

Categorization of Values Submitted by Task Force Members
For discussion January 16, 2009

Red font indicates agreed upon value at January 16 meeting.

Blue font indicates task force agreed value needed additional discussion.

Overall

1. Conclusions or recommendations in the final report should be based on the factual record of testimony and documentation (including mapping) gathered by the Task Force, as well as the consensus viewpoint of the Task Force members and majority vote of Task Force.

Rural/Metro or Ubiquity of Service

1. Take into consideration the needs of all Minnesotans, not just those living within city limits. We live in a largely agricultural state, making sure that our ag producers are competitive should be a priority (which means having access to broadband services).
2. Equal access, participation, collaboration, improving Minnesotans quality of life, equal education on how to use and take advantage, quality access, and affordability in regards to creation of a state ultra high-speed broadband goal and a plan to implement that goal.
3. **Ubiquity of service (everyone is served).**
4. **Broadband should be treated as a utility** and available to every home, government entity, institution and business in the state, regardless of location, regardless of cost to bring it to the site. The Internet is used as a means, and sometimes the only means, of business, communication, and government services. Minnesota currently denies many citizens access simply on the basis of location and this Task Force needs to address that. “Almost everywhere” is not good enough.
5. Easy Access (user friendly) for ALL Minnesotans, in metropolitan as well as greater Minnesota, at the desired service levels.
6. Always On, Always Available (**Businesses and citizens can get the broadband capability they need**, when they need it)
7. Coverage to virtually all citizens? Every town? Every county? Every town larger than X? Available to every dwelling with more than X people? Available to every household in the state?
8. **Level of service by type of users/tiers. By use and need (not one size fits all).**

Infrastructure

1. Leverage our existing infrastructure and encourage investment in upgrading it to meet the needs of all Minnesota. Ripping out the existing infrastructure and starting over does not make sense. The current infrastructure is scalable and capable of growing to meet future needs.
2. Ideally, services would be less costly to offer on a common shared infrastructure. In reality that is not likely to happen because each company wants to control the pipe, but if we could encourage and showcase a pilot example or two that achieved measurable results on cost and service we might be able to turn that around. Is private investment really a problem? Are they investing in duplicate infrastructure? What role does interoperability play?
3. Provide open access -- acknowledge the natural-monopoly of the "last mile" and provide a single high-capacity connection that can be shared by multiple providers
4. That the most critical deployment issue is the provision of facilities for broadband services in unserved and underserved areas. Areas which are underserved would be those with less than 1mbs of Internet access.
Supporting testimony: Provider presentation, December 19
5. View broadband as essential infrastructure -- rather than leaving it to be deployed only when private investors believe they can make favorable returns

Not "One Size Fits All"

1. A one size fits all approach is not appropriate or even doable. Go in the direction we were heading at the last meeting....**defining different levels of usage and service that is necessary for those levels.**
2. We should distinguish the differences for residential and business access and affordability. How do they affect each other? How independent are they?
3. That the state recognize those demographic factors impacting broadband deployment and usage. In particular income and age are critical demographic factors that relate directly computer ownership.
Supporting Testimony: Dr. Geller presentation on
Center for Rural Policy surveys

Affordable

1. Affordable access for each person via their primary residence, not just work, school, or public facilities (libraries, etc.) access. Affordable residence access offers many advantages in the areas of business (work at home), education (availability to excellence), health care (remote diagnostics and monitoring),

- government (easier direct access and participation), and community (people like me) as a few real examples.
2. What would the definition for affordable access for each business be?
 3. Put consumers in the driver's seat -- broadband that is ubiquitous, symmetrical, affordable.
 4. Affordable cost – While bringing broadband capabilities everywhere is not without cost, the state needs to address the fact that many Minnesotans cannot afford high prices for this service. Just as telephone costs were equalized through the Universal Services Fund, so should telecommunication lines. Everyone may still not be able to afford access, and some may not want it, we should work toward uniform, affordable costs across the state.
 5. Affordability in accessing basic service levels. Perhaps Ultra High Speed Broadband needs to be treated as a common good since Internet is fast becoming the main medium for conducting business and personal transactions around the state, country and the world.
 6. From affordability perspective, keeping the playing field as level as possible across our state demographics through tax policy for those who are in need of assistance.
 7. **Today if people are willing to pay, they can get the service.**

Competition

1. From an access perspective, keeping the playing field as level as possible across our state demographics through the encouragement of market competition.
2. Encouraging private competition through public incentives only when necessary. It would be ideal if we had at least 3 competitive offerings in each locality – fixed wired (telco and cable) and wireless because the market will support it.
3. Communities should have the right to control their own access to high-speed connections; however they should respect the private investment made by existing providers.
4. State government should minimize its impact on market competition.
5. That the state recognize the enormous achievements and progress that has been made under a policy of competition among providers.

