfare; Jay Engstrom, Idaho Department of Labor; Dan Chadwick, Idaho Association of Counties; Dana Kirkham, City of Ammon.

NOTE: Copies of most presentations, handouts, reference materials, and public testimony can be found at: [Idaho State Legislature - 2015 Interim Committees - Broadband Access Study Committee](#) and are also on file at the Legislative Services Office.

Co-Chair Mortimer introduced Robert Feeley, SLIGP, Program Manager, Military Division, Bureau of Homeland Security. Mr. Feeley presented an [Overview of the Development of the Public Safety Wireless Broadband Network \(FirstNet\)](#). Representative Rusche asked if the \$7 billion was for start-up costs, not for operational costs. Mr. Feeley stated the \$7 billion is the initial capital outlay for network deployment. He stated the sustainment of the network is intended to come from payment of access fees, and the marketing of the excess capacities intended to be another revenue stream for the network. Representative Rusche asked if the specific bandwidth for public safety was to raise money or will it require specific devices. Mr. Feeley responded that Band14 is the name of the spectrum channel in which the network will operate. He stated that Band14 devices are not currently widely accessible and there are pilot projects in Adams County, Colorado, Harris County, Texas, New Jersey, and Los Angeles. Mr. Feeley stated that when it gets closer to network deployment, new devices will need to be provided for public safety. Representative Rusche asked if that included new transmitters and towers. Mr. Feeley responded that the intent was to not create new towers, but develop partnerships to keep costs down. Representative Rusche stated there will be a huge amount of data between hospitals and first responders and transportation, etc. He stated that when the first team is meeting, the police take that into account if they haven't already. Mr. Feeley concurred and stated that the EMS and health community is going to be one of the primary beneficiaries and anticipates a large growth in use of data. Mr. Feeley stated he will take recommendations.

Senator Schmidt asked if deals across state lines with regard to dispatch and communication have been considered. Mr. Feeley responded yes, and that partnerships across state lines have been identified as an area of partnership. Representative Clow referenced slide six of the presentation and asked how large and where the geographic area was. Mr. Feeley responded that the area covered Twin Falls, Minidoka, and Jerome Counties and is the service area provided by SIRCOMM. He stated

that the yellow area was proposed coverage by FirstNet, and superimposed are the calls for service, to see the comparison, and to identify areas that needed coverage.

Representative Clow asked if the \$7 billion was to do the study and how much would be needed to service the areas in yellow. Mr. Feeley clarified that the areas in yellow are outside the SIRCOMM coverage area. He agreed that it will take more than the \$7 billion to create a nationwide network for public safety. He added that it was a good start and can be built upon by using innovative partnerships and potentially existing infrastructure. Representative Clow asked if they are more concerned with auto accidents and incidents of that matter, versus fire. Mr. Feeley stated that SIRCOMM provided a breakdown by EMS, fire, and law enforcement incidents and was put together in one layer. He stated that wildland fires were identified and typically occur in rural, remote, wilderness areas. He stated that each wildfire was mapped for the last five years to identify where they respond. Mr. Feeley stated that it may not be feasible to build a terrestrial network to service every area; however, the hope is to encourage them to have a deployable mechanism. Representative Clow asked about the operability of the signs on highways that notify drivers dial a number to report a fire or drunk driver. He asked how it was possible to remember that number 20 miles down the road when an incident is witnessed. He suggested putting 911 on those signs. Mr. Feeley stated that inoperability was an important issue. He did not know why there was a different number, but will find out.

Representative Chaney stated that there are areas in the state that need to be built out. He asked if there were areas where there is a redundant region primarily for education. Mr. Feeley stated that building out to areas without coverage is a challenge within Idaho due to funding and topography. He stated that fiber and/or microwave might be a solution depending on the particular location. He stated that mountain top areas might be difficult to run fiber to, so microwave might be better. Representative Chaney asked where or the degree to which a potential rebirth of a statewide fiber optic network would be a good partner to their project. Mr. Feeley stated that the mechanism set up for potential offers and partners is to identify themselves and to get on a partnership list so discussions can begin.

