From:	<u>Rick.Kean</u>
To:	BOCrfc2015
Subject:	Broadband Opportunity Council Request for Comment Response
Date:	Tuesday, June 09, 2015 5:38:47 PM
Attachments:	051815Broadband Opportunity Council Request for Comment.docx

Dear Broadband Opportunity Council:

Attached is our response to your request for comment on Broadband. We hope you find it helpful.

Thank you,

Rick Kean Chair, Town of Hawley, MA Communications Committee For the Town of Hawley Board of Selectmen

## **Broadband Opportunity Council Notice and Request for Comment**

June 9, 2015

**Please Note:** The responses provided below were generated by the Communications Committee of the Town of Hawley, which lies in northwest corner of Western Massachusetts. Participating in the work of the Committee, are:

Rick Kean;	Contact Information:
Kirby Thwing;	Town of Hawley
Craig Shrimpton;	8 Pudding Hollow Road
Hussain Hamdan; and,	Hawley, MA 01339
Greg Rowehl.	info@townofhawley.com; rick@rickkean.com

The comments were then presented to the members of the Town's three person Board of Selectmen (New England's version of a City Council), including . . .

Phillip Keenan; John Sears; and, Robert MacLean

... who approved them without changes.

Hawley is very much a Town that is faced with the dilemma's that seem to underlay this survey. With fewer than 375 residents, a population density of 11 people per square mile, mountainous terrain and almost 50% of our land in State Forests or other tax-reduced conservation programs, we have neither the financial resources nor the taxing wherewithal to pay for the cost of building a Broadband network based on fiber-optic cable to every home. As a result, our population is aging faster than the norm and is beginning to dwindle, and real estate values are beginning to stagnate.

Some people would say we live in a paradise. And it's true – every day our residents see fox, bear, deer, the occasional moose, and a large variety of birds, including two species of eagles. Many of our streams still harbor native brook trout, the air is clear and oxygen-rich and the upstream water is often safe to drink. We can see stars – billions of them – on every clear night. In the fall we view harvest moons so large they look like they could swallow the earth.

OK, so what's our problem? There is one thing that is missing that would make a perfect paradise. And that one thing is Broadband.

While our Town is rich in nature's gifts, we could use some help in the area of telecommunications. This would enhance us culturally, but more important, would allow us to grow educationally and economically. It would also help us attract more people, and maybe even a few businesses, to Hawley. Every day that goes by we see examples of more ways that **not** having Broadband prevents us from consolidating our resources, contributing to the economy and reaching our potential. Because of the importance of information these days, we also believe that **not** having Broadband compromises our safety.

We feel "stuck" in our need for a resource that we cannot seem to afford, and we're hopeful that sharing our perspective in this comments document will us find a solution.

### A. Overarching Questions

1. How can the federal government promote best practices in broadband deployment and adoption? What resources are most useful to communities? What actions would be most helpful to communities seeking to improve broadband availability and use?

The problems that the smaller communities face have to do with a lack of expertise and time to thoroughly probe and understand the complexities of Broadband that could end up costing them much more than their original investment. Three things are needed:

- a. <u>Broadband do's and don'ts</u>. Whatever the technology, what are the elements of a sound broadband plan? What pitfalls should be avoided? What should we look out for in year 2, 3, 4, 5...? What is the standard Vocabulary of Broadband? These are the tools and standards of practice that everyone should use and follow.
- b. <u>Sample configurations and expected levels of performance</u>. OK, every system is a little different, but there are still commonalities that make networking possible. For each of the chosen performance levels, what are the essentials that have to be in place? What are the associated [ballpark] costs?
- c. <u>Best practices</u>. Only when the basics are understood can meaningful conversation take place at this level. This could be a knowledge-base-type of interaction where people ask and answer questions, both about strategy and about the technology.
- 2. How can the federal government best promote the coordination and use of federallyfunded broadband assets?
  - Via an expedited yet centralized grant application and funds disbursement process. There is a wide disparity between skillsets of communities and groups applying for funding, with the spoils tending to go to those with the slickest presentation and the most experience. Standardized grant applications for all Broadband projects could help moderate this trend. And to prevent overconcentration of resources, the government should know before any money flows how much each project is receiving from all other public sources.
- 3. What federal regulations and/or statutes could be modernized or adapted to promote broadband deployment and adoption?
  - Not sure.
- 4. As the federal government transitions to delivering more services online, what should government do to provide information and training to those who have not adopted broadband? What should the federal government do to make reasonable accommodations to those without access to broadband?

