

Unapproved Meeting Minutes
Ultra High Speed Broadband Task Force Meeting
Friday, July 17, 2009
9:30 a.m. to 3:45 p.m.



Location: Loose Moose Saloon and Conference Center
119 S. Front St.
Mankato, MN

Facilitator: Anne Losby

Task force members in attendance: Myron Lowe (for Steve Cawley), Brent Christensen, Tom Garrison, Jack Geller, Bob Fenwick (for Barb Gervais), John Gibbs, JoAnne Johnson, Jack Ries (for Gopal Khanna), Rick King, Dan McElroy, Mike O'Connor, Kim Ross, Vijay Sethi, Dick Sjoberg, Karen Smith, John Stanoch, Gary Fields for Chris Swanson, Craig Taylor, Mary Ellen Wells, Peg Werner, Robyn West, Glenn Wilson.

Replacements:

Gary Fields for Chris Swanson - gfields@comcast.net

Myron Lowe for Steve Cawley - mlope@umn.edu

Bob (Robert) Fenwick for Barb Gervais - bfenwick@boreal.org

Jack Ries for Gopal Khanna – jack.ries@state.mn.us

Tim Lovaasen was not in attendance.

Public attendees: Dan Olsen, Chuck Ackman, Dale A. Ericson, Les Heen, Dayle Zelenka, Randy Young, John Schultz, Doug Johnson, Ray Schleck, Jerry Wolfe, Michael Scott, Donovan Lambright, Tom Berkelman, Ronda Allis, Tucker Carlson, Sen. Kathy Sheran, Preston Lougheed, Bill Coleman, Carrie Rice, Dale Carrison, Mike Martin, Andy Schriener.

Staff in attendance: Carlos Seoane, Shirley Walz and Michele Engdahl from Thomson Reuters; Diane Wells from the MN Department of Commerce.

Opening comments; review meeting agenda – Rick King

Rick King called the meeting to order at 8:56 a.m.

Rick King welcomed everyone to Mankato and thanked Brent Christensen for organizing the events in Mankato. Rick welcomed the general public to the meeting. He asked that the general public remember to sign in. The following substitutes were noted to be in attendance:

Gary Fields for Chris Swanson
Myron Lowe for Steve Cawley
Bob Fenwick for Barb Gervais
Jack Ries for Gopal Khanna

Today we have two sections to the meeting, one is extended public comment time to hear from the people in the area and then we have a lot of sub-team reports. Rick King noted appreciation for the diligence that all the teams showed. Some sub-team work will be ready to make decisions and some have gotten through one or two things and some will ask for guidance and want to do some more work. There are two or three that we can put to bed today. One in particular will be the symmetry to put to bed, and also the speed issue. Not sure there are many more facts or information to be found.

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Rick also noted a couple of updates on correspondence. Rick, Commissioner Wilson and Diane Wells met with the Governor a couple of weeks ago to give him an update. He was very interested and very engaged. He had just come back from a conference on education in Washington and some of the things he spoke about played right into the areas of education we had looked at. We also spoke to him about the health care piece and the issues we were grappling with. He was pleased to hear the issues. Looking down the chart that was prepared to give an overview of what other states are doing, he thought that we left some things out for Minnesota. We will make sure it is accurate. One thing that he said that was interesting that will probably come out in the September meeting is that the task force makes sure it looks at actionable items that go with the report, things that can be done. Some things will cost money, but his view is don't give him something that is going to take up space but something that can be implemented. An example that Rick has thought about is that we've heard some experts say that people don't have access because they don't have computers. We know that some companies donate computers to be refurbished and there are non-profits that do this. They do not usually go to people that do not have access. An actionable item would be to deploy to people that do not have access or to a place people can go when they want to use a computer. That is an example of thinking for the future. There are things in that realm that don't cause people as many issues as other things we are looking at. We need to think about how to make some of the things actionable that we are discussing. We've been talking about the "what" and that will be the discussion about "how". We do not want to do the hows while we are doing the what.

We also have a couple things to tell you about for correspondence. The American Indian community is not represented on the task force and we have not heard from them individually or as a group. Rick got some contacts from Diane and sent out some e-mails and he has not heard much but will pursue that further in the next few weeks. At least they know they have the opportunity to speak. If any of you have contacts let me know and we would figure out a way to get them in or come for a public comment part. Second, we got a letter from the city manager of Burnsville and they made a submission which you can all read. Rick indicated that he hopes we are not overwhelming you with things to read. Two more things: there is a lot of material from both directions on Utopia that are interesting to read about. The Monticello program has also let us know that there is a BBQ and Rick will pass the information around. One more item and this hasn't been distributed is that Bill Coleman from Dakota Futures has indicated that they have a third broadband policy draft.

Rick asked everyone to look at the agenda for today.

Brent Christensen asked if Connected Nation was supposed to come today.

Rick King replied that we had originally planned on that but he asked them to come to the September meeting instead.

Tom Garrison said that Rick noted that we received a lot of correspondence and asked if they will be reflected in the official report.

Rick King responded that we could put in an appendix.

Tom Garrison indicated that he just would like them to be officially collected in some way.

Rick King said that we will figure out a way to do this.

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Motion to approve agenda. Seconded. Agenda approved.

Meeting minutes of June 19 were discussed next. Vijay had a correction on page 8 where he indicated that the minutes should read “compatibility” versus “capability”. Motion to approve the minutes with correction. Seconded. Minutes approved

Public Comments

Rick King opened up the meeting for public comment and asked commenters to please identify themselves and who they represented.

Dale Carrison noted that he came to the meeting wearing two hats, first representing SOCRATES (South Central Regional Area Telecommunications System). (See www.projectsocrates.org) SOCRATES provides data and video connectivity to schools and libraries in south central Minnesota. His second hat is as the outgoing chair of the regional telecom group. Minnesota is divided into eight regions (which don't match up with any other region types) when the grant program was started 11 years ago. When they first started with the grant program they were using 56Kbps and now are up to the point where almost all have 10 Mbps down to the school sites and the schools have at least a MB going to each school site. They have a number of libraries underserved in terms of bandwidth because they do not meet the conditions of the regional telecom libraries and there is not a good way to provide them with bandwidth. They have a handout where they recommend 100 MB to each 1,000 students and staff. WANs also 100MB. Where they are today it is not unreasonable at all to think in terms of 500 MB per 1,000 students and staff and a gig of bandwidth per site. It's true of our state public libraries as well. Where we get into the problem is in some cases all we have available is DSL. He would urge you to consider K-12 schools, public libraries, and higher education in terms of the fact that we are increasing all of the time in terms of automated library systems (cataloging, check out, etc.) and in terms of education all but one or two will have online offerings. This next year all but 5 of the school districts will have online courses. Also, the legislature sooner or later will put in a provision that no one be able to graduate from high school without an online experience or a distance learning experience. We need to be thinking ahead to where we are going to be in the next 4 to 6 years and he would suggest that we will need more than a gig for every 1,000 students and staff. There is also a heavy emphasis on no child left behind and a heavy interest on assessment. We keep getting mandates from the legislature but you have to consider the delivery system in what they want and we have to work this into an infrastructure within the state. K-12 public education and libraries have a good program from the feds and a bad program. We get a discount for the SOCRATES region of 60% of our Internet costs. Other regions get discounts ranging from a low of 50 to a high of 70 percent discount. The bad side is that you can only use the E-rate funding to provide at eligible sites. We ought to be looking at infrastructure for states, cities, counties, regions, all in one package. We need to be creative enough to figure out a way around to make others available for some grant resources. The leadership needs to come from the state to provide avenues and groups that will put this together. What's on the sheet that was given to you is a document that was put together for the legislature two years ago. It is still relevant. It underscores the need for bandwidth. There are parts of the state that cost up to \$100 per student to get bandwidth to them at the site. There are other parts of the state like ours with very little fiber in the ground. We need to determine ways in which we can get collaboration among providers to get the bandwidth and coverage needed.

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Tom Garrison indicated that Dale talked about online education and download speeds. Tom's wife is in a Masters program where there is an online component and the need to upload. Have you looked at upload bandwidth needs?

Dale Carrison responded that they ought to equal each other and a minimum is 1.5Mbps. He has 3 Mbps coming into his home office and there are times when that is not enough for the things he works on. It needs to be at least a thousand up and down would be his recommendation.

Peg Werner said that Dale raises a point that she has not thought of before. Public libraries across the world share a port and it allows sharing of information but also the automated systems that they run are sensitive to disturbances. Fiber to a regional library system with proprietary out to the sites is required to keep those systems up.

Dale Carrison said there are complete interrelationships between K-12, higher education and public libraries. Part of the reason that use at public libraries is going up is economic, people can't afford access from home and need access for information on jobs, etc.

John Gibbs replied that he would hope that we take some time to dive into the public library issues as there may be some actionable items. John asked who is the "we" that submitted the handout?

Dale Carrison responded that it was the 8 regional library directors.

Brent Christensen said that he was confused by the comments on the relationship to the providers. Brent has held you up as a good public private partnership model, that you worked with multiple providers.

Dale Carrison said that they are in the process of writing an RFP now. Peg is in another region writing an RFP. We are actually doing this jointly. What we are trying to get is one vendor that provides the telecommunications and Internet access and has a relationship with the last mile providers. In our new RFP, we are going to request collaboration with wireless vendors because we need collaborations with buses, bus garages, and maybe other smaller public libraries. Our model has been to get the vendors of various telecommunications resources together to provide the best possible infrastructure.

Peg Werner added that it has been very successful. They ran for years on statewide telecommunications systems. Several years ago we broke off and went to regional systems. Now we are able to work with local providers which keeps profits local and when we have a larger issue we can work through the 702 company. We are able to work with our local phone companies and we can go through those clusters. We are talking about a huge area of the state. Those have worked well.

Gary Fields said that in rural areas sometimes the libraries and schools are the biggest users. Have you been able to enhance areas outside the libraries and schools rather than just meeting your needs?

Dale Carrison said that what they have tried to do, and they have 3 communities in south central Minnesota that have done what you are asking about. The school and the public library receive their access through SOCRATES and then we work with the city to give them a hook up.

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Gary Fields asked if they've been able to find solutions for business and residential.

Dale Carrison said that in their next RFP they are going to ask for collaborations that are related to businesses, work force development and a way to address the needs of home bound students and to do a better job of connecting everybody. At least VoIP if not video IP. He thinks the price of video IP is going to go down drastically so we will see homes that have VoIP and video over IP.

JoAnne Johnson said that she is a firm believer in collaboration but there is one caveat to what Dale has said. There is e-rate funding but it is available only for educational use. We also have rules in place for state enabled educational discounts. You would not have a manufacturing company piggyback on that line and there should be caution in any discussion of this.

Dayle Zelenka, executive director of the Traverse des Sioux library system, was the next speaker. Dale Carrison touched on what we need to do and Dayle said he would touch on why. Libraries are in some cases the only source of broadband access for the disenfranchised. Blandin said 92% of the state could be reached, but just because they can get it does not mean they are getting it. Many have to go to libraries. Libraries have a limited number of computers. There is a common 30 minute time limit on computer use. Many libraries are cutting back on their hours. We do as much uploading as downloading. You see slow rates going up. There is nothing worse than a parent trying to find a job and when their 30 minutes is up and their application is only half uploaded and comes crashing down, it is heartbreaking.