Co-Chair Mortimer introduced Gayle Nelson, Vice President, Customer Services, and Mike McKerley, Vice President, Technology, Education Networks of America (ENA). Mr. McKerley presented an [Overview of Broadband Services of Education Networks of America](#). Representative Rusche asked if the education construct is a network creator manager and being able to use regional providers where they have network that meets the specifications for the needs of the customer. Mr. McKerley replied yes and that it's critical that the organization has the skills and expertise to provide the end-to-end networking. He stated that an organization that provides the right expertise to stitch a comprehensive network serving the needs of public institutions using many local carriers could be successful in Idaho and has been successful in other states. Representative Rusche asked how public safety could be integrated with education. Mr. McKerley stated it was possible and that there was a seven-layer model in technology. He stated that layer one is physical technology and layer seven is the interaction between the application and the user; however, with broadband, there is an eighth layer, politics. He stated that from a technology perspective, it is possible to bring in the needs of other public institutions under a single network management. He added that from a political perspective, it's often easiest to start with education and the needs of schools and then branch out to the most critical use cases.

Representative Clow asked if the Idaho Education Network (IEN) was an opt-out system versus opt-in. Mr. McKerley deferred to Ms. Nelson. Ms. Nelson responded that the IEN was state funded and districts had the option to accept service or not. She stated that all but one did, and when it was accepted, it was 100% funded. Ms. Nelson stated that the IEN was not forced on any district, but the majority took advantage of it because it was fully funded. Representative Clow asked if a school district opted out, did they still receive their E-rate money directly. Ms. Nelson confirmed that opted-out districts did not forgo E-rate. She stated that opted-out districts can apply for E-rate

as an individual and secure that E-rate. Representative Clow asked if the growth of broadband usage is doubling every 12-18 months, could fiber be out of capacity and can something be done to slow growth. Mr. McKerley responded that that is why they prefer fiber because electronics can be developed on either end to get more and more bandwidth across the same fiber. He stated electronics can be upgraded without replacing fiber. Mr. McKerley stated that fiber is the most promising long-term technology to meet broadband needs for public institutions and citizens. Senator Schmidt asked what the pluses and minuses were of having a combined broadband institutional use. Mr. McKerley responded that Indiana, as an example, ENA serves all libraries and most school districts with the same network. He stated they have different needs but have similar missions to provide Internet to everyone. He stated that, in many communities, local governments exist for education and public safety. Mr. McKerley stated that ENA often serves the municipality itself because broadband has already been built out. He stated that ENA can manage a public institution focused network, then the underlying carriers paid to build out use their own. Mr. McKerley suggested finding a particular use case that drives public sentiment, build out broadband, then add others. He added that if the two most significant uses can be combined then more can be added.

Senator Schmidt asked whether E-rate eligibility for funding is a bright line that needs to be paid attention to. Mr. McKerley responded yes and that it makes funding cleaner if all services provided are to E-rate eligible customers which makes a clearer delineation of what part of the network infrastructure is E-rate eligible. He added that if Idaho owned and operated a backbone across the state, none of it would be E-rate eligible because it is owned by the state and not specifically for school and public library uses. Co-Chair Mortimer asked who enters into the contract with the actual broadband provider. Mr. McKerley responded that ENA enters into the contract with the purchasing organization through strict SLAs. He stated that ENA finds, encourages, and offers incentives to others to build out. Mr. McKerley stated that certain organizations want a blended cost and many school systems prefer a per-seat pricing matrix. Mr. McKerley added that ENA takes advantage of various other incentives and state or federal subsidies but is still the contracting party and ultimately responsible for any service level violation.

Representative Rusche asked whether ENA makes a profit when a network is sold to a customer. Mr. McKerley stated that there are costs and value ENA provides on top of the underlying circuit. Mr. McKerley confirmed that ENA charges for the value provided and feels they deserve it. He stated that any service provider providing expertise and engineering wants to charge for that value, otherwise it's not valuable. He added that ENA does not make a profit on re-selling the circuit. Senator Schmidt asked if ENA had developed relationships similar to Idaho's in other states, and if so, what was the outcome. Mr. McKerley responded that, in all other areas, ENA had the freedom to develop their own contracts and relationships with underlying carriers. He stated that they are able to develop good pricing with a carrier because their primary network management use case was to bring fiber and other high capacity to businesses, but they don't have an organization that serves public institutions. He added that ENA is free to do that essentially everywhere they operate except they weren't necessarily free to do that in most of the territory of Idaho under the IEN as it previously existed before its dissolution.

