

MINUTES

**FIVE COUNTY ASSOCIATION OF GOVERNMENTS
REGIONAL BROADBAND PROJECT MEETING
CEDAR CITY AND BRIAN HEAD CONVENTION BUREAU
581 NORTH MAIN STREET; CEDAR CITY, UT
OCTOBER 15, 2013**

THOSE IN ATTENDANCE

Michael East
Heather Rankin
Norman Olsen
Ken Munford
Bill Shaw
Justin Fischer, via telephone
Scott Hirschi, via telephone
Monty Thurber, via telephone
Kelly Stowell, via telephone
Matt Brown, via telephone
Kelleigh Cole, via telephone
Gary Zabriskie
Levi Roberts

REPRESENTING

South Central Communications, CEO
Rankin Realty at Lake Powell, Owner
MSC Aerospace
Iron County School District
Baja Broadband
Garfield County, Economic Development Professional
Washington Co., Economic Development Professional
St. George City, Traffic Coordinator
Kane County Center for Education, Business and Arts
Kane County Economic Development
Governor's Office of Economic Development
Five County Association of Governments
Five County Association of Governments

I. WELCOME AND INTRODUCTIONS

Mr. Levi Roberts extended a welcome those in attendance and others joining via conference call. Introductions were provided and those participating via telephone acknowledged their presence. A slide presentation was provided via e-mail for review prior to today's meeting.

II. REVIEW PROCESS FOR DEVELOPING PLAN

Levi Roberts recapped the kickoff meeting where strengths and weaknesses were discussed. This meeting will begin the second phase of fact finding. The goal with this phase is to nail down priorities that will be pursued. Today's meeting will cover discussion in terms of opportunities and challenges. Work will also proceed toward the development of a draft plan.

III. INITIAL FINDINGS OF SURVEY

Levi Roberts provided a quick overview of the initial results of the Broadband survey. There have been a number of responses (286) thus far. One thing of interest is there is very little representation from Beaver and Garfield counties. However, there may be an issue with the system that can attribute to this because Justin Fisher completed a survey, and the system shows zero responses from Garfield County. Committee representatives in those counties are encouraged to put the word out encouraging their constituents to complete the survey. It is important to have participation from the rural counties in the plan. DSL, Cable and wireless represent the majority of service types for home service. Most respondents indicated that they use the internet in a variety of locations and would like to have faster internet. Speed and reliability

were equally important to most of the respondents. It is interesting to note that less people had a landline than those that had one, and several of the respondents had never had a landline phone. Cellular and internet devices are being utilized by most people to connect. More businesses are using fiber optics. The number of providers is limited in many areas, with the exception of St. George. As mentioned previously, these are initial findings and more time is being allowed for the survey. It will remain posted for the remainder of October to hopefully gather additional input. The most participation in the survey to this point has come from Iron County. It also depicts where people are using the internet outside of their homes for locations such as school, someone else's home, library, etc. Scott Hirschi indicated that one question needs to be clarified in terms of those businesses who indicated that they utilize fiber optics and if they actually connect to fiber.

Slide number seven under resident questions: What is the primary service you use to access the internet from home? Again, DSL, cable and wireless are the most prevalent. Slide number 8 shows that most residents would like to have faster internet. Results from slide number 9 are mixed for people in terms of whether the high speed connection has improved versus those who indicated that it remained about the same. Approximately 12% indicated that it has gotten worse. Slide 10 respondents indicate that both connection speed and ability of the service connection are equally important. A committee participant indicated that in conducting customer focus groups, it is amazing the percentage of customers that do not know their upload and download speeds. It would be helpful to know what types of speed customers are looking for in terms of what is more. The survey provides a link to test internet speeds if the respondent does not know their connection speed. A cross tabulation may be helpful to depict the speeds, those that say it is not good enough versus those that say it is good enough. The spreadsheet is exportable to Excel for better analysis. Slide number 11 asks which company provides internet service at home. This question should have had an other tab as well. Tentative numbers indicated that Century Link is the most prevalent, with Infowest, South Central, Baja and Skywire Communications showing less. There are obviously other providers as well. Slide number 12 depicts the number of people that have cancelled their landline phone versus the number that have never had a landline at all. Approximately 54% of the respondents do not currently have a landline phone. Slide number 13 asked if respondents had ever cancelled or cut back on their internet service. This may also depict those that have switched providers for their service and the question could be a little misleading.