Dan McElroy asked for more information about the Traverse County system.

Dan Zelenka replied that it serves 38 public libraries and multi-type libraries (school, company, law libraries). Access right now is 1 MB or a T1 to some of the biggest libraries. There is a library that has DSL only. Budgets are being cut. With unallotments, library budgets go fast. Broadband always ends up being a significant portion of a library budget. A tiny library can't pay. We do supplement out of our service agency when we can. We do have E-rate. We are always working on a limited budget because we are always dependent on city and county budgets.

Peg Werner clarified that the State of Minnesota, in conjunction with E-rate, pays for a T1 per building. Right now statewide, 55% of the cost is covered by E-rate and the state pays for 45% of the cost. In Peg's region, E-rate pays 70%. If a library needs more than that then the library pays for it.

Jack Geller said that when you look at the bandwidth the library needs, there is a certain amount to serve the community and an amount for the library's own use. If you partition out the areas how would you characterize the bandwidth needs, 50/50 or is one area more?

Dale Carrison said that because they work on regional systems he has to break that down. Totally off the top of his head, 25 to 35% is upload, but because we are exchanging data between the centers and from individual libraries to the regions there is a lot of data being pushed. In his office they have 2 T1's and they are pegged out every single day and that is a staff of 8.

Jack Geller said so in other states they may not have the stand-alone region.

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Dan McElroy said you are seeing more and more upload with resumes and documents and homework. One thing that came up is what happens to the bandwidth in the community with the students coming home at 3:00 p.m. Those figures are very much in flux and are changing so much the line is pushing to more.

Peg Werner said that we started in 1995 and when we had to go to filtering we put a server in every library and we portion 30% of the bandwidth is assigned to their system where data is transferred. Increases in bandwidth as high as 75% public and Minnesota uses more.

Jack Geller said that if we are looking out, if in fact we look and have adoption to reach ubiquity, your needs may shrink as more people adopt in their homes.

John Gibbs urged we get deeper into these issues at another meeting. If we focus on adoption we are not going to move the needle enough that the public library will move enough. As we look at needs, he thinks we will see more not less.

Rick King said he had noted about further discussion.

John Stanoch said that there is \$50 million that is there in the stimulus funding for public computing centers and he asked if libraries were going to apply.

Peg Werner said that there are certainly discussions. You can buy the equipment with stimulus funding but then you have to have a place to put the equipment and the lines have to be paid for.

Rick King noted that we have 6 more people on the list that want to speak.

Doug Johnson, Director of Media and Technology for the Mankato Public Schools. He would like to second what both of the Dales have said. The Mankato public schools depend on SOCRATES for a lot of their needs even though they are a large district. The collaborative model works. He would also echo the importance of the libraries for their access to families. They have many students that do not have access outside of schools. He also wanted to make one point and that is to not underestimate the need for public bandwidth that is needed by schools. We will see more testing and it will be media rich testing. His experience is that the data keeping is increasingly a large part of school's data driven decision making. We are housing data offsite. CRDC in St. Cloud is providing an Application Service Provider. Start talking about disruptive technologies, netbooks and devices that students are going to be using. If they are going to be good 21st century citizens they need to know how to use the tools. The need for upload is increasing; students are sharing work on wikis to blogs. Everything is moving to the cloud. Moving to the small devices, less for us to maintain. When our first WAN came in it was adequate and used 14.4 modems. It was all text. Then we moved to a T1, then 2 T1s. Currently at 40 MB that serves about 8,000 people and it's barely adequate. We have a little saying, you can't be too rich, too thin, or have too much bandwidth.

Dan McElroy asked if your schools are keeping homework rooms open after school is out.

Doug Johnson said that we serve kids after school. We keep our library open for use. School libraries were open in the evening or summer, but not much use. Maybe our public libraries are just too good.

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Preston Lougheed said he is the general manager of the AmericInn on campus and manager of student housing that houses 280 MSU students. HickoryTech, his supplier asked him to come here and speak. For hotels and the business traveler, you used to be able to charge for Internet use and now they expect it, we've constantly moved up in speed and we are at 10Mbps down 2Mbps up. On the business side, the upload is more important as they do their work and send it back to the office.

On the student side it's almost a nightmare. That is all they have in their life is computers and they do peer to peer gaming and video streaming. They are on campus at Mankato and they have an incredible system and then they go home and want something to match and we can't keep up. We've tried some of the systems to filter out who is hogging the bandwidth and if they do not fix it we kick them off. Those are the challenges. His competitors do not have it any better. Similar use times for students and the business traveler. The business traveler comes back at the close of the business day. Students sleep later. So from 6 p.m. to 4 a.m. we are maxed out. The problem is that they do not want to pay; they want it fast, reliable and free.

Mitch Jasper, Mayor of Jackson, MN. We put together a group in southern MN, Windom, Jackson, Heron Lake, Okabena, etc. to bring broadband down to our county. It is supported by every one of the EDAs, hospitals, etc. Windom brought broadband into their town and got beat up in the press but they were successful. In Jackson we have a company with 1200 employees there and when their Internet access starts up in the morning, everyone else goes down. The Sanborn Hospital does just in time doctoring. They are very much in support of bringing broadband to the area. We are called deep rural America. We have one provider and that is Qwest and they will not get the return on investment they need. He is here today to ask for the task force's support to bring broadband to deep rural MN. In return, he wants to be supportive and go to his legislators to ask them to support the task force's efforts. We want to bring broadband to all rural southern MN cities. You know that already. When we are chasing after a company to come to Minnesota, we have everything they want to have. Greater Chicago does not have what we have, Jackson has the best employees and we want to compete with Chicago. We are going to do that through a cooperative effort. We plan on supporting your effort and ask that you support ours.

Jack Geller said that Mr. Jasper started his comments by saying he was part of a multi community collaborative group but he wasn't clear on what they are doing.

Mitch Jasper said that they are working together with Windom. They have the primary infrastructure and management in place. We are going to loop that together so that we can have less cost on the back end and have the support from Windom that has already done it. He does have two people here for a lifeline if there are questions he can't answer.

Dan McElroy asked if they were planning to duplicate Windom.

Mitch Jasper said no, they want the broadband but not the management

Dan McElroy asked what are you proposing to build.

John Schultz said that they would build a 125 mile fiber ring connecting communities and bringing all farms, homes and businesses broadband.

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John Gibbs asked if you are outlining Windom is successful. You reached the conclusion that Windom was successful and John has an impression that this is a financial calamity. Could you explain what about Windom is successful and is it sustainable?

Mitch Jasper said that when Windom started they had a lot of resistance, but now they have support because of the results.

Dan Olson, City of Windom, responded that the city is financially on track with their plan. It is in its fifth year. They have not broken a profit yet but that is due in part to being 40% over hook-up projections so they've had more investment than planned. We are at 2100 drops. We have some financial hurdles. We can't say to people that we aren't going to serve you. On the economic development front, we saved 11 jobs that were going to Mexico. Toro has access to whatever it wants with a phone call. Financially we do not charge market rates; he has encouraged the city council to raise the rates. But we look at getting the broadband out there and approaching 1200 people. It's the quality of life. The city put its own electric service in a long time ago. Twenty-five years ago the city of Windom put their own cable TV system in because no one else would do it. They do not prevent anyone from coming in and competing.

Tom Garrison asked if rates are not raised when do you project profitability.

Dan Olson replied that somewhere around September 2010 they will be at break-even. That is preliminary. The city has some other budget issues.

John Gibbs asked if you break even in 2010 is that without any subsidy.

Dan Olson replied that there are no taxpayer dollars put toward this. They run the telecom and marketing and he spent a lot of years on the private side.

John Gibbs asked if you go and bring this service to the other communities, will you make a profit.

Dan Olson replied that, yes, there are opportunities to increase revenues in doing this by being the wholesale provider. On the economic development front that helps us. If Toro closes and we can get the broadband out there we can hold the taxes. It helps Jackson and all of us. There are towns that sit 3 miles from us and can't get broadband out there.

Mike O'Connor asked what Windom's rates are for service.

Dan Olson replied that the rate for 5Mbps up is \$98 with voice and 69 channels of television. They are rolling out 17Mbps and for voice, TV, Internet that would be \$150. They have a good service effort, the technician that installs also answers the phone calls. They would pick up 5 school districts in this project. He also noted that they house the fire department equipment in the telco building.

How to Approach the Aspirational Speed Goal

Rick King said that we are trying to get into the speed piece and the team will report back what they investigated.

Craig Taylor stated that the speed team met to talk about the aspirational goal a number of times. They were looking at two aspects and they looked at the penetration rate. If you look on

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page 39 of the draft report you will see that. On page 36 there are applications and their speed ranges.

Vijay Sethi said that he was looking at this in terms of the CA model and looking for our comments and as he is looking he was trying to find a listing of ranges for the government. For services we have educational services and hospital. Does there need to be a specific category for the government services?

Craig Taylor said that they did try to put in some Minnesota uses but he does not think that it is specifically referencing government. When we asked members to contribute, some of the feedback was consumer oriented and some from the provider perspective. We have mixed use that we may need to clear up. He doesn't think we called out government services in particular.

Rick King commented that the list evolves past the government in the numbers we say. We should look in our individual areas and make sure there are entries on this document that reflect the needs for those individual areas. You can give those to Shirley.

Tom Garrison said that at a state level they are working on a delivery of service. Looking ahead to those bandwidth requirements that would replicate well for counties and government. Tom asked if we could take back to Gopal, maybe through Jack Ries, as Tom knows they are working on uses.

Rick King asked Jack Ries to try and get some information for government uses so that we can put them in the chart.

Craig Taylor said that he thinks we will be truing up the chart over time. If you look starting on page 39, it starts on the bottom. The aspiration, penetration and speed goal should be read. That is how the overall goal was characterized and a lot of charts were in-lined and a lot of these charts will fall out. The data should be apples to apples comparison to put Minnesota in with the other states and the world. The data does not always seem to support that. If you look at page 40 and the penetration for the U.S., MN was ranked 24th using Akamai. They do a lot of heavy duty measurement. Some others are yearly. There are other data sources on other pages.

Tom Garrison commented that Akamai is the only one compiling data quarterly, others are yearly.

John Gibbs asked whether you buy broadband on a per capita bases in Minnesota.

Craig Taylor replied that he is unsure as to how the data is formed; if it is residential or commercial only.

JoAnne Johnson said that she sees where John Gibbs is going with this. If our goal is ubiquity per household, that is the real number. Why are we looking at it per capita?

Rick King said that to be fair to the sub-group, one of the things they are trying to show is what measures are the best measures that we should use for the goals we want to show. We have many. But the discussion is also relevant. This is what they show as the penetration numbers and if businesses are included the 1,000 that he has at his business and the thousands in the state of Washington will skew a per capita number.

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John Gibbs said we have a demographic profile and the diverse industry that we have in Minnesota is not the same as we have elsewhere.