Senator Davis asked if there is fiber where it needs to be to service school districts. Mr. McKerley responded no and that ENA has found fiber or incentives for others to build fiber to the 24 school districts ENA currently services in Idaho after the IEN, but they encourage various funding mechanisms to get fiber to other locations. He stated that ENA uses other technology today, microwave and fiber. He added that fiber is not always available, but should try to be made available to public institutions because their broadband needs would be best served by fiber in the long term. Senator Davis asked how much of the prior delivery was on copper. Mr. McKerley stated he does not have direct numbers, but could get them. He stated that the vast majority of services provided under the IEN were on copper in the beginning, not at the end. Senator Davis asked if all contracts today are fiber. Mr. McKerley responded yes.

Co-Chair Mortimer asked for clarification on the issues surrounding the state entering into contracts versus the state being the contracting agency. Mr. McKerley stated that the amount of expertise that providers can bring to the table is significant. He stated he did not mean to indicate that various state organizations do not have or could not hire significant subject matter expertise, but it's been ENA's experience that the best run models are where the contracting organization is strict about their needs and wants and a general contractor is found who can make sure those needs are met. He stated that if the organization is state run, often politics are involved in order negotiate with individual network providers. ENA believes the private sector is best used to negotiate outside the realm of politics to make sure the service is strictly managed through service-level agreements.

Co-Chair Mortimer introduced Sunny Deye, Program Principal, National Conference of State Legislators (NCSL). Ms. Deye presented a review of [Other States' Broadband Models for State Agencies](#). Representative Rusche asked if other states were involved in other than K-12 education efforts and was it helpful to combine that additional market and differences in direction for the network. Ms. Deye stated that half to two-thirds of states have some connection to the higher education network, some being optional. She stated that three to five states have gone more broad to include public safety, or state agencies as part of the network. Co-Chair Mortimer asked what parameters should the state include to determine which method to use. Ms. Deye responded that the state should consider what level would allow the state to aggregate, what level of services does the state want to provide, and how much money is available to reach its goals. She added the state should also consider the desires of the districts.

Co-Chair Mortimer introduced John Adame, Director, Communications, Financial Services and Interstate Commerce Committee, NCSL. Mr. Adame presented a review of [Other States' Broadband Models for State Agencies](#). Representative Rusche asked if there will be more money to help with mapping and planning. Mr. Adame responded yes, there will be more money available. He said that many states have the same problem. He confirmed it would be helpful to have a map to see gaps. Senator Davis asked how other states approach their statutory constructions for procurements and professional services. Mr. Adame responded that other states are also dealing with that. He stated that broadband statutes are being updated and that deployment is unique. He stated there was also a regulatory aspect in terms of how much red tape is involved to get broadband out faster. He suggested considering what the state is doing that is slowing down the process and if new laws and amending others could speed the process.

Representative Clow asked what the 6th Circuit ruling was and for details on the Amicus Brief. Mr. Adame stated that the FCC handed down an order about municipal broadband networks that preempted North Carolina and Tennessee from managing their own networks. He said that the commission stated that because they found barriers to broadband deployment, the commission had the authority to step in and to say states didn't have the authority to regulate anymore and the federal government will take over and deal directly with the municipalities that are setting up the networks. Mr. Adame stated the huge financial component is problematic. He said that the commission essentially stated that there isn't a place for state regulations. Mr. Adame stated that the NCSL filed an Amicus Brief focusing on the unintended consequences. Mr. Adame stated that the brief was filed but no ruling yet.

The committee recessed at 10:12 a.m. and reconvened at 10:25 a.m. for further discussion.

Co-Chair Mortimer introduced Chris Campbell, Chief Technology Officer, Idaho State Department of Education. Mr. Campbell presented a review of [Fiscal Year Expenditures and Estimates and Broadband Connectivity Benchmark](#). Representative Rusche asked if the department is looking into K-8 schools that are more difficult to get to and may not have network available. Mr. Campbell confirmed that the department is looking at the current providers and contracts for unserved schools. Representative Rusche asked if the \$5 million from the general fund was for commodity bandwidth not network management or other security issues. Mr. Campbell stated there is a large

mix of contracts in the districts, some are Internet only, some are managed Internet, and some are receiving fully managed fire wall services. Representative Rusche asked if the superintendent has oversight or a standard role to make sure its state-of-the-art or has adequate security. Mr. Campbell stated that moving forward it is very important to set standards so districts know what to ask for. He stated that current contracts were driven by the school districts themselves.

Representative Chaney noted exponential growth and asked if the state department could give an educated projection based on teaching trends or what other states have done. Mr. Campbell stated that education in Idaho is a local decision process and many schools have implemented one-to-one programs feeling it's in the best interest of the students. He stated that a school like that would have higher technology needs than another. He stated there isn't one size fits all. Mr. Campbell stated, historically, there has been a 40-50% growth in bandwidth over the last five years over the IEN. He said that other states are seeing 50-100% growth.