- The first thing is to publicize as widely as possible the fact that the government *IS* making that transition, and to place that fact within the context of the larger trend toward weightier web pages, faster data speeds and larger file sizes. Many people see Broadband as a "luxury" because they don't understand that trend. This has the effect of preventing the democratic process from moving affirmatively on Broadband in the smaller communities.
- The second is to train and require Federal employees to be conscious of filesize and webpage-size, and to optimize them where possible. Just because the newer systems *can* handle larger files doesn't necessarily mean they *should*. Many people who live in non-Broadband communities have to pick and choose what items they access on the Internet or in email because of the cost and time involved in downloading large files and webpages.
- Third, maybe we're going to have to go back to all-text- or -html-based versions of certain websites and documents. That seems very "throw-backish," given the advanced capabilities of the new technology, but what's the short-term alternative?
- 5. How can the federal government best collaborate with stakeholders (state, local, and tribal governments, philanthropic entities, industry, trade associations, consumer organizations, etc.) to promote broadband adoption and deployment?
  - Make matching funds available across the board for real projects that actually have the effect of increasing Broadband coverage. These funds should be oriented toward supporting actual build-outs. Let the states and local communities handle the funding for planning and feasibility studies.

# B. Addressing Regulatory Barriers to Broadband Deployment, Competition, and Adoption

- 6. What regulatory barriers exist within the agencies of the Executive Branch to the deployment of broadband infrastructure?
  - Not sure if this is a regulatory barrier or a lack of a regulation. In some of our "partially-served" towns, we find that further growth of Broadband is locked up because the current provider has an "exclusive" on territory it doesn't seem to have an interest in developing. In some cases, these providers seem to have "cherry-picked" the higher-profit areas and have no concrete plans to provide service to the less-profitable "remainders." And yet these providers seem to feel they have the right to scream to the high heavens if a new provider proposes to wire those remainders.
  - A simple solution would seem to be to grant those exclusives with a "use it or lose it" clause. Simply stated, if a current provider failed to develop a significant portion of the "remainder" of a community within five years, the balance of the territory would be made available for bids by other providers. If such clauses already exist and are not effective, then enforce them better and shorten the time frames.

7. What federal programs should allow the use of funding for the deployment of broadband infrastructure or promotion of broadband adoption but do not do so now?

Do these . . .

- U. S. Forestry Service / National Parks Service
- Military in strategic locations
- Army Engineers
- Health and Human Services
- ... departments all have programs?
- 8. What inconsistences exist in federal interpretation and application of procedures, requirements, and policies by Executive Branch agencies related to broadband deployment and/or adoption, and how could these be reconciled? One example is the variance in broadband speed definitions. [5]
  - Don't have enough information to comment.
- 9. Are there specific regulations within the agencies of the Executive Branch that impede or restrict competition for broadband service, where residents have either no option or just one option? If so, what modifications could agencies make to promote competition in the broadband marketplace?
  - Increasing competition is only a good idea in areas where more than one provider actually wants to go in and develop the network. In some cases because of high per-user build-out costs, the only way to get a network node done is via a cooperative, not-for-profit association or governmental entity. Once the new network node is established, if a private entity wants to come in and take the operation over, liquidated damages should be paid to the coop or government entity to defray its investment costs.
  - Perhaps the attractive Broadband areas should be treated like a new prescription drug in the sense that the protections that go with the territory should only last for a specified period of time. At that point the territory would be open for bidding through a standard federal RFP process, with the minimum award given in any geographic area being to two providers.
- 10. Are there federal policies or regulations within the Executive Branch that create barriers for communities or entities to share federally-funded broadband assets or networks with other non-federally funded networks?
  - Don't have enough information to comment. We imagine there are issues for communities located near military bases and/or secure government facilities.
- 11. Should the federal government promote the implementation of federally-funded broadband projects to coincide with other federally-funded infrastructure projects? For example, coordinating a broadband construction project funded by USDA with a road excavation funded by DOT?

• Absolutely. Broadband, or "Infotricity," is as much infrastructure as electric power, railroads, subways, interstate highways, sewers, water systems and airports. Even if there are no plans to use the technology for a few years, it only makes sense to install the required basics in a project when it is built. In most cases, this will be much less expensive than doing a retrofit later. This same concept should also be extended to cover public buildings.