Rick King said we should give feedback on whether the metric fits the goals we are trying to show. We are on the right track, but let Craig walk through what we have.

Craig Taylor, still on page 40, if you look at the top broadband speeds, Minnesota would be ranked 23rd in this measurement. The next page does similar activity but breaks it down by speed bands. He likes the banding that is done as it does a nice job of relating to our application overlay.

Karen Smith noted that in the chart on page 41 Iowa is ranked second in percent of states with speeds over 25Mbps and on page 42 Iowa is ranked sixth slowest.

JoAnne Johnson said Iowa has a small population so the results could be skewed.

Rick King said that the percent over 25Mbps is 2.8% and the percent below 256Kbps is 5.8%, those are small percentages. He can see them both being true. The comparatives are a bit difficult.

Mike O'Connor said Iowa sits on both tails of the bell curve.

Dan McElroy noted states that are dense have higher penetration and higher speeds. If you put it in that context, we have several counties that are bigger than Rhode Island and a dozen bigger than Delaware. Maybe in the final work we compare to peer states. Comparing Minnesota to Delaware is not apples to apples.

Mike O'Connor said that this is getting to the fundamental questions and we need to pick what we want to measure and figure out how we can measure. It turns out that this data is hard to get and hard to gather. These are good examples but maybe what we need to do is describe the kind of data that we want to gather to support what we want. He is in agreement that this may not be the best data to drive us.

Rick King said that these are the statements that we were trying to substantiate. "Minnesota will be in the top 5 states..." It's a measurement; it gives you a target. These are all going to be options. Are any of these things we are going to support? At the bottom of p. 42, "Minnesota will be in the top 10 in the world in broadband penetration." There was a lot of interest in the framework of both of those statements. It's not a point in time, you have to keep up technically and there was not a number that was so far beyond. Where do we want to be. There are metrics that will bring this alive. We can fire at any data. We will arrive at the most illustrative data that can serve that goal.

Tom Garrison asked if Rick was asking us to weigh in on are these the right goals. Is that our first decision?

Rick King said that we had the notation of the number stated as an equivalent rather than an absolute. Is there a measure for that? What the sub-group did was put some words around the goal. He is less interested in what the measure is unless there is no way to measure. We do need to talk about the goals.

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Tom Garrison said that he subscribes to some of the things that Mike and Dan have said. One of the challenges is trying to pick a data set when we might pick a different set if we are trying to compare multi state jurisdictions. He would not want to lose how we compare to a high dense state. As an example, if Nevada is not a dense state but it is #4, the questions is what's a number, knowing states are more dense . We should just want to weigh in on the top 5 and always try to be there.

Rick King read the statement at the top of page 40. "Minnesota will be in the Top 5 states of the United States for broadband penetration (subscription rate or take rate) as described by our ranking in Akamai Technologies –The State of the Internet Report. Minnesota's ranking in Q1 of 2009 is #24 in the U.S., growing to 0.35 unique IPs per capita. "

Jack Geller said that he appreciate the fact that we are separating the metrics from the aspirations, But with that said, don't let that get in the way of where we want Minnesota positioned. He is very supportive of the penetration goal. We should work on the goals and we can figure out the metrics even if we have to take up the charge of collecting it. He thinks the penetration goal is more than aspirational but it can be reached.

Dick Sjoberg said that we may want to look at this from a different direction. We are looking at this for the number of customers taking the service, but not looking at the people that are not taking or those that have it available. We may have one-third of Minnesotans that have 50Mbps available to them but we don't have one-third subscribing. What he is looking at is if you have a majority of the people with 6Mbps available and the majority are using 5Mbps then we have a lot of breathing room. That indicates that providers are staying ahead of the curve.

Bob Fenwick said he does not have a problem with the metrics, but can see why Nevada would be a high number. He would like to see Minnesota to have 95% penetration and we would like to have 95% penetration per county in Minnesota in all those areas. Then you will end up with a penetration rate and you will have it locality wide. Do it on a local basis is his suggestion.

Gary Fields said it is important to look at the world rankings. Being faster than the next state isn't going to cut it. The measures that compare us to the rest of the world is where we focus. These global measures have been around awhile and from an historical perspective, he can say that the United States is going in the wrong direction.

Peg Werner said she thinks we do want to compare ourselves to the dense states. She doesn't think it's the same argument if you are talking speed; the speeds have to be comparable.

John Gibbs said he would agree with a great deal of that. We should set goals for the measurement and there might be goals we can't measure. If we can't readily measure he doesn't think we should include as goals in the report. He doesn't have a problem with being the top 5 but he does have a problem with being measured by Akamai. What providers sell and what people buy is different. It concerns him if we have the first part tied to a measurement, are we ever going to be able to measure.

Brent Christensen said that the subcommittee just used this as an example. He is on the other side of Tom's position. He is more interested in penetration over speed and that it is available to everyone. If he had a choice between penetration and speed, he would like to make sure broadband is first available to everyone.

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JoAnne Johnson replied that it goes back to a point that Peg made. There are separate goals and measurement for each of these. The speed is however you want to measure since it is not tied to per capita or per household. Penetration would be great if we could measure by household. If those comparisons are available and why those figures are the truest they can find, that could be a narrative for each chart.

Rick King said he was going to see where we stand on a couple of things. If we use this type of statement we have to agree on measurement. Some of these are not the right measurement and he is going to assume that we are going to find a measurement and if we can't find a measurement we will not have the goal. We will debate that or maybe with some of the Connected Nation stuff and we may not always have a direct hit. We won't have a goal without the measurement. We've talked about penetration and speed. We have the U.S. and we have the world. Penetration and the speed are two things that we want to be in such and such a position in the U.S. and a measurement and substantiate it. He proposes today that we agree or discuss for agreement and pick that Minnesota will be in the top five and define penetration to mean that they have it to take. Consider it a penetration that it is available and they can take it. And, be in the top 5 in overall speed in the U.S. He is asking that you agree today that we recommend those as aspirational goals.

For ubiquitous, ubiquity says everywhere. He thinks we are going to have to agree on a measure of penetration. Penetration means take rate. He would like to focus on those two issues. Decide if you want those subject to any measures we can agree to and then a yes or no.

Jack Geller said that the standard definition of take rate is penetration.

Rick King said on the potential take rate as much as the actual, have to represent that the availability is there. We could be very high in providing the service and lower in the take rate and we would want to recommend different programs. So we'll have to agree on the measurement of penetration. He wants to focus on those two items and decide if we want those.

Tom Garrison suggested a third. He would like to have a discussion on the speed and if he looks at where CA is trying to be, CA compares to the world and our ranking may be too low. Did the committee discuss top 3 versus 5?

Gary Fields said that if availability is high and penetration is low, it raises another word which is affordability and there should be some measure. Price per Mbps, but if that is the direction of where you want to go.

Rick King said that we have a discussion of affordability.

Peg Werner said we have had many discussions and there is overlapping material. Until the ubiquity subgroup comes forward we will have this issue.

Tom Garrison said to move things along he would offer a motion that the first be top 5 and speed be top 3.

Rick King said he would like to propose an alternative first.

JoAnne Johnson said that she is visualizing that when we get to the penetration goal and that is far lower than what it seems to be, then that has to turn into a recommendation. She just sees

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this branching and you can't put a bald statement out there without mapping it. She thinks it will fall out right without figuring each piece. Get each pieced dressed for the day and put them on the bus.

Rick King said he asked Tom to hold off as we know we can vote on things, but we also said we will go for consensus. Do we have consensus? Can we start with the first one about broadband penetration and say that the penetration definition will be discussed. Minnesota will be in the top 5 in broadband penetration. Is there concession given that we will find a measure that is agreeable.

John Gibbs said that in this formulation it is participation, is that what we should be thinking about.

Rick King said that we should deal with what is written and agree that we'll find a measure, top 5 in broadband penetration rate, subscription rate. Any disagreement? None. Agreement.

Glenn Wilson asked what is the timing.

Rick King said the aspirational goal is by 2015.

Rick King noted that the task force accepted this and the measure needs to be agreed to.

Tom Garrison said that he didn't get to speak to the why. His original motion of top three and his thinking is that if some state on the West coast is doing well and some state on the East doing well, he wants Minnesota to be in the top 3.

John Gibbs said that this is where availability v. take rate really takes off.

Rick King said that this would have to be about availability.

Tom Garrison said he doesn't see those words "average available. "

Jack Geller said that there may be a reasonable and standardized measure as NTIA builds the national broadband map. That is part of all the data that states will have to collect. There will be a measure and by 2011 it will be in place and that would be the measure sanctioned by the U.S. Department of Commerce.

Craig Taylor said that then these are consumers, not business. We keep intermixing and he wants to make sure he understands. If we are measuring consumer speeds then we should state that.

Rick King replied yes.

Mike O'Connor said that he thinks this is one that will challenge us and he is not as confident as Jack that the national map and measurement will work for us and he is watching. As the standards came out, he is not sure we want to count on the federal government for coming up with a useful measure.

Rick King would submit that it is a good goal and given the goal we can put our energies and resources into finding a measurement and if we can't find one we will re-address the goal. He wanted to speak to Tom's Top 3 v. Top 5 comment. Five gives the combination of states like,

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Washington, Texas and 5 puts us in the middle of those whereas 3 is rarefied air. Top 5 is aggressive but reasonable. It will be hard for us to move up and we have to climb in the numbers no matter where the numbers go. It is aggressive and will take considerable work to achieve and we are all interested in that goal. To Rick, five is a little more reasonable than three. He would support three, but he would like to have the goal and is comfortable with 5. Rick asked if anyone wanted to say anything more.

Tom Garrison moved that we keep the goal as top three. Peg seconded.

John Gibbs asked if there is the caveat that there is a measure.

Rick King replied that it would have to be a measure that we would agree to.

Tom Garrison said we are talking consumer. Change the wording to be average available and indicate consumer.

Rick King said that it would be Minnesota will be in the top 3 states for overall average availability.

Peg Werner said that businesses are consumers, why would we be saying this.

Dan McElroy replied that if you look at Global Crossing they only serve data centers and big institutions. In your community, the public library is a consumer.

Rick King said that the only thing he was thinking was that he would like a measure that doesn't have his company in there because it raises the average. He wants to take communities where they are and where they could move them and show them and measure them. He does not want the numbers to be squeezed by what we do as a business.

Peg Werner said that we are hearing the vendors say that 1.5Mbps everywhere is going to be hard and that service to the BWCA is a problem. Then we are going to bring Thomson's numbers in to bring up the average.

John Gibbs said that the theoretical reason not to include business is there is no limit on the speed available as providers will build to suit.

Rick King agreed that if his company was in Jackson and he called up Comcast or Qwest or Christensen and said he was going to pay you to do this, they would say ok. Karen would tell me how she would do this with wireless and it's affordable. Putting us in the equation we buy what we need and negotiate rates. There is no price sheet.

Peg Werner said there are consumers that are more residential and there are those that are business.

Rick King said let us figure out what the data is and figure out big business. Tom made a motion and it got seconded.