Senator Schmidt asked if the department had an estimate of E-rate returns or reimbursement to schools. Mr. Campbell referenced the bandwidth cost slide of his presentation. Senator Schmidt asked about comparison from previous years. Mr. Campbell confirmed he had comparisons, just not with him. He will forward it to the committee. Senator Schmidt asked if the IEN serves high school. Mr. Campbell stated that smaller school districts share multiple grade levels. Representative Clow asked if E-rate discounts were set on statewide basis or by size. Mr. Campbell replied that the E-rate discounts are set at district level and based on free and reduced populations.

Co-Chair Mortimer introduced Randy Gaines, Chief Information Officer, Idaho State University; Max-Davis-Johnson, Office of Information Technology, Boise State University; Daniel Ewart, Vice President for Infrastructure, University of Idaho. Mr. Ewart presented a review of [Broadband Services and Related Technologies Used in Idaho Universities](#). Senator Schmidt asked if the universities considered using IRON for K-12 schools. Mr. Ewart stated there were discussions in the past but the universities stayed in the direction of the purview of the IEN. Senator Schmidt noted that other states have found synergy or efficiencies in broadening their application of Internet networks. He asked if the universities would be interested. Mr. Ewart stated there has been discussion and they do want to serve Idaho in the best way possible, but no there has been no resolution. Mr. Davis-Johnson stated there are some synergies by working closer with IEN. Mr. Gaines concurred and stated that prior to the IEN, ISU coordinated a rural video network where bandwidth was facilitated and coordinated to some K-12 schools. He stated it was a challenge, but valuable to those schools.

Representative Clow asked for an explanation of communicating without going through public domain. Mr. Gaines responded that it provides a purer path without having to intermingle with public Internet. Mr. Davis-Johnson stated that its an opportunity to have a dedicated circuit. He stated that the universities have the ability to segment traffic thru IRON. Representative Clow asked if it was more secure. Mr. Davis-Johnson replied that it's physically more secure and added that hacking occurs at the human level.

Representative Rusche asked if IRON is owned by the users. Mr. Ewart confirmed that IRON is owned by the users. Representative Rusche asked if there was an advantage to using IRON and if it was cost effective. Mr. Ewart responded there is a possible benefit, but will need to look at hardware upgrades. He stated it has been explored, just not in great depth. Senator Keough asked where the state is with infrastructure and should the state be involved in securing and owning broadband network. Mr. Ewart replied that her question was challenging. He stated that there are advantages to owning. Mr. Ewart added that IRON leases fiber and sees expansion in purchasing versus leasing. He hopes resources are not duplicated in the state. Mr. Ewart will provide more research and provide more specific recommendations. Mr. Gaines stated there is no duplication between what IEN and IRON provided. He stated there is a big difference in scale and it would be of concern in any state model. Mr. Davis-Johnson stated that the last mile connectivity was a problem with IEN. Mr. Davis-Johnson recommended leveraging expertise.

Co-Chair Mortimer asked about reaching capacity and where the universities are heading. Mr. Ewart stated there are peaks and valleys in Internet connectivity and bandwidth usage. He stated that there is enough connectivity. He added that 100 gigabytes connectivity is a hardware upgrade throughout the network that needs to be done. He stated that the fiber assets and skills are in place. He hopes the state utilizes the skills and resources that IRON has in further conversations. Mr. Ewart stated that the equipment costs don't change radically, but the capacities do. Mr. Gaines stated that an advantage to IRON is that a certain amount of bandwidth is paid for but they don't have to pay extra for bursts of bandwidth. Mr. Davis-Johnson stated that there are a lot of connectivity options and that bandwidth could be purchased cheaper by upgrading equipment. Senator Schmidt asked if IRON is capable of aggregating services. Mr. Ewart confirmed yes. Co-Chair Malek asked what the committee should keep in mind for policy setting. Mr. Gaines suggested allowing enough flexibility. Mr. Ewart agreed that flexibility is key and that the universities are willing to help.

Co-Chair Mortimer introduced Shannon Barnes, Enterprise Technology Services Administrator, Idaho Transportation Department (ITD). Ms. Barnes presented an [Overview of Broadband Services and Related Technologies Used in the Idaho Transportation Department](#). Co-Chair Malek asked if the green dot, as shown in the presentation, was a maintenance shed in Shoshone. Ms. Barnes said she did not know. Representative Rusche asked if fiber was owned. Ms. Barnes stated that ITD does not have a lot of fiber and that it is not part of ITD's mission. She added that there are multiple ways of getting broadband and that ITD saves money by working with Syringa and Ada County Highway District. Senator Schmidt asked if fiber was buried on all highway improvements. Ms. Barnes replied that fiber is only laid for specific needs.