Supporting testimony: Provider presentations, December 19

6. **Competition** (We value market competition and not sole source providers to achieve affordability and choice of services)
7. Open access. Treat it as if it were another utility, like electricity, water, sewer, etc. Or, you build it, you own it.

Speed

1. Video, and to a lesser extent, real-time audio are going to be the large drivers for broadband adoption. Beyond entertainment (the elephant already in the room), video will absolutely be key for go forward collaborative applications in education, healthcare, government, and community.
2. Speeds of 100MB are not far away from being necessary, with 500MB just over the 2015 horizon when you examine the entertainment, personal communication (IP telephone, video email, etc.), and business based applications that will become commonly accepted. Bi-directional speeds will need to increase as well as more demands are placed on real-time 2-way communication.
3. In terms of average speed availability we want Minnesota to always be (pick one) A) first in the world, B) first in the US, or C) in the top five in the nation or world.
4. Do we set a speed goal or not? FCC definition v. build it and they will come? No goal v. multiple goals for various scenarios v. mandate a goal. Geographically diverse goals v. one goal for all? If a goal is set, is it universal coverage or based on demand?
5. **Symmetry** (Our aim should be for symmetric connections with the same upstream & downstream speeds to facilitate video conference applications.)
6. **Specific minimum speed to all Minnesotans. (Think far into the future.)**

Technology Neutral

1. State government policies and programs should be technology neutral.
2. That the state focus on services not a specific technology or speed, encourage private investment instead of publicly subsidized broadband delivery models, on accountability and appropriate oversight of private industry providers.
Supporting Testimony: Bret Swanson, The Center for Global Innovation
3. Private Sector Providers/Multiple Options – If we are truly going to deploy broadband in tough economic times, we need to engage the private sector to offer the services and allow a “Minnesota Grassroots Style” of which vendors will

provide what to whom. It has been clear in our discussion that what is working in one area of the state does not work in another. As long as there is broadband available, we should work with the vendors to make sure that there is total coverage and low costs and not worry about how broadband is delivered. (Cable, wireless, fiber.) Having worked with both state and private sector networks, we should rely on the private sector. The state's funding is less stable and their attention is not as keenly focused as a private business's generally is. It is also a real economic development tool to have the broadband be offered and delivered in as local a manner as possible. We have run on state networks, on networks run by a single (big) vendor and on networks composed of smaller regional groups. The smaller, regional groups have been the cheapest and the most reliable.

4. **Neutrality (We are not picking a technology, but rather any means that can achieve our speed goals)**
5. Mandate a technology (so not neutral)? Mandate fiber everywhere? Leave it up to providers? Mandate a common technology regardless of demand or geography.

Role of Government

1. Improving 'right of way' issues through legislation if necessary. Encourage the adoption of simplified, standardized, state wide rules.
2. What other regulations are impediments to availability? Federal, State, County, Township, City, Association?
3. Address regulatory impediments to investment. Minnesota should address right of way fees and access, regulatory uncertainty and inconsistent regulation, cost of entry and other associated issues to encourage broadband investment.
4. Do not add hurdles for businesses whether start-ups or large companies. Overregulation and legislative mandates for companies that are service providers can have an adverse impact on deployment of new products and services. (That was loud and clear from WiMax entrepreneur.)
5. Should all residences to be built be 'enabled' for broadband through statewide building code updates for fiber to the home, coax to the home, wireless antenna to the home and the like where the owner would pay for and own the broadband infrastructure assets coming in from the street, just like they own the sewer connection, landline telephone connection (do they own this?) and electric connection (do they own this?) of today. What would this mean for rural or low density connections?