Mike O'Connor asked if there was discussion and said he was going to come in against top 3 because he was concerned about setting an unrealistic goal. Top 5 is amazing and he is much more comfortable with a number we have a chance of achieving.

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Rick King asked for any additional discussion.

John Stanoch said he is going to disagree with top 3 and we need to keep the interest and balance and if we are saying 5 is good and keeps us focused on the issues he would put those issues over speed.

Rick King said all in favor to adopt the motion in the top 3. The nays have it.

Brent Christensen made a motion to adopt the top 5.

Rick King asked if anyone disagrees with the same language but top 5. No disagreement. We will take a break until 11:35.

Rick King said we have a couple more related items and we will try to get through the world rankings question and try to get to the symmetry or take a break and go to symmetry as a breather. With the U.S. goals that we just did, the consensus was unanimous. If someone disagreed, he didn't see it. We move onto the world goals and we can use the same rules if we want. The world data will be harder, since there aren't as many data pieces but let's think about the goal. Minnesota in the top 10 in the world in penetration and that is on the bottom of p. 42. Top 10 of the world for top broadband speed and that is on p. 46. Can we talk about if those goals are an adequate measure? Obviously Minnesota won't show up on the list but we would do the equivalent.

Dick Sjoberg asked if we have a breakdown that shows what Minnesota's penetration is now. If we move up to the top ten we would be at 76. His question is if Minnesota is in the top five in penetration in the U.S. and let's say we are at 55% and the top state is 60% or 65% on the world chart at #15. He just wants to make sure the two goals will overlay on top of each other and not be side by side banging into each other.

Craig Taylor said that the sub-group briefly discussed. It's really an apples to oranges comparison and you can do the math but it will be a challenge to get them to line up.

JoAnne Johnson said that it's a point of curiosity but we should do our best to figure it out and make as a sidebar. That target will be distracting from the other two targets and with ubiquity as we move forward to implement strategies. Minnesota competes with the world but on a daily basis it competes with Iowa. It's a cool thing to measure but a goal that disturbs her.

John Gibbs said that he agrees with JoAnne on this but for different reasons. For the OECD stuff, that data doesn't pass. He does not think it tells us much or matters where we are relative to the rest of the world.

Gary Fields said that if we are a manufacturer and the person who is working, we are trying to match an engineer working in India or China. The real competition is global.

John Gibbs said that he appreciates that you will have business competitors in India or China if you are manufacturing, but it will not alter that business based on where Minnesota ranks internationally in broadband if we are top in the U.S. You will win or lose on a whole bunch of factors but it isn't going to be won or lost based on broadband.

Mary Ellen Wells asked if we have any indication that the U.S. is moving forward in this ranking aggressively so if we peg our rankings to national we know we will be competitive in the world.

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If not then we need to go with the global rankings. She can tell you stories about countries enticing people to have their heart, hip, etc. surgeries outside the U.S. because it costs less even including transportation and rehab.

Rick King said that what he heard John say is whether you see broadband as affecting those costs or not.

Mary Ellen Wells said that what we are saying is that the applications that need to be provided that require broadband will be located outside the U.S. and in China, India, or wherever if they have broadband. The applications will move there, the service positions.

Myron Lowe said that from a higher education perspective, what is happening for research programs to go ahead, there are top researcher around the world and more competition for them. As more universities look at this, the researchers ask what your broadband capability is in the area. This statement is very important in the report so that someone outside the U.S. that is looking at coming to Minnesota sees this and there is a commitment to broadband speed that they can relate to.

Tom Garrison would like to echo what we hear from a number of Eagan companies who say their competition is not just Iowa. We just heard from a university perspective. It says something about Minnesota and how we are positioning or aspiring to be. We haven't seen yet what the ubiquity recommendations are but after you get there, all the argument shifts to speed. Do we give it as much weight as the town or state ones, maybe not but we need a global focus. To him it is absolutely essential and it sends a powerful message.

Jack Geller said he agrees with Tom and Myron. It's hard to see where we've positioned ourselves as having a day-to-day business impact. At the same time he can't remember what our statewide penetration is. If he had to guess he would say it is just north of a 65% take rate. To get in the top 10, we have to go to 75 or 76%. He doesn't think it is one of those pie in the sky things. Whether we can or can't, it's a aspirational goal. The message that we are sending is kind of important as Tom and Myron say. He is feeling more supportive of it.

Peg Werner agrees that it's an important part of the report. The fact that what we did first as a task force was to collect all the other state reports shows us that this is important.

Mike O'Connor said he is persuaded as well. If we just tie ourselves to the U.S. and the U.S. is dropping then we are not quite tying ourselves to the right point.

Rick King asked if there were other views.

Glenn Wilson said he would note on page 44 that the U.S. would probably be in the top 5 if we looked at density and it's clearly designated. If it is an aspirational goal, that we want to be as good as anybody in the world and we want it to be realistically accomplishable and we are going to overcome the density issues in 6 years that is a significant expectation.

Rick King said the way we have these worded is aspirational goals by 2015 so in the same category.

Rick King said we'll do our straw polling method. Fist to five with 0 to five to support the proposal and the proposal is top 10 in these areas. Five means you strongly support and a fist means you do not support.

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Rick King took the first one as top ten in the world in penetration. Rick noted there was a lot of strong support and then we have a few negative and a few that are more support than not. Dissecting, is #10 the issue? How many do not think global is a relative measure.

Peg Werner noted that the vote is divided by vendor versus user.

Rick King said that provider is a better word. We've tried really hard not to and everyone has their view and while that is true it is all valid. We have to decide as a group whether we want to approve or not. What if we look at this and there is a strong sense to have this in the report. What could we do to move this from a fist to a two or three?

Bob Fenwick said he just got this draft report a few days ago. It's admirable. In looking through this quickly, the justification for doing this says that speed and penetration drive our economic engine. How well it penetrates our society and in this discussion it is separating this out. Saying you are one, two, three or four and how this ties in and stand in numbers has a bearing on how we sell the economy of this state. The way to get there is to by xyz in the world. The way he thinks of this is in fact that broadband is part of the economic engine, so then it is important that somehow we measure ourselves against the world and feed the economic engine. We do need to subscribe to that goal to make our economic engine work.

Rick King said that he wants to go back to the question of whether there is anything we can do to make this more uniformly accepted. If we can't, we know where it could go but he would like to nudge this to a better corner.

Peg Werner said that the reason she brought it up is if we were thinking what would be the barrier and looked around the room, she wanted to raise the issue of why there are barriers.

John Gibbs said that he does not think there are barriers and it could be colored by what he does and who he hangs around with all day, but something that was not particularly relevant does not feel like a constructive addition to the report. So it's not even that so much as it just reflects that this group in Minnesota says we are going to be #X in the world and it feels a little more grandiose than credibility would suggest. We know the measures that are out there and we know that the measures that are out there aren't all that useful. He appreciates the marketing potential and comparing Minnesota to the global economy.

Rick King said that he does want to make one comment and that is that he disagrees with John a bit on the OECD data and John reiterated this twice. We saw the speaker you referenced and there are flaws in the OECD data but there are equal flaws in that person's analysis of the data. While nothing is perfect, and I'm not suggesting that is the data we should use, although if we do anything in the world that is the best source of data but not perfect. It might have a little more value than what the professor was saying to us. Rick is more inclined to use the data with eyes wide open.

John Gibbs added if the Wallsten data is flawed.

Tom Garrison said that it did not get much discussion around the room but following Wallsten's presentation there was a white paper from Free Press pointing out Wallsten's analytical flaws and perhaps we need to send that back out. The paper was pointing out several reasons why the competitive standing in the world matters.

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Rick King said that he was persuaded by the professor to be reminded that the data was not perfect and also persuaded by the paper after that some of the things that Professor Wallsten said were not factual. All he is saying is that neither one was perfect but he is not rejecting the OECD data.

John Gibbs said he would not accept or reject OECD or Wallsten but what he has been struggling with is the relevancy of the rankings.

Rick King said he thinks we are going to come back to that and we should think there is some controversy in that data but it is data that gets used by a lot of people. Question that we should be top 10 in the world.

John Stanoch said just to talk about another OECD issue and what would make people more comfortable. He looked at some measures for primary and secondary schools, and the U.S. is first in the world. He is interested in drilling down to the information that really counts for broadband and would get more comfortable using that.

JoAnne Johnson said that she does not object to measuring. Her objection is that it should not be a goal as there is controversy to how you measure. Earlier this week, FCC Commissioner McDowell said that if you took the OECD data and transferred it from per capita to per household; the U.S. would be second behind Canada. Everyone is entitled to their own opinion, but those are not facts. If we can find a measurement that people are more comfortable with that would be best.

Jack Geller said he is confused as to why there are issues with this goal. If we are talking about increasing the number of Minnesotans that have adopted the technology, if we are going to get those served that are unserved, we are going to increase our penetration. Get the places that are truly unserved served and people that have it available today that don't subscribe to take a subscription, either way if Minnesota decided to take a position that would be tens of thousands of customers coming to the providers and he is struggling with why we debate as a good or bad thing. Ranking is not relevant and if there was a recommendation, it would be some kind of coordinated effort for people to adopt the technology.

Karen Smith said she is uncomfortable that we are not sure what actions we will take to be top 10 in the world versus top 5 in the state.

Tom Garrison said if the U.S. is truly competitive, how do we gauge how we are falling below if we don't measure; if we are only doing well within the U.S.

Karen Smith said she thinks it's broader than just our state.

Rick King said that it is clear that if we adopt the goal, the things we will do will be the same. We are not advocating but we will be saying we recognize that we are a player in the world and making a statement that it is important to be aggressive in our country and in our world. What we are saying is the stage is bigger in the U.S. You might get someone to say "what about the world" and if you include it that says something about the groups thinking on the larger stage. The Governor has gone on trade missions for economic need and Rick thinks it is a case to be in there as it drives additional actions. When John said it's an economic piece, it's more the visual of having us think globally and a frame of reference from the business we are in. This is what Rick envisions why we would include.

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Mike O'Connor said that it seems like we are talking about the same goal and that is to increase penetration. What if we said that our goal is to increase penetration and representative measures of progress are XX in national rankings and XX in the world rankings. Then you bring the world neighborhood ranking below the goal but you still have the marketing.

Rick King said that suggests that we redraw the first goal and combine those to increase penetration and measures of progress are, whatever the list is.

Karen suggested that maybe we come up with a percentage.

Mike O'Connor said don't come up with a specific number, it's a penetration.

John Gibbs said he was intrigued by what the chair said which was we establish that we are not an island and it's important. The global ranking diminishes the report and makes it feel presumptuous. He likes the rhetorical approach.

John Stanoch said he is a big believer in democracy and he can count the votes. He is comfortable with the statement about competing in a global economy. Like John Gibbs, he is comfortable about saying where we want to be among the states, keep an eye on where the world is going, and then tie that into some metrics that are what are we doing about health care and education. It's an aspirational place of where the state wants to be.

Gary Fields said that the global perspective is what's most important to him. We could improve in the U.S. but not in the world. We should have that as a real benchmark to see how we are doing in a global economy. It's not grandiose or privileged but the economy we live in.