Representative Rusche asked if ITD laid conduit. Ms. Barnes replied no. Representative Rusche asked if ITD rents network or has their own manager. Ms. Barnes stated multiple models are used. She stated that ITD has leased fiber from Syringa for the past 10 years but they manage the equipment themselves. She added that ITD also utilizes ACHD and adapts to the environment to find the most cost-effective way. Representative Rusche asked if drivers are blind when traveling. Ms. Barnes stated the drivers rely on microwave for radios in areas without broadband. Representative Rusche asked if in areas without broadband, is there connection only with the truck but nothing else. Ms. Barnes stated that trucks get information at the sheds. Co-Chair Malek asked if there should be conduit wherever a road is built. Ms. Barnes replied that there is a lot of discussion at the federal level about digging only once, but the topic has not been raised at the agency level.

Co-Chair Malek asked whether the discussion of placing conduit was not a focus or if there were obstacles. Ms. Barnes stated cost and time are factors. She added that in the past, the decisions have been in ITD's best interest. She stated that network security is critical. Ms. Barnes stated that conduit and fiber are in some places, but if the legislature is requesting something specific, she will talk to the director.

Senator Schmidt asked if there was a good way of implementing statewide security. Ms. Barnes stated that flexibility is important because of the different needs of larger agencies versus smaller agencies. Representative Rusche stated he is surprised to hear that conduit was not put in when ground was dug up. He recognizes that ITD is more than just trucks on the road, but all state agencies should work together. Ms. Barnes stated she will take comments back to the director. Co-Chair Mortimer asked how much bandwidth ITD uses. Ms. Barnes said she did not know but will find out.

The committee recessed at 11:53 a.m. and reconvened at 1:05 p.m. for further discussion.

Co-Chair Mortimer introduced Ann Joslin, State Librarian, Idaho Commission for Libraries (Commission). Ms. Joslin presented an [Overview of Broadband Services and Related Technologies Used in State Libraries](#). Representative Youngblood asked if the \$83,904 was from total services for all libraries or just E-rate. Ms. Joslin stated that \$83,904 was the total cost for telecommunication services eligible for discounts under E-rate. Representative Rusche asked if rural libraries could be open more than one day per week. Ms. Joslin stated that it's only a recommendation that libraries

be open 20 hours per week and some weekends. She stated that libraries depend on local funding. She added that most libraries have WiFi and are encouraged to leave it on 24/7. Staff may not be there, but Internet access is available. She stated that there have been people in the parking lot all night to use the WiFi.

Representative Clow asked why some libraries are not using E-rate. Ms. Joslin replied that costs of bandwidth and staff time are factors. Representative Clow asked why cost was so high. Ms. Joslin stated that libraries pay more per year compared to other states. Co-Chair Malek asked how it could be incorporated into statewide planning. Ms. Joslin replied that three years ago, the Commission for Libraries requested state funding to reimburse a portion of public library costs. She added that it would benefit the state to help libraries with costs because of their role in education. She stated that flexibility was very important. Ms. Joslin stated that libraries couldn't join IEN because it was expensive and it was a package deal. She stated that libraries don't need that much and could purchase from state contracts. Ms. Joslin added that public libraries should be high on the list with state funding to get broadband. Co-Chair Malek asked how the state could help libraries get E-rate funding. Ms. Joslin replied that the Commission is not in a position to encourage libraries to go through the time-consuming process for a small amount of money. Senator Schmidt asked if IRON could be utilized. Ms. Joslin stated the commission is not in the business plan of IRON and that it might make a difference if libraries had the money to bring to the table. Senator Schmidt asked if E-rate reimbursement would be applicable to last mile connection. Ms. Joslin stated it would be, and perhaps with new provisions in the modernized E-rate program, additional discounts could be offered if the state matches the build-out project.