The first business questions asked what business the respondent represents. The answers provided are pretty much across the board from Real Estate, Education, Retail Trade, Construction, etc. The second question covers the internet connection that the business currently utilizes. This is the item that Scott Hirschi questioned previously where 23.1% businesses indicate that they have fiber to the premises. For this question, DSL and wireless are the most prevalent. The third business slide asks what they currently pay for the service. Answers range across the board depending on the type of business. The next slide depicts the various ways that businesses are utilizing the internet including e-mail, website applications, etc. Question 51 asked businesses to rate several listed aspects of their service by checking the appropriate column. The thing that is generally most prevalent is that people are not satisfied with their connection speed. It appears that businesses are more satisfied with customer service related items. The next slide outlines the availability of multiple, competing broadband options. Responses to this question vary depending on the location of the business in terms of competitiveness. More rural areas across the Five County region would have fewer providers than St. George or Cedar City.

This summarizes the initial findings on the survey. Levi asked for other observations that people may have or anything that should be looked out for in analyzing the survey. Bill Shaw mentioned that we should look at connection speeds and based on the connection speed how satisfied people are with their service. Heather Rankin pointed out that a number of individuals have asked her why

more questions were not about the telephone. It has been hard to get them to understand that telephone and broadband internet are different issues. It is difficult for them to distinguish between cellular and broadband internet. Century Link has not provided upgrades to the telephone lines in the Big Water area for many years. Telephone numbers in Century Link's data base for Big Water are actually 928 which is tied to Arizona. Unless it is made known that they need to look in Arizona, people in Big Water do not exist in their data base. Many of the residents in this area have asked why telephone service cannot be incorporated into the broadband study. The problem is that it is assumed that everyone has reliable telephone service and therefore would have the opportunity for broadband service. It was pointed out that the broadband connection may bring service from telephone companies that requires your own broadband. Broadband connection to an area provides various opportunities for services. Heather Rankin indicated that this is now turning into a public safety problem where people cannot get emergency assistance because of non-existent telephone and/or internet services to the area. Big Water has a well equipped ambulance and fire department that responds all over Kane County, but no one can talk to each other. This causes a huge communications problem when trying to respond to fire and/or automobile accident.

Levi Roberts indicated that at the last meeting an invitation was extended for people to look at the online mapping tool. Justin Fischer provided some concerns that were forwarded to the state of Utah. State staff has been very responsive and has some dialogue taking place. Heather Rankin pointed out again that Big Water does not have service available in their area. This concern was also forwarded to the state. The most useful information that the state can use is concrete information where there is some type of discrepancy in the service. Providing a specific location allows them to verify the accuracy of the mapping. The state of Utah has people on staff that are dedicated specifically to this broadband project. It is important to make sure that the mapping is as accurate as possible.

IV. REVIEW STRENGTHS AND WEAKNESSES FROM FIRST MEETING

Levi Roberts indicated that the strengths and weaknesses were discussed at the last meeting by participants around the table to reflect each individuals perspective on broadband services that are available in their area. He reviewed commonalities in terms of strengths as follows: 1) The network is expanding and improving throughout the region; 2) Broadband services are adequate for many industries; 3) There is good connectivity generally at schools and libraries throughout the region; and 4) There are empty conduits available on UDOT right-of-ways that can be used for broadband service. Weaknesses commonalities are as follows: 1) Limited coverage and diversity in rural areas; 2) Long distances, physical barriers, and limited consumer base in the rural areas; and 3) Communication between governmental entities and providers to develop agreements for expansion of service (BLM and UDOT).

V. REGIONAL OPPORTUNITIES AND CHALLENGES DISCUSSION

Gary Zabriskie will lead the discussion for regional opportunities and challenges. He asked for discussion of strengths from a business standpoint.

Norm Olsen, MSC Aerospace, indicated the need for more bandwidth to interface with either customers, vendors, or other company offices. Exchange of data is an issue because companies are not becoming more efficient in their data file size. As a general rule, if there is more memory it will be used and if there is more power it will be consumed. It is a big issue to get information where it is needed because of the bandwidth limitations. A lot of this is tied to cost and how much one is willing to pay for additional bandwidth, but it would be good to have a bigger highway. There

is currently a 20 megabit tunnel into each location. It would cost approximately \$400.00 monthly for each additional 10 megabit in bandwidth. Prices have come down quite a bit over the years as technology got faster. In the past, the company has been able to work with Interlinx and South Central Communications to get fiber lines into their business. This has provided fiber connection between their two buildings.