Tom Garrison said that to some extent if you do not measure it then you do not value it. It is up to policy makers to decide how much weight to give to these measures and that is beyond this room. Tom thinks we will fundamentally lose track of it.

Robyn West said she is suspect of statistics. We see them all the time. In South Korea how many people are over 80, it must be more than 5% so grandma has broadband access but no clue how to use it.

Dan McElroy said that in South Korea the households are very multi-generational, at least in the cities which are mainly apartment blocks.

Jack Geller added it's a very densely populated country and it doesn't surprise him that they are 95% and a very different environment as they have one telephone company and it is pseudo-nationalized.

JoAnne Johnson said that she liked how John stated it earlier and by having us measure how we rank in the world. Could we make it not separate but as a corollary to the top 5 in the U.S. That helps. She doesn't have a problem measuring penetration but doesn't want to measure speed. When you have speed in many countries that is high speed delivered over fiber in small concentrated areas, we aren't going to get there.

Peg Werner said that she liked Mike's suggestion of making the goal to increase penetration and then indicated that we measure this far in the country and this far in the world. It focuses the Governor and the legislature on what should really be focused on. The problem that she has

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if we say we should measure it against the world but then we don't provide a measure, the question ends up being what is it.

Tom Garrison suggested we see if we can play with this a little bit. What if we had the goal that Mike was talking about, the main goal is getting the number up, but then we are tracking. Then it's achieving the goal that is most important. Sliding it visually under the goal.

Mike O'Connor said he would feel uncomfortable moving forward without consensus. Do we need to declare we don't have consensus and move on.

JoAnne Johnson said that we are all saying almost the same thing; we have no problem with the measurement, but should be disconnected from the goal.

Rick King said that he thinks we have captured the words and let us go through it over lunch and put up on the flip charts a proposed set of words that might have consensus. Take a shot and look at it when we come back from lunch. He has 12:35 now and we will have until 1:00 for lunch.

Lunch break

Rick King said that it plays on the notion that we are just saying penetration is a significant measure and that we want Minnesota to be in the top 5 in U.S. rankings by 2015 and recognizing that our competition is not solely in the U.S., we the task force also believe that increasing penetration in Minnesota will increase our ranking globally. As such we have an aspirational goal to be among the top 15 globally in penetration by 2015.

Rick King said that he changed 10 to 15 as this seemed to incorporate a lot of the language but held out that we could have an aspirational global goal. He changed from 10 to 15 because when you look at the list there are some anchors there and from the U.S. it would be difficult to break into that group. Changing the number a bit made it more reasonable. It made it a little better. So if the objection is around 15, if this works us toward the compromise then that is more important.

Kim Ross asked if this is in place of the other goal and where does it go. It stood out as it was in bold print and that elevated its importance. Readers don't always read everything but look at bullet points but if in an executive summary it has value.

Rick King said that if he understood in the compromise, he was to pull it out of the bold, that is what he was doing.

Glenn Wilson said that another option would be to increase our penetration by 12% if that is where we are and that would put us in the top 10. If that were the goal to increase by 10 to 12%.

Rick King said that goes to the overall group being more comfortable with the ranking as it keeps up with the overall changes. If we increased by 12% but others increase by 15% we haven't moved in comparison.

Tom Garrison said it does bring up the question of how do we measure our increase.

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Rick King said we were not going to change the bolded language which are the items we changed and agreed to on the U.S. numbers. This would replace the bolded global language.

JoAnne Johnson said she would prefer how we have it here and be in the top states in penetration and then may have to wordsmith the first entry and then put the world ranking and bold the stuff under the chart. It's not diminished and not the primary target; the penetration is the primary target not the world rank.

Gary Fields said when he looks at it this way it looks like global is a subordinate issue or an afterthought. When you say "not solely in the U.S." You could say it in the affirmative "our competition is primarily global". And the other is to say it is an aspirational goal which is a qualifier.

Rick King said it should be in there, it should be aspirational.

Gary Fields replied if it could be primarily then it states what you are doing.

Peg Werner asked if you can reiterate how it is going to be in the report.

Rick King said that it should be in the same area, keep the bolding on the U.S. penetration and speeds. We will go from the penetration statement into these items here. The global one will appear with the U.S. one. We are not going to change what we did before.

Rick King said that when we talked about the numbers before we said we did not want to propose the percentages. What we say in the goal is increasing broadband penetration in Minnesota and the goal is in the ranking. We use what we approved before and use this to amplify the global ranking. Puts this as a sub-bullet.

Mike O'Connor said that what we are trying to do is get consensus. Is this moving us in the right direction?

John Stanoch said it is moving us in the right direction; we can never be South Korea by 2015.

John Gibbs said he doesn't want us to look like a bunch of goof balls.

Mike O'Connor commented that lots of people are saying what we said before and that doesn't help. We have to get the folks who are concerned to a place where they are comfortable.

Rick King said he wanted to hear more from Kim and we subordinate the global. How we word that, we will still edit and we won't change how we approve from a concept. If we are there move along.

JoAnne Johnson said she thinks you are there now and can put up a 4 on a fist to five.

Kim Ross said he is going the other direction now but he thinks the words are fine, but it diminishes it.

Tom Garrison said that what is causing him a little heartburn is that in the first paragraph there is a little bit of why or the outcome of why increasing penetration is a positive outcome. Show policy makers why.

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John Gibbs said we can start preamble sentence and say to enhance our global competitiveness and lay out a rationale of why.

Tom Garrison said also what happens if you get more people using computers and broadband and connect the dots in the narrative.

Rick King said we absolutely have to connect the dots. That is where we are focusing today.

Mike O'Connor said let's grab John's thought and insert the global. His fear was the headline that Minnesota is one state in 50 in a continent of three.

Jack Geller said that if we were voting he would say to call the question. But he thinks we are mostly there and if the state did not realize we need to boast penetration they would not have put together this task force.

Gary Fields said that 5 or 6 years ago penetration was an issue that the state recognized and they funded with Blandin get broadband. This committee is about ultra high speed and hope we haven't forgotten that and that we will talk about speed. The state has done some work and made some progress. Assuming that we have not dropped the speed goal as part of this, correct me if I'm wrong.

Rick King said we agreed on the minimum and an applications table and this is the third piece. We did the speed for the U.S. and not the global yet. Is there consensus knowing that it needs some editing? Any violent disagreement?

Rick is not seeing any.

Gary Fields said he wanted to see a parallel type of language for speed.

Rick King said we did the U.S. speed; we have not done global speed. We are going to bake this. We did not deal with the speed globally. We approved the penetration and U.S. top 5 and just dealt with penetration globally. Now speed globally. The way this is stated is top 10 globally. Page 46.

Peg Werner clarified with the observation that if Minnesota is in the top 5 we can use the top in the U.S. Can you assume that it is in the top 10 in the U.S.

Rick King said so what you are saying is should we have Minnesota in the top 10 in the world bulleted as an aspirational goal.

Dick Sjoberg asked if we are looking at available speed or speeds that people are reporting or speeds that people are subscribing to. Knowing what the market is interested in or speeds that are available versus what people are subscribing to. If you use Akamai speed tests you get one result, if you get speeds that people subscribe to you have another result and if you use speeds that are available you get a third result.

John Gibbs said that certainly we can figure out our ranking domestically but isn't this the one true immeasurable given the variety of infrastructure. Isn't this where we won't find a good measuring stick.

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Mike O'Connor said he is with John Gibbs on this. He is a firm believer in that which gets measured gets done, but the ability to measure speed globally is just too tough.

Brent Christensen said didn't we decide not to do this.

Mike O'Connor indicated we decided to defer.

Tom Garrison said that those speeds that are offered are important. What you can measure that is meaningful. Put on an economic development hat. We get questions from people looking at locations and we are asked whether you get your power from one substation, do you have multiple routes out of your location, what speeds are offered for broadband, etc. We should measure that so we know how we do. If you have an option to say whether you will locate in Eagan or locate in Stockholm that is relevant, highly relevant.

Dick Sjoberg said we also need to see what they are using the bandwidth for and if in the U.S it is used for commerce and not entertainment and you go to Korea where they watch almost all of their television through IP over the Internet and have no basic cable television there or satellite services that they use. It becomes a different deal. 10 Mbps in the U.S. may be more capacity than 25Mbps used in Korea because they are watching a 15 Mbps high definition stream and that would take that chunk of the bandwidth, so if we are going to start with that maybe we have to include the bandwidth coming into the home through satellite or cable. Our little system we are up over 1 GB per second that we are pumping into the home and people that have satellite are much higher than that. If you are going to measure globally you have to measure all the usage.

Jack Geller said he agrees with John and Mike but maybe for different reasons. If in 2015, Minnesota is number 5 in speed it is good enough for him. That is one heck of a reach when you think about little states like Delaware, Rhode Island, and Connecticut; we have counties bigger than that. We can spend the rest of this meeting and the next on this issue and not sure we can close the circle, so at the end of the day if we can be top 5 in penetration and top 5 in speed, I'll raise the flag of victory.

Brent Christensen was going to jump on what Tom said when you talk about Sweden had access to 100 by 100 and we had access to 10 by 5 and 20 by 5. He doesn't think we'll crack availability versus use.

JoAnne Johnson said that her problem with endorsing speed on a global basis is that we had decided not to endorse any technology so if you crack the top 10 you are talking fiber to the home. You see countries that have built full fiber networks with Government subsidies. Or there are countries that have never had a phone system so all is built new. That is not a fair comparison; it is going to take a decade. We are a big state and country and we are copper laden. If you want to measure this you are endorsing fiber.

Tom Garrison said that would say to me that the measurement is not 2015 and maybe your date pushes out. He has spoken to what people can do from home and it rivals what they can do from the office.

JoAnne Johnson said she isn't saying it doesn't matter she doesn't want a measurement in there.

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John Gibbs said he doesn't believe that we can measure in a meaningful way. He would be concerned that we put a standard in that can't be measured. It would be a good decision that we did not set a goal that could be measured. We can figure out in one customer and contrast it with another customer here.

Jack Geller said that while he buys the strong economic development argument and relocations and site location, but to suggest it is the only criteria or the overriding criteria they use is not true.

Peg Werner said that if we are going to have an actionable report, agree we have to be realistic. If what you say is we would need a full fiber network then we have to deal with the reality and hearing those comments helps us know what is the reality.

Rick King said that he is going to assert that there is enough concern about putting this particular goal in there that we should not. He is on the other side but persuaded by what he hears. We are speaking globally in the other one. Top 5 for the U.S. in speed would take care of everything we can do in the global. The only part is it does not if the U.S. continues to fall behind then we do too, but he doesn't know how likely that is to happen. He thinks the top 5 speed goal will serve a lot of our economic development needs. By not putting the international or global top 10 speed goal he is not sure that we lose a lot.

Peg Werner said that in the interest of symmetry, we should capture the discussion that we talked about speed globally and had concerns about the measurement.

Tom Garrison doesn't want to beat a dead horse but he did want to say that when we get to the affordability then we need to compare ourselves internationally and he is going to want to know what you get per MB of service.

Rick King asked if we have consensus on not including the top 10 speed goal. There was consensus.