Co-Chair Mortimer introduced Jeff Sayer, Director, Department of Commerce (Department). Mr. Sayer presented an overview of broadband services and related technologies used in commerce. Mr. Sayer stated that broadband is much bigger than education and more than the IEN. He stated it is about future economic growth and keeping Idaho current. He noted there is a significant impact on rural Idaho. Mr. Sayer noted that the CEO of Google said he believed that the Internet would someday disappear. He related it to how people don't ask where water or electricity comes from. He stated that the Internet will be that way and Idaho needs to pay attention. He stated that growth will expect it and it needs to be in place and that broadband might be more important than roads and bridges. Mr. Sayer believes there is a long list of opportunities to benefit rural Idaho and agreed that libraries should be supported. Mr. Sayer noted that employees can be distributed around the world to work. He referenced Montana notifying people about working off-site. He suggested encouraging small businesses and attracting private capital. Mr. Sayer stated that you could not tax enough. He stated small businesses have problems with up-front capital. Mr. Sayer noted that the current broadband credit is a dead credit and suggested raising the credit and adding a sunset clause. He also suggested adding a sales tax exemption to add incentive.

Co-Chair Malek asked if there was something more that could be done to the tax credit. Mr. Sayer suggested tweaking the credit higher for higher speed or having a minimum broadband speed to qualify. Representative Rusche asked if the current defacto tax exemption on online sales could be an opportunity to transfer that receipt for credit. Mr. Sayer agreed it would create a revenue source to help fund. Representative Rusche stated that past opportunities to participate in federal programs, like Link Idaho, have not been supported by the department. Representative Rusche asked if this was a change in direction for the department. Mr. Sayer responded that the department sees the importance.

Co-Chair Mortimer introduced Kevin Kempf, Director, Idaho Department of Correction (department). Mr. Kempf presented an [Overview of Broadband Services and Related Technologies Used in the Idaho Department of Correction](#). Co-Chair Mortimer asked if more broadband and improvements were needed. Mr. Kempf stated yes, particularly in rural areas. He stated that broadband is not as fast in populated areas and that the future of corrections relies heavily on technology. Representative Youngblood asked if the department contacts providers directly. Mr. Kempf

responded yes and added that it's an area that needs improvement because there is confusion on who is and should be contacting whom.

Representative Rusche asked if the department plans to use telehealth. Mr. Kempf replied yes. Representative Rusche asked if the department considered setting up a common system between jails. Mr. Kempf stated no, but it is a great idea. Representative Clow asked if kiosks require much broadband. Mr. Kempf responded he did not know. Randy Turner added there is a need for more bandwidth because kiosks are used for more than just e-mail. He stated that the kiosks are also used for video, voice, phone, and Internet access. Representative Clow asked if security cameras were used with the Internet. Mr. Turner stated that the cameras are hardwired and that bandwidth was required within closed circuit.

Co-Chair Mortimer introduced Richard Armstrong, Director, Idaho Department of Health and Welfare (department). Mr. Armstrong presented an [Overview of Broadband Services and Related Technologies Used in the Idaho Department of Health and Welfare](#). Co-Chair Mortimer asked how much bandwidth was used. Mr. Armstrong deferred to Chris Brigg, IT Enterprise Architect for the department. Mr. Brigg stated that within MAN (metropolitan area network), they currently have about 500 megabits of bandwidth. He stated locally, 400 megabits of bandwidth. He stated that use by minute was unknown but any point could hit 100 percent of that 500 megabits of bandwidth. Co-Chair Mortimer asked if usage could double in education. Mr. Brigg stated that usage may not double but it will grow. He stated that tele-conferencing and video-conferencing are increasing.

Representative Rusche asked if the department sees things coming in healthcare. Mr. Armstrong replied that with regard to health management, the amount of communication between patient and clinic will go up dramatically. Health data exchange is adding one million records per month and expects to grow, could double. He stated that network will be necessary because of homes in rural Idaho. Mr. Armstrong stated that healthcare is going where the people are, people are not going to metropolitan areas. He stated that the mission plan includes more capacity for telehealth. Senator Schmidt asked if the department has a direct contract with providers. Mr. Armstrong stated that there is some direct contracting, but not always.

The committee recessed at 2:38 p.m. and reconvened at 2:46 p.m. for further discussion.