#### C. Promoting Public and Private Investment in Broadband

- 12. How can communities/regions incentivize service providers to offer broadband services, either wired or wireless, in rural and remote areas? What can the federal government do to help encourage providers to serve rural areas?
  - It's all about helping with build-out costs, perhaps unilaterally, or perhaps in a matching program with the States. Whether the federal government contracts with a provider to build out and serve a certain community, or helps fund a cooperative or local governmental unit to do the same thing using subcontractors, all but the tiniest networks should be able to become self-sustaining and/or profitable in relatively short order once the build-out costs have been handled.
- 13. What changes in Executive Branch agency regulations or program requirements could incentivize last mile investments in rural areas and sparsely populated, remote parts of the country?
  - Don't have enough information to comment.
- 14. What changes in Executive Branch agency regulations or program requirements would improve coordination of federal programs that help communities leverage the economic benefits offered by broadband?
  - Not sure what that means. Are there such programs? From the perspective of the field, there is a need for a great deal more information on the economic opportunities that Broadband opens up in rural communities. Too many people see Broadband only as a cost (in the form of increased taxes), and not as a benefit.
- 15. How can Executive Branch agencies incentivize new entrants into the market by lowering regulatory or policy barriers?
  - Don't have enough information to comment.

#### D. Promoting Broadband Adoption

- 16. What federal programs within the Executive Branch should allow the use of funding for broadband adoption, but do not do so now?
  - Don't have enough information to comment..

- 17. Typical barriers to broadband adoption include cost, relevance, and training. How can these be addressed by regulatory changes by Executive Branch agencies?
  - Of the three, "relevance" might be the most difficult to address, as it resonates with lifestyle, and those who choose to live a peaceful, alternative, non-connected lifestyle should not have to justify their choices to the government. However, actions that reduce costs to consumers, and the effectiveness of training programs offered, if any, could certainly be applied as criteria in license-granting and -renewal situations.

### E. Issues Related to State, Local, and Tribal Governments

- 18. What barriers exist at the state, local, and/or tribal level to broadband deployment and adoption? How can the federal government work with and incentivize state, local, and tribal governments to remove these barriers?
  - As stated, the largest barrier is build-out cost. Matching funds specifically aimed at build-outs, rather than network operations, would seem to be, from the perspective of the local level, the best way to go. The federal government could offer those matching funds through the States, provided the States had a program in place that distributed build-out costs evenly across the entire network, rather than one that loaded the highest per-unit costs on the localities with the fewest resources to shoulder them.
- 19. What federal barriers do state, local, and tribal governments confront as they seek to promote broadband deployment and adoption in their communities?
  - Don't have enough information to comment..
- 20. What can the federal government do to make it easier for state, local, and tribal governments or organizations to access funding for broadband?
  - As stated in the answer to question #2, standardize the application process. Also, publish a catalogue or database that presents all federal Broadband funding programs and sources in one place.
- 21. How can the federal government support state, local, and tribal efforts to promote and/or invest in broadband networks and promote broadband adoption? For example, what type of capacity-building or technical assistance is needed?

(next page)

- Matching funds to lighten the burden.
- Factual information on the economic benefits of broadband to individuals living in smaller communities.

# F. Issues Related to Vulnerable Communities and Communities With Limited or No Broadband

- 22. How can specific regulatory policies within the Executive Branch agencies be altered to remove or reduce barriers that prevent vulnerable populations from accessing and using broadband technologies? Vulnerable populations might include, but are not limited to, veterans, seniors, minorities, people with disabilities, at-risk youth, low-income individuals and families, and the unemployed.
  - Talk about *vulnerable* -- we live in a town with a high concentration of senior citizens that is on the verge of losing its ambulance service. Not even the firehouse, which is separated from our Town Hall and highway department garage by a range of mountain foothills, has high-speed Internet. All of our current "wiring," which includes almost zero fiber optic cable, is deployed via telephone poles. Since we are a wooded area, ice storms, windstorms and prolonged snow storms tend to create a lot of damage. During Hurricane Irene, for example, many pockets of our population were cut off from the outside world for several days.
  - We don't know enough about Executive Branch regulations to be able to comment, except to say that anything that could be done from the FCC's purview to streamline the phone pole permitting and make-ready process would be helpful.
- 23. How can the federal government make broadband technologies more available and relevant for vulnerable populations?
  - We're not sure about other States, but in Massachusetts every Town is required by law to have a Council on Aging (COA). While some COA's (like ours) do not have specific facilities for programs, meetings, and such, a few well-placed computers in those facilities (or in cases like ours, in the Town Halls) could go a long way to bridging the gap with the more senior members of the community, particularly if training on basics were offered there.
  - As to relevance, assistance could be offered by (trained) staff members to those in the community who want to take advantage of it. In smaller towns, much of this assistance could be provided on a volunteer basis, so that our more elderly residents could do things like . . .
    - 1. Speak via Skype-type programs with grandchildren or relatives;
    - 2. Join a like-minded online group of hobbyists;
    - 3. Seek a job online or build an online resume;
    - 4. Hook into online veterans assistance programs;