Ken Munford, Iron County School District, reported that currently all secondary schools, high schools, middle schools, and now all elementary schools have 1gbit connections to the district office. In some cases there is a 1 to 2 gbit uplink prior to getting to the district office. There is a one gbit connection out of the district office to local universities. There are also redundant links that are wireless. The Washington County School District has been utilizing approximately 70 percent of their capacity which will require an upgrade in the near future. A request has already been submitted to the Utah Education Network. The Utah Education Network is the internet service provider for school districts. They constantly monitor the network, backup, broadcast center, the Richfield data center, etc. There is also a circuit going out of the south end of the state to Las Vegas. Once it hits the University of Utah, there are actually five providers including Excell and Sprint and three other providers which provides a lot of redundancy. They are currently expanding a 10 gbit connectivity upgrade to all of the major data centers and universities. Some of the school districts are actually getting upgraded to a 10 gbit connection. The network provider has been working hard to provide service the school in Big Water. The government shutdown created several bureaucratic problems because a lot of the lines traverse federal lands which require environmental surveys to be performed. The process was shut down during the federal government closure. They are installing either a 1 gig path or a 100 meg path into Big Water. It was noted that this will be accomplished by using the microwave tower that is operational. He indicated that he would provide a link with the UEN network path that shows all of the sites throughout the state of Utah. The biggest problem right now for school districts is the incredible move toward wireless service. The number of wireless devices being used in schools has almost doubled in the past two years. It is the responsibility of students to access the online resources that are utilized by teachers. In many instances, students can even submit their homework online. The movement to one-to-one is a national goal and it will push the bounds for the school districts. It was pointed out that school district internet is available twenty-four-seven. Heather Rankin indicated that the school in Big Water has a computer lab that is available for students up until 5:00 p.m. every day to provide internet access. The internet connection to the school has been the most stable connection for over 20 miles around the area. Once students leave the school, it is next to impossible to access the internet from home. Hotels in the area generally eat up all of the bandwidth that is available. Mr. Munford pointed out that a lot of secondary schools have tutoring programs that last until 9:00 p.m. The tutors generally come from SUU to assist the school district with tutoring needs. He noted that UEN is a fantastic resource for school districts. They are currently trying to move more toward fiber optics as opposed to microwave service.

Last month strengths were identified including the Utah backbone fiber optic system, the Williams FTD long-haul fiber optic line, and the Tonaquint Data Center. Gary Zabriskie asked what types of opportunities do you see those facilities and/or systems bring to the county. Scott Hirschi had apparently left the call. Justin Fischer indicated that Panguitch City currently owns 17 acres of industrial property and the President of South Central Communications will allow consideration of a call center/data center as a possibly in Garfield County. A few years ago, this would not have been seen as something that could even be considered in the area. This would also bring year-round employment rather than the typical seasonal types of employment opportunities that exist in Garfield County. The type of broadband that is available in the area now will allow diversification of the economy in Garfield County. The priority right now is focused on the industrial park. Matt Brown, Kane County Economic Development, echoed Justin's comments and noted that Kane

County wants to promote home based businesses in rural areas. Home based businesses can only happen with increased internet speed. Kelly Stowell, Kane County, indicated that they are encouraging local businesses to provide free Wi-fi connection for those visiting in the area to enhance their experience as well as allow sharing experiences with others. Infrastructure and services have improved in the Kanab area over the past several years. Offering free Wi-fi provides free advertisement of the area through social media. A number of businesses have relocated to Kanab because of the availability of high speed internet and as a result of their visit to the area. Monty Thurber, St. George, indicated that on the tourism side more traveler information needs to be provided, mainly in terms of road closures. A lot of people were unaware that the road to Brian Head is closed. It is extremely important to share this type of information with people as they travel to their destinations. Having a broadband network for real time data is very important.

Ken Munford indicated that from the public education perspective there is opportunity for service providers to expand 3g and 4g one-to-one access for schools rather than relying on the traditional technology. Some providers expressed interest in this regard. Most of the projects that the school district is currently supporting in the long term are unsustainable. The amount of technology funding that is being provided to public schools has decreased substantially. This will eventually force the school boards and superintendents to make very difficult decisions, i.e., reductions in the size of IT staffing, allowing public service providers a larger role in supplying internet access to schools, etc. This is something that service providers should take note of in their planning process because they could have a much larger role than they even understand right now. This is a crisis that impacts not only Utah but other states as well. Schools are having to provide more devices than the traditional computer labs. Because these devices are more cost effective, there will likely be more devices in play. Many schools are moving to subscription software for their computer systems with web-based operations to replace traditional server systems. This move is occurring on a national level. Bandwidth availability has increased substantially over the past few years.