Co-Chair Mortimer introduced Mike Field, Idaho Rural Partnership. Mr. Field presented [Observations During the State Broadband Initiative With a Focus on Rural Populations](#). Co-Chair Mortimer asked if the website will tell where our emphasis is needed instead of searching by location. Mr. Field replied no and that it was meant to be a volunteer system. Co-Chair Mortimer requested a list of the Broadband Advisory Team members. Mr. Field suggested the committee talk to rural providers, like Step One in Moscow and listen closely to the city of Ammon whose tech person understood telecommunications, which is critical. Representative Clow stated that people protest putting up towers and asked if the partnership has discussed the process of approval for putting up towers. Mr. Field stated that if locals don't want a tower, it's not going to happen. He stated they need to be educated and taught the benefits. Mr. Field stated that the federal government has towers everywhere but no one else is allowed on those towers. He stated there should be a way that private entities have access to those towers. Mr. Field suggested subsidizing public libraries so Internet was always available. Co-Chair Malek asked if it would be helpful to offer a more robust tax incentive. Mr. Field stated that Ron Williams worked with the partnership to create a tax incentive bill. He stated it was a good piece of legislation but had no support. Co-Chair Mortimer asked what the annual cost of the project was. Mr. Field answered the contract was \$4.6 million, but for coordination was \$110,000. Co-Chair Mortimer asked if \$110,000 would keep the program going. Mr. Field agreed \$110,000 could do it.

Co-Chair Mortimer introduced Jay Engstrom, Deputy Director, Idaho Department of Labor. Mr. Engstrom presented an [Overview of the Idaho Rural Broadband Investment Program](#). Representative Rusche asked if the IEN was the last time the state put money into broadband. Mr. Engstrom

confirmed that was true. Senator Schmidt asked if costs have been bumped up or was there sufficient incentive. Mr. Engstrom stated there wasn't ongoing monitoring from the department. He stated that under the legislation, the PUC was asked to review projects going forward, so there was a disconnect from the department. Mr. Engstrom stated that the department asked for marketing materials or plans for companies to market it to the area so people would know about it. He added that most equipment was long-term equipment, and couldn't say how much is ongoing. Senator Schmidt asked if there was a connection to libraries getting free service. Mr. Engstrom stated he didn't have any information that there was a direct link, but through the application process, they said they would provide free access in certain areas. Senator Schmidt requested a list of the 79 projects. Mr. Engstrom will provide that list.

Co-Chair Mortimer introduced Dan Chadwick, Executive Director, Idaho Association of Counties (IAC). Mr. Chadwick presented an [Overview of County Broadband Services and Related Technologies](#). Mr. Chadwick suggested the committee ask the courts and agencies for their broadband needs. Co-Chair Malek expressed frustration that Kootenai County is sitting on fiber but they don't have access, particularly at the courthouse. Co-Chair Malek asked whether IAC could help the counties better understand the robust system. Mr. Chadwick responded he wasn't aware of the problem, but will find out and help the counties. He added that citizen access is important too but not every county has the resources. Representative Rusche stated it would be helpful to have a catalogue of uses and anticipated uses over the next few years. Mr. Chadwick stated that IAC will work with LSO staff to develop surveys, but stated they will need to know what questions to ask.

Co-Chair Mortimer introduced Seth Grigg, Executive Director, Association of Idaho Cities and Dana Kirkham, Mayor, City of Ammon. Mr. Grigg briefly reviewed the [Survey of Municipal Broadband Services](#). Ms. Kirkham presented an [Overview of City Broadband Services and Related Technologies](#). Representative Rusche asked what city services Internet is used for. Ms. Kirkham stated that the Internet is used for connecting to their system for well houses, lift stations, and the firehouse. Representative Rusche asked if there was pressure from the private sector to restrict municipal networks. Ms. Kirkham stated yes and added that their model is new, a little threatening, and unfamiliar to the private sector. She stated there was some fear or apprehension that it could become restrictive because the city of Ammon owns the infrastructure. Representative Rusche asked if once they got over the fact they didn't have to own, there was a low barrier of entry and a bunch of competitors and the price reflected that. Ms. Kirkham agreed and stated that once providers decided to play, competition and prices increase. She added that that price structure only comes from the free market system. Representative Rusche asked what would happen in cities that have enforced carriers. Ms. Kirkham replied that she doesn't have an answer but referenced the city of Rupert which has a sole provider that built their infrastructure. She added that if there is going to be legislation that would protect all kinds of municipal systems, every model would be protected. In Rupert's case, there is an issue because someone else has invested in their infrastructure.

Senator Schmidt asked for a description of Ammon's relationship with schools. Ms. Kirkham stated fiber infrastructure was provided to high school, middle school, and elementary. She stated that service was initially provided because of competition and that Silver Star and CenturyLink are fighting to provide service. Representative Clow asked if Silver Star and CenturyLink are paying the city of Ammon. Ms. Kirkham responded yes but at a nominal fee and costs aren't increased. Co-Chair Mortimer asked how would that fee to Silver Star and CenturyLink compare to what they would pay Syringa or someone else with the same infrastructure. Ms. Kirkham responded it is less than, but the percent is unknown because they have a business and private rate.