Symmetrical Sub-Group Report

Rick King indicated that JoAnne Johnson will provide the symmetry sub-group report.

JoAnne Johnson read from the handout, "The Task Force determined that a symmetrical service option (equal upland and download speed) should be available to all consumers who require it, especially small business. This need not be mandated for all consumers as it may not be required by everyone. Indeed some consumers might well prefer service offerings that provide slower upload speed in order to deliver faster download speed or a lower price." JoAnne referenced a chart that illustrates where symmetry is needed as a way of showing what we are talking about so that people understand that downloading a movie if that is your primary purpose, you don't need symmetrical speed, but if you are going to do a teleconference because you work from home, symmetry is important.

Rick King indicated that he thinks this is very insightful and helpful.

Dan McElroy indicated that one suggestion that he had was that we site the source of the table. The more stuff we source the better.

Mike O'Connor said there really wasn't a source.

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Dan McElroy asked if we could find one.

Rick King said that we will classify as the work of the task force.

Tom Garrison suggested one additional sentence to explain why you need symmetrical.

JoAnne Johnson said just a little bit of narrative to talk about why symmetry matters for those types of applications.

Rick King said there are some that require more up and some that require more down and some that are equal symmetry. He thinks the idea is that the application drives the need.

Tom Garrison responded what he was trying to get at is for Telepresence and some of those where you need to be communicating in real time, he just wanted to call those out.

Rick King indicated that does put health and education sort of in the symmetry place; maybe those are the two big areas that require a symmetrical approach.

Jack Geller said for him the key thing is the first bullet. We are recommending that symmetrical service should be an option to everyone, everywhere, it is not required but it should be available. It's key.

John Gibbs said that this would suggest to him that we would be recommending the state determine how a provider chooses to market and package its service. He's not sure if his company offers any symmetrical service. He knows Comcast offers fast, rather fast, and very fast. The question he would ask the committee is do you really want to tell providers that you have to develop symmetrical service when the real question is whether there is enough upload speed.

Mike O'Connor explained that what we are trying to get at is more exemplified by part of the applications need symmetrical, as the Internet changes and applications change, the message that we want to send is that the balance between asymmetrical marketing and asymmetrical packaging is shifting. Sort of a heads up to providers, but this asymmetrical architecture is well advised to shift to a symmetrical architecture. At least approving a symmetrical option for consumers that fall down this chart

Rick King noted that Dick had some technical comments.

Dick Sjoberg said he did about symmetry and what they are seeing in networks.

Rick King said the discussion was the capability around the service, there was an ability to rebalance.

Dick Sjoberg said that was JoAnne regarding DSL capability.

Rick King said you would have to make sure that the number goes up together and had a 20 10 service then that is a 30 service and then you could break the service into 15 – 15 and you had to do some technical stuff to make that happen. It did not sound like that was much of a big deal so that the consumer drive to do this would cause the provider to balance.

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John Gibbs remarked that is the market and consumer driven.

Rick King asked whether he got that right.

JoAnne Johnson said that is exactly how it is for telecom. Her tech guys tell her anywhere we are doing DSL we can do symmetrical DSL and there has not been much of a demand for it until the recent past when suddenly symmetry is becoming more and more important, especially in the small business arena. Technically it works for telcos to have that in their pocket and offer when the customer wants it. For cable, she does not know about.

Rick King commented they could offer the way you suggested which is more up speed gives you more volume.

John Gibbs said his concern is that we are instructing the model regarding what must be available. He is not trying to drive speeds down, but cautioning that if we are instructing how it will be marketed we are going down a different path.

Rick King said that cable could do it the way that it wanted to but a symmetrical service option is something that is needed.

JoAnne Johnson said if it would help, we can have an introductory sentence to state the intent. The intent was not to create a mandate, but to make it clear that the technology needs are changing in this arena, symmetrical service is becoming more and more important. If you can provide it, you need to tell people you can provide it. The point is to make the idea that it is a head's up to us.

John Gibbs said his point is that we tell providers how to offer service, symmetrical service or faster upload speeds that is becoming more and more important.

JoAnne Johnson said that the point was to demonstrate that symmetrical is becoming more important. As long as you can do the Telepresence, that's the important thing.

Myron Lowe indicated that's what he sees as an opportunity for the report to do is to increase the awareness that sometimes speed does matter beyond just having the service. There are some applications that do not work at lower speeds. The reason why he is focusing on speed is because it's the same as symmetry, it's just speed in the other direction. There are cases where symmetry is needed and some cases where it does not matter, but the message is that if there are situations where there is not enough the application can't be used, it either fails, it's too slow to be practical, or causes problems. These are all tied to applications and he likes the way these are broken out. Some things for education, telemedicine, some things even in terms of service from the government that might be considered available, might not be usable at a certain level, low level of speed. He thinks that is an important distinction and someone will look at this part from the speeds and symmetry and upload and download and compare to the service that we want to have available in the area. Is there Internet service capability compatible with the applications that we want to have available?

Jack Geller said that sometimes circumstances can drive your decision in ways that you would not think about or anticipate. Yesterday we were at that Blandin meeting in the afternoon and there was a gentleman there who all of a sudden started talking about that here in Minnesota a number of camps associated with MS were canceled due to the flu. There are a lot of public health officials that are concerned about what might happen this winter in terms of H1N1 and if

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in fact some of those things actually played out and all of a sudden you have a number of large companies aggregated together saying you have to do more work from home or he doesn't know what the impact might be on schools and all of a sudden kids are encouraged to do more schooling from home because of public health concerns over a period of time. All of a sudden people are uploading things in ways that you would not have thought about under a different context. Trying to say there are lots of things when you start thinking about it might drive normal upload demand beyond the normal progression that we are seeing right now. So at least knowing that these kind of services, whether it is very fast upload or symmetrical are available and a recommendation, there are a variety of reasons beyond just consumer demand and why it might be smart for Minnesota to be thinking about it.

Rick King asked how we feel about the draft as written.

John Gibbs said he likes it with the caveat that he's not sure it's symmetrical by adequate upload speeds.

JoAnne Johnson replied that the assignment was to define symmetrical.

John Gibbs said that this presupposed that we are talking about a particular technology.

Mike O'Connor said in a way we have a chicken and an egg problem. Today consumers tend to draw down more than they push up. Is that what they want to do or is that the way things are architected; he doesn't want to debate that. What we are saying is that there are some instances where the balance is shifting and we want to acknowledge that trend. We want to say its coming and give the head's up. The balance between upload and download speed need to tilt a bit more toward symmetrical.

John Gibbs stated he's there he's not so sure.

JoAnne Johnson said you need a marketing piece that says 15 up 15 down and plus up you get an extra 35Mbps.

Gary Fields stated that the way the language is drafted is good. He thinks the only thing that is missing is timing perspective and historical. The need for symmetry is increasing with the development and increased use of applications like telemedicine and videoconferencing that the need for symmetry is likely to increase. If you could add a comment as to why this is important, the historical trend says that this is becoming important.

JoAnne Johnson commented that an introductory sentence added to this is appropriate and we can come up with one fairly quickly.

Rick King said he thinks we could consider and take a shot at one more bullet to go with that and that is symmetry can also be met by committing multiple or more capacity than required as an alternative strategy. If you gave them 10 times what they wanted you have symmetry and the application will run symmetrically within a vastly larger pipe.

JoAnne Johnson said you'd still be able to do 15 Mbps up and 137,000 down.

Rick King stated maybe there is a way where we say symmetry is important as there are more applications that require as much up as down and that can be met by different types of offerings and those kinds of offerings should be available.

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JoAnne Johnson stated that she agrees with Rick's point, but the point is like John's which is you can let people do teleconferencing a number of ways given that you have fast enough upload speeds. Given that, this paragraph this deals with symmetry what it is, why it's important, why the demand is growing and what we should be looking for.

Rick King commented that the only problem is that symmetrical service option, equal upload and download, that is not the only way to deliver a symmetrical service option.

JoAnne Johnson stated yes it is.

Rick King indicated not if you give them 10 times more than what is needed, they could run symmetrical.

John Gibbs stated that begs the question, why symmetrical.

Mike O'Connor commented that this is back to the point he made before that this is a head's up to the tech architects in your companies. He imagines that some of you know David Dressel from Cal. We have these violent arguments because his whole architecture is way faster down than up and Mike is saying that's fine but just recognize the next time you design it recognize that this is the trend. There is this shift from the old Internet, person as consumer. That is what this is trying to get at; this is not trying to put a mandate with a big stamp that says you must be symmetrical by this date.

Karen Smith stated that she did not remember that we agreed that symmetrical was a goal.

Rick King replied that we did agree that symmetrical was a goal and the task for this group was to write it in a way to capture our consensus.

Karen Smith stated with being technology neutral she can say for wireless that she knows it is greater download usage than upload usage.

Mike O'Connor commented that today for everyone there is greater download than upload but it is changing.

Karen Smith stated that even for the foreseeable future for wireless she sees greater download vs. upload.

Mike O'Connor comments that is what we are saying; head's up the world is changing. Look out into the future to see the applications that are coming. When you are doing your planning look forward.

Karen Smith replied that she thinks it should be available to all consumers, that is the statement that is concerning.

JoAnne Johnson indicated that it does not say you have to do it and doesn't say I have to do it, it says there should be enough options in the state of Minnesota that if you need and want symmetrical service there is a provider that can get it to you. Because there is no mandate that I do it and you do it and that John does it that just opens up the door for another entrepreneur. This is all about demand. This is all about the people that came and told us that one of the things that they were missing in their neighborhood or there industry was the availability of

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symmetry. We heard it enough times that that is why it got included and as you can see it's not a big thing it's just one of the aspects of the Internet world that we've looked at, acknowledged and addressed.

Rick King indicated that he'd like to make a suggestion. He stated that he thinks the task force has consensus around what is written here with the preamble paragraph that JoAnne offered to take that, write that, and bring it back to the next meeting. He then suggested that the task force move on. What he'd like to do is move ubiquitous to the next topic.

Recommendation #2 – Policies and actions necessary to achieve ubiquitous broadband – sub-group report

Rick asked Mike O'Connor to speak. That is on page 52 and a handout.