- 5. Take advantage of programs, discounts and rebates for persons with disabilities;
- 6. Apply for State / Federal aid programs for low-income families;
- 7. Learn about drug abuse prevention;
- 8. Order merchandise online;
- 9. Etc.

#### G. Issues Specific to Rural Areas

- 24. What federal agencies alter to improve broadband access and adoption in rural areas?
  - Do not know the answer to this one not familiar with Executive Branch regulations or barriers.
- 25. Would spurring competition to offer broadband service in rural areas expand availability and, if so, what specific actions could Executive Branch agencies take in furtherance of this goal?
  - The issue in rural areas begins and ends with the fact that low-populationdensity Towns are not profitable to build out for Broadband Internet.
  - In order to spur competition among for-profit providers, the Federal Government would have to come up with a way to change that basic condition.
    - 1. Perhaps that could be done via special tax write-off provisions for the initial investment costs; or,
    - 2. Perhaps via corporate tax incentives.
- 26. Because the predominant areas with limited or no broadband service tend to be rural, what specific provisions should Executive Branch agencies consider to facilitate broadband deployment and adoption in such rural areas?
  - A plan to "level the playing field" vis a vis the per-household build-out costs of more densely-populated areas;
  - More education and training offered to local residents as part of the program (see the answer to question # 23, above);
  - An initial questionnaire, coordinated at the Town level, to determine current use of and perceived need for computer, Internet, mobile devices and Broadband; and,
  - More factual information about how Broadband can positively affect local livelihoods.

#### H. Measuring Broadband Availability, Adoption, and Speeds

27. What information about existing broadband services should the Executive Branch collect to inform decisions about broadband investment, deployment, and adoption? How often should this information be updated?

- First, as background, the 'speed' definition of "Broadband" has recently changed from 5 Mbps to 25 Mbps. That's quite a leap. If it is also a trend, and is truly indicative of what we should look forward to, then perhaps the Federal Government should issue not just a speed, but a table of speeds projected out over the next 5 7 years. If things are really moving as fast as they seem to be, such a table would give all of us at the local level a better idea as to what we're shooting for, so that we can avoid implementing systems that are obsolete before they are deployed.
- In order to avoid the trap of seeming to pry into information that most corporations would consider proprietary, the Federal Government's information gathering efforts should focus on the "What's" rather than the "How's." This means spotlighting measurable and verifiable performance characteristics rather than the specific technologies that achieved them.
- By the same token, providers should be required to create "maps" of their networks, identifying key components of the networks without providing information on what makes them tick.
- These three items should be updated annually, and provided to the public in an internet-deployed database that does NOT require Broadband speeds to be accessible.
- The Federal staff members who are charged with following up on these items should report to some more "sanction-neutral" agency than the IRS, FCC or GAO.
- 28. Are there gaps in the level or reliability of broadband-related information gathered by other entities that need to be filled by Executive Branch data collection efforts?
  - Yes. See the answers to question #1, above, for suggestions on how to fill those gaps.
- 29. What additional research should the government conduct to promote broadband deployment, adoption, and competition?
  - Best practices from other countries would be helpful;
  - Information on ways to reduce the cost of essential network materials without reducing performance.
- 30. How might the federal government encourage innovation in broadband deployment, adoption, and competition?
  - The Federal Government could encourage innovation by rewarding it. For example, by . . .
    - Underwriting the cost of using experimental materials in a statistically significant number of networks or network nodes, provided the projects are fully documented and the results are shared with the government and the public in an intelligible and timely manner;
    - Hosting local/regional "Broadband Fairs" that demonstrate the capabilities and economic benefits of Broadband;
    - Recognizing "Broadband Pioneers" people or groups who accomplish Broadband deployment under seemingly impossible conditions.