Co-Chair Mortimer asked if District 93 was mostly microwave and if they were taking advantage of Ammon's infrastructure. Ms. Kirkham stated yes and that most of the elementary schools were microwave. She stated that District 93 is hoping to run a dedicated fiber line, but it is not advantageous to them until Ammon is closer. Senator Keough asked whether there were providers in the area that couldn't assist Ammon. Ms. Kirkham stated yes and that all existing providers were

approached in 2008, to which they stated the economy wasn't there. Senator Keough thanked Ms. Kirkham for blazing the trail. Senator Davis asked how the citizens reacted. Ms. Kirkham stated the citizens' reactions were fantastic and overwhelming. She stated that 70 percent said they would pay to have fiber in their home. Senator Davis stated it is impressive to see how little was required. Ms. Kirkham stated that all are welcome in Ammon and there will be higher paying and more sustainable jobs. Senator Davis asked if Ammon's sister city has begun something similar. Ms. Kirkham stated yes and added that they have fiber in the ground, but it is dark. Senator Davis asked what was next for Ammon. Ms. Kirkham stated that the sky is the limit. She stated they plan to bring in a research development center with an INL presence and could grow as big as Shelley. Senator Schmidt asked if Ammon was interested in regulating content. Ms. Kirkham responded yes and it is part of research and development. Representative Youngblood asked what the cost was. Ms. Kirkham stated it cost \$1 million to connect all public facilities. She stated that Ammon is operating in the black now and all money was reinvested in fiber.

Co-Chair Mortimer opened the floor for committee discussion. He confirmed that the next meeting is scheduled for November 20, 2015. Co-Chair Mortimer stated that all presentations are needed. He stated the committee needs to start formulating a direction and policy. He requested that if additional presenters are needed, to contact the committee. Co-Chair Mortimer asked if a facilitator was needed to move forward with a robust round table. Representative Clow asked what the legislative issues were and how much of the IEN is in code. Co-Chair Mortimer asked LSO to review all current legislation and present at the next meeting. Co-Chair Malek agreed a round table was a great idea and requested all policy ideas to get the committee started. Senator Davis suggested compiling a list of ideas and specific recommendations for the next meeting. He noted concern about the relationship between the two interim committees and stated that legislation hasn't been drafted yet, but will be soon. Senator Davis stated he would rather get the legislation right than hurry to get it done by January. He suggested the chairs of both committees meet to see what their vision is and to minimize duplication. Co-Chair Malek stated that ENA was drafting legislation and asked if people with outside interest could bring ideas. Senator Davis responded yes and suggested it be bullet style and nothing formal. Representative Clow stated the problem with the IEN was how the bids went out and asked how specific the legislation needs to be. He asked how far off the committee was. Representative Rusche noted that the city of Ammon created a monopoly which created a market and that it worked because they had the utility. He stated there is a real deficit in leadership, which is a primary need, as well as developing an infrastructure. Senator Keough stated that HCR 26 formed the committee and lays out its task which is to focus on K-12, higher education, and state agencies and to complete a thorough study of broadband. Senator Keough stated a gap analysis was needed and that Idaho is a platform to start with and build upon. She asked what the state's role was in developing infrastructure and what are the barriers. Senator Keough stated that LinkIDAHO might be a platform to start with and build upon, figure out where to put it, and keep it updated.

Senator Davis stated that the Department of Administration probably did the best they could with lousy language that was antiquated for a difficult technology. Senator Davis stated the Department of Administration needs to be involved as they have a great deal of experience and deep perspective that should not be ignored. Representative Rusche stated that leadership is needed but it cannot lay on the director of the Department of Administration. Co-Chair Malek stated the issue of broadband is bigger than education and it is important to create a policy that will last.

Co-Chair Mortimer summarized that LSO will prepare a starting point of ideas and gather information from outside to be ready within three to four weeks. Next meeting will be a round table with all interested vendors available to answer questions and provide feedback. Senator Davis asked if there will be a facilitator. Co-Chair Mortimer confirmed there will be a facilitator and stated the facilitator will be someone who is aware of, understands the issues, and can help. Co-Chair Mortimer asked if the facilitator should be someone in government service. LSO and the Co-Chairs will work together to find a facilitator.

Co-Chair Malek adjourned the meeting at 4:44 p.m.