Mike O'Connor indicated that they are not presenting something that goes straight into the report. They had a series of meetings where they carved out a big territory and they wanted to get the task force's impressions of the map that they are drawing before presenting the overview. This is open to edits. They set out a goal that said 100% availability in the state. Availability meaning available not penetration and then indicated why that was an important goal and threw in symmetrical. They tried to get the notion of looking forward, expansion capability. He wants to go through the whole thing and then we'll come back and discuss. They spent most of their time trying to figure out what the goal is. Whatever the goal is our charter is to come up with recommendations on how to accomplish that goal. They threw up a question and tried to draw the map of things that need to happen to accomplish this. The next page is the elevator pitch, if you get to say 12 words here are the 12 words and if you go to the next page this is the set of words if you have 20 minutes to pitch and if you have 2 hours we write a lot underneath. You read from the center out in order to accomplish ubiquitous broadband. One of the things we need to do is lead, what do we mean by that, well we need to mobilize, we need to empower, and we need to manage. What do we need to mobilize; we need to mobilize resources within organizations, in communities. We need to figure out organizational, technology and human resources. How are we going to do that, one of the ways is by organizing. This is not something that just the government, providers or citizens do. It's something we all do. So if you work your way around this the top quadrant is about mobilizing, community organizing. The middle is empowering when you get into the penetration discussion and talk about digital literacy being important to increasing penetration. You get into the managing side and that has to be ongoing. If you just do this once and it never gets repeated we are going to get stuck. That is sort of the leadership part. Then there is a stimulate part, we do need to stimulate activity and how do you do that, three ways you can incent activity with money or promotion, you can actually go out and build things, infrastructure facilities. You can coordinate, getting people working together and finally there is an oversight function. There is the tracking part and we've talked a lot about metrics and tracking. Another piece is an evaluative component, not necessarily regulatory, but that what gets measured gets done. We need to evaluate how we are doing. The final thing is close to incenting on the stimulate side; there is the rewarding of good behaviors versus punishing the bad things. That is the map. The next few pages are the exact same words, but in an outline. It's a mechanical translation of the picture. The thought that we have is that if we have this more or less right then what we would go do is strip in specific suggestion on what to do, but we wanted to make sure we had the landscape right. The last couple of pages are some questions. The first question is, who is going to be responsible for doing this. Who is going to be responsible, accountable, what is going to happen if goals are not met? What is the cost to the state if this is not done? Another question, do we want to include wireless both satellite and cellular in the ubiquity solution center

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or not? Just a few drafting notes, we all agreed that ubiquity is a big deal and has to be right front and center in the report. It has to be highlighted. With that we will step back and take questions. Members from the gang chime in. Mike thinks they were pretty united in their view. Anything that we did not agree on did not make it in the draft. Given the amount of time we have today maybe not get way down in the details but wanted to take the first cut.

Rick King stated that we should get some comments and spend a little time on teasing the framework out, does this seem right or tweak this, tweak that so that whatever the level of discussion. Looks like most groups will have continuing work for a little while.

Robyn West commented that the cost of not doing this will cover the neigh-sayers. Answer their objections.

JoAnne Johnson stated that a lot of these words that look like they were thrown at the wall and stuck actually had quite a bit of conversation behind them. One of the things that she knows is going to stick with the providers is that everyone gets the same speed options everywhere, she argued against that because that puts us down to the lowest common denominator then everyone gets a 1.5 and that's it. Because of the technical difficulties from all of our technologies and the further you go the speed will go down. But the point that the other side of the table wanted to make is the point that came up in Grand Rapids, which is don't make us Mayberry. Which is, rural areas need speed just as much as urban areas and that is the concept that we are trying to work into here, so that wording may evolve so we can clearly make that point.

Peg Werner commented that they also talked about the fact that the goals for speed and penetration are 2015, but our goals for ubiquity probably are as soon as this is adopted and moved forward. So if you start at a speed in 2010 or 2011 it isn't the same as for 2015. The goal is to roll it out there and ramp up the speeds after that.

Jack Geller replied that he thinks it is important that we affirm the goal of ubiquity, he thinks we've already done that. The other piece is the technical issue as to whether you consider satellite in the mix. He doesn't think that is appropriate, obviously fixed wireless, cellular providers, absolutely. There are places in rural Minnesota where they are dependent on it and they are getting good speeds. When it comes to satellite, if you throw satellite in the mix since so many of the satellites have a North American footprint, let's disband, we're done, it's everywhere. On top of that he does not think that the federal government, in their broadband discussions put satellite in the mix. He thinks we should take it out unless someone brings it up again. There are some Wild Blue (satellite) customers that are satisfied.

Rick King asked if Jack was saying satellite out and cell in?

Jack Geller replied, yes.

Karen Smith commented on the ubiquity of cell phone coverage. First, she thinks every carrier is building out their networks every year and the federal government, the FCC is the regulatory body for cellular and wireless technology and some carriers choose to except universal service funds and others do not for tower build out. There are some limitations in terms of radio frequency about where towers can be placed and where they will cover. Ubiquitous coverage not sure it would exist anywhere for wireless cell towers.

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JoAnne Johnson stated that they are talking about ubiquitous availability of high speed service. We are not talking about any of our particular offerings as providers as covering the entire state. Her company doesn't cover the entire state. The idea is wherever you are in Minnesota there is a high speed option for you. There is some way to get broadband.

Mike O'Connor commented that the question is when you're sitting in a given location and the only option is cellular; does that get the thumbs up as qualifying for ubiquitous? He tends to agree with Jack, if you include satellite then the whole state is covered, if you include cell then you will cover areas no one else will cover and that's a good thing. The question is whether to include that or not, if it's only cellular in this location it does not count.

Karen Smith replied that she does not think the speeds are going to be at the level that the task force is talking about in some rural areas. Her company is building out its 3G network to all of its towers, but her competitors may not be.

John Gibbs asked, does that beg the question of what broadband is?

Mike O'Connor replied, that's why we got into this, everything is connected to everything.

John Gibbs stated that perhaps we should hear what the vision is of the definition of broadband.

Mike O'Connor responded that was not in our charter, whatever the speed gang comes up with, we are assuming that we are going to drive the ubiquity side of.

Rick King indicated that the task force set a minimum speed last time.

John Gibbs asked if that was the 10 to 20 down and the 5 to 10 up? Do we need to analyze the bullet in the context of 10 to 20?

JoAnne Johnson stated, remember the 10 – 20 is the 2015 number and we hope we hit the 100 before we hit the 2015 number. The 2015, we may not hit that number. Maybe it's 2015 and ½ maybe it's 2014, but we can still hit some level of high speed broadband for 100% of the state.

John Gibbs asked if all these are 2015 bullets.

JoAnne Johnson stated that is still an item on the table that is under discussion. Basically, everything from a stylistic point of view, all the goals appear to 2015. This may be headed with 2015 goals, but in the narrative, talk about that it may be possible that we can achieve ubiquity before 2015.

Jack Geller commented that if you believe the Connect Minnesota maps, we are at 92%, plus or minus a few percentages.

John Gibbs stated that he suspects we are, but that last 8 or 6 percent is not so simple and he took your bullet as to that point and what we are talking about.

Mike O'Connor stated, we need to get that nailed down.

John Gibbs indicated that he doesn't want to diminish the cell capacity, but it's not at these speeds.

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Mike O'Connor replied, he thinks that is a fair critique and we need to put some bounds around when we say what is ubiquitous.

Tom Garrison made two observations; the ubiquitous chart that we see is fantastic and will position us well. You talked about coming back with more specifics and he thinks about the Governor's conversation with Rick about what things are actionable. It would be helpful as the group comes up with the laundry list, indicate the items that are immediately actionable and those that are longer term, some sense of priority.

Mike O'Connor replied, everything is connected to everything. We need to figure out how we marry those conclusions into this. What we were trying to do is come up with a framework that works for others. If we get to the security, redundancy one today, he stole the same framework. We have to figure out how to get all the threads together and if this is a framework that works great, then we will charge ahead. If this framework is broken then we need to hear about it today. Basically what this is trying to get at is shifting out of the what and getting into the how. If this framework that works to organize the how, then we come up with the lists and rank them, prioritize.

John Gibbs asked, is the question whether this as an organizational construct seems workable or is the question whether some of the bulleted under the items are at a basis for consensus.

Mike O'Connor replied that he does not think we are ready for consensus just yet. Before we can come to consensus, you all need a list of what we mean.

Brent Christensen indicated this is more of "are we on track".

John Gibbs responded that it's highly appropriate to have the conversation around the ideas, but the checkmarks and bullets underneath some of them are highly controversial. He is comfortable to engage in the conversation around this outline. He is also looking forward to conversation around this and discussing the words.

Mike O'Connor stated there are two questions. If there are any bullets that you find everybody disagrees with out of the box we get rid of them. If there are missing bullets we'd like to hear about those.

Bob Fenwick commented, we indicated we are leaving the realm of what and going to how. Are we talking about ubiquity in terms of households and businesses or in terms of geography? How you define broadband has a very important role in terms of how you define ubiquity because it is relevant to what will go where. In response to including cell in the outlying parts of the state it would be hard to make cell a part of ubiquity unless you are talking geography.

Mike O'Connor indicated the terms here is not you it is we.

Bob Fenwick continued his comments, in relation to things like hand held computers without the availability of that cell type of structure, that would not be ubiquitous either. He has not left the realm of what is it we think it is to be ubiquitous and who we are talking about.

Mike O'Connor replied, that is in the same vein. What we are saying to you is we are going to work on that and we want to make sure we are working on the right stuff.

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Rick King stated the drafting notes are correct. We may need to define a little more. What you are hearing is that the overarching framework is ok. There will be the normal discussion over detail. He thinks anyone running a subcommittee can take a look and maybe use this framework. It is in the security one. What other kind of feedback do you want?

Peg Werner said she thinks we want accountability for the ubiquity and we want to know who is responsible and accountable to provide service. Are we going to put teeth behind this?

JoAnne Johnson suggested it could be candy instead of teeth.

Rick King said that as part of our charter we could recommend ways to cover and incent. In the discussion that we had it would be 100%, but together a person in Minnesota can be sure they can get a type of technology from a provider.

Tom Garrison said that Comcast would say there serve 100% of Eagan today and we say it is 99.9%. We have pockets in Eagan where there are private rights-of-way by lakes and in these pockets, what are the strategies to get to those residents.

Karen Smith said that she will provide some information about cellular to the committee. Wireless has to build out a certain percentage in areas where it obtains spectrum.

Dan McElroy asked is there a point where you have to build it all out.

Karen Smith said a company has to serve a certain percent of an area and those are through the FCC and her company spends millions.

Jack Geller said we could take ubiquity to the extreme and one would argue that we have coverage in the hundreds of acres of state park where no one lives.

Mike O'Connor said you have the emergency responders trying to figure out where.

Gary Fields said right now ubiquity is not well defined. Ubiquity is a sign of the time. We have a loan application in to RUS to build out Lake County with fiber. We will not build out to the boundary waters but have determined that if you are served by power or copper, you get broadband. If we are lucky you get built. This is a lofty idea, but not out of reach. We are building it all at once.

John Gibbs noted that on the last draft of this page you indicate that the government plays a role.

Mike O'Connor said that is a conclusion that we have not arrived at. This is not a government prescription.

John Gibbs said he thinks the third and fourth bullets that to get into underserved, unserved and penetration it seems we will have plenty of recommendations. He thinks of ubiquity as getting full coverage and he thinks it is a full agenda to get to the underserved.

Mike O'Connor said what we were saying is that there are people who do not have service and there are people who are underserved.

John Gibbs said if they don't have broadband they are unserved.

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Mike O'Connor said by the definitions that are floating out there, if we have 10 people that don't have broadband and there are 2 people who live in an unserved area, 2 live in underserved and 6 in a served. Should we say that the 2 people in the unserved are our priority, second is the 2 people in the underserved.

John Gibbs said he would think so.

Mike O'Connor asked if that reflected the sense of the group.