Heather Rankin explained that real estate has seen an enormous shift from brick and mortar buildings to everything being web-based. A lot of businesses have gone from using office space to providing business strictly through the Internet. A large percentage of real estate business is Internet based. This creates a big challenge in Big Water because of the lack of Internet access that works. The realtor's MLS system is entirely web-based and all real estate forms are only available on-line. This is also true for web-based classes that students can complete at home. More and more students are utilizing this option which could ultimately impact the weighted pupil units used to determine funding for schools. This increases the need for Internet connectivity at home.

Levi Roberts outlined the challenge in communication as the need for more bandwidth. It was noted that the diversity of services offered is dependent on the demand in any given area. Another issue seems to be that customers want more bandwidth, but at the same time they want to pay less. It is a big challenge to meet the demand and customer price expectations. It was also noted that the cost of deploying broadband is expensive and companies have to build their infrastructure for everyone, not just a few customers who want more bandwidth. A bandwidth network must be built from a metro area to provide service to those customers at a further distance. This is difficult when there is no density throughout the path where the infrastructure is being placed. This results in a higher cost to consumers that are at a further distance from the metro areas.

Scott Hirschi posed a rhetorical question about Costco in Big Water and incentives to locate there. Heather Rankin indicated that representatives in Page are still trying to work with the Navajo Nation to extend service into the area. However, the price for this remains a sticking point. It is possible that the service could be extended across the river and this may or may not help with the situation. Scott applauded Heather for looking outside the box to examine all types of possible solutions, but

in the long run there must be a business case to expand utilities to various areas. This is not unique to Big Water, Lake Powell or any place in southern Utah, but it is a reality because there must be profit involved. Norman Olson suggested that perhaps an application to the Rural Utility Service (RUS) Universal Service Fund through the United States Department of Agriculture may be a good source to pursue a grant application to provide service to an under served area. This program supplements the cost of extending telephone service to rural areas. It was noted that companies receive funds from the Universal Service Fund to provide service in rural areas. A part of this program called e-rate funds are provided to subsidize broadband activity to schools and libraries across the nation. Ken Munford explained that this funding was utilized to provide broadband service to the Escalante Valley Elementary School because 90% of the students qualified as low-income to receive school lunch. The expansion cost the district 10% of the total cost to expand this service into this rural area. Heather Rankin indicated that approximately 85% of students in Big Water would qualify for free lunch. Michael East, South Central Communications, suggested that residents of Big Water complain consistently to the Public Service Commission that Century Link is not doing their job to deploy broadband service to the Big Water area. However, it was pointed out that broadband is not a regulated telecommunications service in Utah. One challenge that exists would be to get legislation changed to make broadband a regulated service in telecommunications. If this service were to be regulated, then it would fall under the Universal Service Fund and it would require the majority of residents in the state to pay a surcharge to deploy internet to under served areas. The challenge is getting the majority of tax payers to pay for a minority of people in say Big Water. Heather pointed out that their service comes out of Page, Arizona and it is a nightmare for new residents to get a new phone number and telephone service. Every time that the company is sold, there are different people to deal with when new service is required. Scott Hirschi indicated that he strongly believes that more government regulation is not the solution to these problems. Kelleigh Kole indicated that partnerships between public and private companies would be beneficial in terms of coordination and cooperation. A lot can be accomplished without the need for more regulations. Justin Fischer pointed out that rights of way for fiber, etc. brings challenges in terms of access especially through federally owned lands. There is a need for more flexibility in terms of access to wireless broadband for wireless devices in rural areas.

Gary Zabriskie indicated that he would send out the strengths and weaknesses as well as challenges and opportunities for the group to review. Members have the opportunity to add comments from their perspective for each of the items.

VI. OTHER BUSINESS

Levi Roberts indicated that the next meeting will begin identification of priority areas to focus on in the Five County region based upon this discussion. The next meeting will be scheduled during the first week of December. He encouraged committee members to attend the Broadband Tech Summit in Provo scheduled for October 24, 2013. This will provide the opportunity to hear of different perspectives around the state. It will also be a good networking and educational opportunity.

VII. ADJOURNMENT

Meeting adjourned at 2:30 p.m.