6. Is part of government's role to act as an aggregator and clearinghouse for disparate pieces of information regarding overall education, pricing, and services or would a business or consumer be better off looking on their own?
7. Economic development and education. Minnesota should create a point of contact in state government to address concerns about broadband availability where broadband would lead to job creation or retention or educational opportunity.
8. Government should have a role to ensure that all Minnesotans have access to a high-speed Internet connection.
9. Government intervention should focus first on areas where there are no high-speed connections.
10. Focus on unserved areas. Areas in Minnesota lacking a broadband connection tend to be high-cost service areas. Minnesota should consider provider incentives such as grants, loans and tax incentives to encourage deployment in unserved areas, as has been done in other states.
11. State government should establish standards for high-speed connections.
12. Interoperability (any public investments should be in systems that work and operate well with other systems and do not create technology islands.)
13. That any governmental financial support should be in the form of loans and grants. More specifically the state should NOT create ongoing subsidy mechanisms (i.e. the telephone subsidy model) that exist far beyond the time necessary to achieve their stated goals and/or that duplicate outdated legacy federal support mechanisms now in place. Furthermore, public resources should not be used to duplicate existing infrastructure (i.e. use the "yellow pages" test – if the service is in the yellow pages, government should stay out and not use taxpayers to subsidize public projects). Only where there is a market failure is there likely to be an opportunity for public investment in communications services that will be viable and sustainable.

Supporting Testimony: Provider presentation, December 19

14. Should government have a role in implementation or implemented by the private sector only? Public sector only? Both?

Supply and Demand

1. Stimulate demand -- "building it" isn't enough, addressing the Digital Divide through access to computers and information-skills needs to be included in the mix.

2. Demand. Build it and they will come v. stimulate demand through training programs, etc.
3. **Focus on both the demand side and the supply side of this issue.** Much of the discussion to date on broadband in Minnesota has focused on supply side issues, but as pointed out by Dr. Geller and others, nearly a third of Minnesotans do not have a home computer and state no reason to purchase broadband service. The overwhelming majority of Minnesotans report that they are satisfied with the speed of their internet connection. The state should encourage support for programs and initiatives that increase access to broadband and generate demand and use of broadband, discourage new taxes on broadband and telecommunications services and focus on market demand issues and concerns.

Miscellaneous

1. **Look forward**, be proactive -- prepare for our future by anticipating needs.
2. Be competitive -- acknowledge the economic development advantage (and the risk of being left behind if we don't act).
3. That the state identify a strategy and financial resources to promote deployment, inspire innovation, and increase consumer, commercial, educational and governmental usage of Internet technology.
4. Who pays for it? Fully private v. public/private v. fully government funded.
5. **Public/private partnership**
6. Access for those without means. There will always be that sector of society who will not have access despite the best efforts of those supplying the lines. People may still not be able to afford Internet access, they may not be able to afford computers, they may not know how to use a computer, they may not be able to read, they may not have a home. However, given the essential need, at times, to respond or request something only online, there needs to be a place for that to happen. Public libraries are available across the state, and they provide this service now. Throughout the United States, more people who do not have Internet access use public libraries than any other source. The Task Force needs to ensure that public libraries have the bandwidth required to continue this service.
7. Simplicity in describing what is broadband: The definition of Ultra High Speed Broadband to the citizens (Tera, Peta, exa, zetta or some other way of describing system capacity in a tangible manner); the process and components involved in hooking up to the Ultra High speed broadband; and, its application in various

- aspects of our day-to-day lives such as research, learning, healthcare, business, commerce, entertainment, sports, culture, arts, etc.
8. A sincere willingness to collaborate among private and public partners in sharing information and resources (such as infrastructure).
 9. Collaboration (policies enacted should encourage partnerships and particularly public/private partnerships)
 10. **Cooperation across all players.**
 11. Need for complete information. Information about the availability and speed of broadband service in Minnesota is often anecdotal. Minnesota should complete current efforts of create a comprehensive map or database of statewide broadband infrastructure, including areas where broadband service is not available.
 12. World Class (We recognize our competition is not simply Iowa or Wisconsin, but rather world broadband innovation and we want MN to be a place of choice for jobs, location decisions and broadband capability.)
 13. **The Public Good** (Ultimately the test of our policies and recommendations are do they serve the public good? Are our values good for Minnesota, and position the state well, not whether they are good simply for cities or schools or providers or any one segment?)
 14. Future proof. Establish updating mechanism/funding. Scheduled reviews of status, readings. Establish a follow-up commission.
 15. **Consumer protection.**