JoAnne Johnson agreed and after unserved, underserved is the next priority. The five houses on the outside of the lake, but those 5 house have nothing, they would be unserved in an underserved area. And then we go from unserved to underserved to disadvantaged, affordability, disenfranchised.

John Gibbs said that he would say that ubiquity is availability and we have an interest in driving demand.

Mike O'Connor said that we have enough feedback to come back to the group with more.

The task force took a 10 minute break.

Role of Government -- sub-group report

Rick King said that the approach that we are going to try for the rest of the meeting is Tom Garrison needs a little time with the Role of Government piece. They have not addressed things in a couple of areas and the Issue #4 & 6 group has not met so we won't talk about those areas today. We will defer security until next time and then we will go to recommendation #2. Most of the sub-group committee work that has gone on will continue.

Rick and Anne will take the speed issues and come out with the language. Some sub-groups are meeting to finalize. Hopefully you do not mind working on the issues in the sub-groups a little more.

Tom Garrison, on the Role of Government, asked if everyone would look for this handout in their packet. What you have is the big picture and what we'd like is your feedback keeping in mind we are not trying to drive for a decision today but trying to concentrate on the role of state government. We acknowledge that we need to get to municipal government and then get to federal government role. We did some online survey tools to see where there are areas of agreement. What we would ask you to do is look at the document. The state government role is the farthest along and we will try to push through the state government and come back with thoughts on federal and municipal government. If you see anything we have missed under the umbrella of consumer protection, let us know.

John Stanoch said that for consumer protection, what we tried to capture is what is under the consumer fraud strategy at the state level and look at the Federal Trade Commission (FTC). This is intended to be a summary. Is this adequate, what should the state do.

Tom Garrison said that the nature of the discussion is that there may be some role to fill gaps but there may be some authority issues. This does not include the FCC type aspects.

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John Stanoch said that the FTC has been more active.

Tom Garrison said that we are looking for best practices. On page 5 at the bottom we talked about some technical improvements that the government could do to advance broadband and there is another category if there is some university research. We did have quite a bit and you'll note under the municipal we will have to address the issue of municipalities as a provider. Our last discuss was how things are carried forward after this report is submitted, if there is some sort of broadband role at a certain level, what is that, what you see here is what a broadband council might be made up and what their charge might be. We were aware of what the public private partnership brought up. There is a lot of cross connection between sub-groups.

John Stanoch had two additional comments. On the role of the federal government, Congress has mandated the FCC to report back on a national broadband policy by February 2010. At a minimum we would want to support what the FCC is doing. Second, there are a number of items where there are a number of cost placeholders. All those ideas that have cost implications we should identify and they will be in one place.

Tom Garrison said as it relates to the federal piece, if there are things we see we can't do at our level, we may want to contact our congressional delegation, to say here are some things.

Vijay Sethi said as a follow-up having talked about meeting with Roles of Government, we could have a discussion on counties.

Tom Garrison said since Mike is a member of both subcommittees we will try.

Mary Ellen Wells stated, as she looks at items 1-13 of the wheel model it really does work.

Rick King asked if there was any other feedback.

Jack Geller said that one of our recommendations is that after we disband, we all think government will stay on top of this. Assuming we all agree on that, where an ongoing group resides will rely on the functions. If we can agree what they do, will it be an advisory council.

Tom Garrison said that the ongoing broadband piece is what drives this.

Bob Fenwick said he would ask some consideration between state and local governments for the state to do some things to foster flexibility. Note that one size does not fit all and the state should keep that in mind. One of these things that the group needs to do is encourage the state to utilize the technology, the knowledge, to foster the flexibility. And as thought is given to the make-up at a state level those considerations need to be made.

Tom Garrison said that since the subcommittees will need to meet before the August task force meeting and he will be gone the first week of August, if people could read in the next couple weeks and get feedback in.

Recommendation #3 – Opportunities for public and private sectors to cooperate to achieve goal – sub-group report

Rick King said that we will next go to recommendation #3 at p. 57.

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Brent Christensen said that the sub-group had several really good calls and basically what we were tasked to do is look at public/private partnership. We see where local units and providers are not working together. We started out by talking about the mapping system needs to be ongoing and left that mapping to the state. Then from that point, what do you do with the map, we encourage local units of government, RDAs, counties to go over those maps and find unserved and underserved and identify and work with private areas and providers and review and determine how we are going to fix that. The next piece is how local governments need to work amongst themselves, cities, counties, townships, school districts, regional library consortiums to form collaboratively and true connectivity between them. He really wanted Dale Carrison to talk about the process and go into a little bit more detail on the collaborative things he has done in this area to connect the schools and libraries. It's a tremendous success. They are starting their third RFP process so now not only did they put out the network, but every three years they are evaluating and putting out another RFP, constantly upgrading and improving. We are trying to encourage the public and private sector to work together on areas that they think are not being served adequately, how do we get that happening and agree on what it is and everyone would agree that it's a good economic marketing tool for the area. We also, within those governments, understand budgets are tight so we are encouraging them to form consortiums amongst themselves so that they can share services. We've heard testimony from a number of people where they are talking about regional human service centers. Vijay's talked many times about how they are trying to work with other areas to bring their government services together. The last part is talking about how government can encourage the private sector to build out and upgrade their networks as necessary. We believe that economic development tools are a way to get your local providers to provide that service and build it out. The first one is technical assistance there is a lot of help with broadband plans or business plans, how to secure funding, all the economic development tools that are out there now. Provide financial incentives as appropriate, we are going to use the Role of Government sub-group list. Third, is to encourage public and private collaboration and sharing of information. We need a mechanism to encourage, he has a five year plan and the city of Madelia has a five year plan and we are trying to cooperate to the best of our abilities. The fourth point is to position the state to be the location for beta testing, create an environment where the Microsoft's of the world want to come and use the new technologies and come and advance Minnesota to be a place where new technologies are tested.

Dan McElroy said that this seems to emphasize the hardware side that goes out and completes the network. Did you talk at all about the public private role in increasing utilization, education on how and why to use the Internet and greater computer ownership. We know that that's important. Is that in the realm of this committee and if not should it be.

Brent Christensen said we did not address that. We were addressing the goals of public/private partnership to work together to build out the infrastructure for the service.

Dan McElroy asked if this charge was about ubiquity and not about our broader adoption as part of that.

Jack Geller said he thought it was public private partnerships, more generic.

Brent Christensen said we may have narrowed that down a little.

Rick King added that he thought it was supposed to be broad.

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Dan McElroy said that as we think about that, there is a public partnership role and some of you may have been at the Blandin conference out at ADC where they had the people from Smart Cities here from NJ or NY and talking about the role of public private partnerships very broadly and not intrusive. Lots of volunteer opportunities at senior centers and explorers type of things to increase adoption.

Rick King said what might be good if you are willing, is to go back and to the extent that was narrowed down for any reason, open it up and say what other private/partnerships would accelerate our goals.

Brent Christensen indicated that the sub-group can do that.

Rick King commented that what the sub-group has already done is good.

Brent Christensen added it's only one piece.

Dan McElroy said he worries a little and some of us have talked about it and that is in regards to the sharing of information on GIS systems. We should have a partnership and sharing on GIS systems so that we don't end up with state, counties, regions, utilities, duplicating GIS. It's an area for potential collaboration. He does not know that you have duplication in one county, but in the metro area everyone wants their own GIS.

Brent Christensen asked if that isn't that line with the Role of Government and the different levels they are discussing.

Dan McElroy said a times we in government have to get permission from somebody. There is certainly a private role, the providers would know what the private roles is but electrical utilities and gas companies and all those folks, that they get into the right of way and avoiding duplication of GIS. Brent you might see this role as a small utility you do not have to do that, but John might see it differently.

Vijay Sethi said he sees GIS as a form of mapping and we did cover that to some degree. We are talking about collaboration of information between government and providers so that you have a more accurate picture. Thought this was covered under mapping.

John Gibbs said he would think that is part of issue #3 versus the second paragraph on mapping. Equally important points but very different.

Bob Fenwick said he is not sure if this is relevant but many times in government to government relations there are impediments to using public money to foster private enterprise. One suggestion for this group in conjunction with the Role of Government group is to look at what the ways to collaborate are and keep the safety of the taxpayer in mind.

Brent Christensen said that we had that discussion. Anyone can get into the broadband business at any time. We had stuff in there but took it out.

JoAnne Johnson said she would disagree, there are impediments. It starts with rights-of-way issues, municipal ordinances. There are multiple hurdles.

Brent Christensen asked for examples.

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JoAnne Johnson replied that if you are doing anything with physical plants there are going to be hurdles.

Bob Fenwick said that the issue that comes to mind is should you use public money and set up a private enterprise owning it, is it proper use of the money.

John Gibbs wanted to give a multi-state perspective. Minnesota has been in relative terms a fairly welcoming environment in terms of right-of-way restrictions. Comcast uses Minnesota as a beta site. He beats up on Minnesota on a number of things, but there has been more things that work in this area versus do not work.

Tom Garrison said this is an issue that cuts both ways, public/private partnerships and when that road changes that we experience hassles. Anything to make the whole process smoother is good.

John Gibbs suggested an example of what that is in this section. It did not come to him immediately what you were talking about with #1. Who would provide technical help.

Brent Christensen said in looking what cities have the EDA and if someone comes in starting a new business and helping them.

Tom Garrison said someone is looking to relocate they come to see where the fiber paths are.

Gary Fields noted that someone said that there were no barriers to municipal broadband, but any effective business model really calls for a triple play so that barrier effectively becomes a barrier to broadband.

Brent Christensen said the group discussed and decided we are not in the business of deciding the business model; we are focusing on broadband.

JoAnne Johnson responded that there is a work around thing for that and it is to do VoIP if you can't get the 65% vote. If you have the broadband connection then you can offer.

Gary Fields said assuming managed voice is the same.

JoAnne Johnson said there is a work around, does it fit in public private partnership like the Idaho grant system where the state puts up project dollars and the company matches that.

Tom Garrison had an inquiry about the draft table that we saw.

Rick King said we will move the chart to section 3.

Rick King summarized that we will hear from the Role of Government and Symmetrical sub-groups again, and the Public/Private Partnerships. We will hear from financing the next time. We'll also have the wording on speed that will be in the summary e-mail.

Rick King had a couple of other things to highlight. Connected Nation worked with Dan McElroy's staff and they have overlaid the economic data and you have 8 maps in your packet on that including counties around Grand Rapids, Mankato and Fergus Falls. The meeting next month is on August 21st. Both the lodging, reception and meeting location is out. Blandin has the policy seminar from 3:00 to 5:00 p.m., and the reception is from 5:00 to 7:00 p.m. Peg has

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been coordinating and we'll have a few speakers and we will have coffee at 8:00 a.m. and the meeting from 9:00 a.m. to 3:00 p.m.

Peg Werner indicated that they decided to have the reception from 5:00 to 7:00 to keep the community people there from the Blandin seminar.

Rick King stated we have the August date, then one meeting in September, then the three dates in October. Be thinking about whether you want to organize a post-report party. It might be nice to get together and have dinner and not have an agenda. Any other items anyone wants to discuss? None.

Meeting adjourned at 3:45