Please find attached a cover letter and Broadband Opportunity Council Request for Comment response from Hardik Bhatt, Chief Information Officer, State of Illinois.

regards,

Essam El-Beik Illinois Century Network Bureau of Communications & Computer Services Central Management Services 214 792 9866 Dark Fiber and Lit service available throughout Illinois. See www.illinois.net/provider or contact me for more details.

## **State of Illinois Request for Comments Response**

The State of Illinois is pleased to submit the following response to the Request for Comments (RFC) issued by the Broadband Opportunity Council. We recognize the importance of high speed broadband for economic growth, education, health and safety and recognize in particular the broadband connectivity gaps that exist in rural Illinois communities that we would like to address. We believe the availability and adoption of high speed broadband for all Illinois citizens is of the utmost importance and with this in mind we would like to submit the following comments to the RFC.

This response is specifically on behalf of all Illinois State agencies and represents a consolidated response. To be clear, this response does not represent any other public or private entities in Illinois.

If there are any questions on this response, please contact

Hardik Bhatt Chief Information Officer State of Illinois Hardik.Bhatt@illinois.gov 217 524 7083

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The State of Illinois was an active participant in the Broadband Technology Opportunities Program (BTOP) being awarded a federal grant of \$61M with a State match of \$34M to expand and upgrade the Illinois Century Network (ICN), the statewide community anchor institution network providing broadband connectivity to over 6000 institutions as well as commercial service providers via an open access model. The grant award and State match enabled the construction of over 1000 miles of fiber and the purchase of over 700 miles of fiber leases from other providers. Our experience in building this network informs some of our response.

Following the construction of the ICN network we have sold a significant quantity of dark fiber to retail last mile service providers. These providers complete the last mile connection to anchor institutions, businesses, residences, cell towers or other premises. The provision of middle mile fiber in rural communities enhances the business case for last mile providers and facilitates the build of high speed broadband to end user premises. This has been our experience in Illinois and thus we support the expansion of open access middle mile dark fiber, enabling fiber to be purchased by retail providers supporting high speed broadband connections to end user premises.

We strongly believe in the importance of fiber based technology and the expansion of fiber connections in Illinois. With the ability to lay hundreds of strands of fiber during one construction project, and the virtually unlimited capacity of fiber optic cable, we promote and support the build of middle mile open access dark fiber deeper and deeper into rural communities.

For very remote, rural communities, there is likely no business case possible for a fully funded private provider without some level of support from either the municipality, state or at the federal level. When support is provided mechanisms that increase the availability of middle mile open access dark fiber are welcomed. This should help increase competition in certain areas, although we do recognize there are areas where it will remain a challenge to have competition.

# Focus on Open Access Middle Mile Dark Fiber versus Incremental Approach to Meeting Broadband Definitions

We believe federal support of an incremental approach to providing broadband may cost more in the long run than a federal support approach that focuses on laying open access middle mile dark fiber. By incremental approach we mean that a federal agency provides a definition of broadband then provides support for providers to meet this definition; then after a period of time, the definition of broadband changes; then federal support is once again provided to support the new definition of broadband. If instead, federal support is focused towards very high speed broadband, enabled by deployment of high strand count open access middle mile dark fiber, a tremendously useful asset is now in place that can serve the surrounding community for decades. We would be pleased to work with federal agencies proposing where Illinois would benefit from middle mile open access dark fiber. This will be based on the current availability of broadband in the area and the level of competition. In Illinois, the ICN would be pleased to add additional open access middle mile dark fiber to its inventory to then sell this dark fiber to retail Illinois providers.

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- Alignment of goals although each federal agency has different responsibilities, we believe alignment of goals between the broadband loans and grants will help accelerate broadband deployment. For example, in a rural community a goal may be to bring very high speed broadband to key community anchor institutions first versus high speed broadband to every location within the community. The goal may dictate or strongly recommend fiber deployment and may even specify how many fiber optic strands should be laid.
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# **Response to the RFC Questions**

## **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?

#### Response

## [Include response here]

The National Telecommunications and Information Administration (NTIA) is ideally placed to be able to assist communities with broadband network development. They have existing engineering and regulatory expertise, and their engineering capability should be enhanced to be able to provide technical assistance to communities who do not have this type of experience. The NTIA would be able to bring lessons learned from network implementations around the US as examples of broadband deployments.

Guidance on secure access and methodologies to reduce data breaches would be welcome by communities and in particular anchor institutions within those communities.

2. How can the federal government best promote the coordination and use of federally-funded broadband assets?

#### Response

#### [Include response here]

A single integrated unified approach. The coordination will only be effective if managed with a single entity. Sharing among many agencies will cost time and money. Also, keeping the states and territories well informed of progress, continually asking for input, and actively looking to better manage expectations and incorporating the needs of the consumers. The coordination and use of federallyfunded broadband assets should also be done cost effectively.

3. What federal regulations and/or statutes could be modernized or adapted to promote broadband deployment and adoption?

#### Response

#### [Include response here]

Again as discussed above, a single agency needs to coordinate all efforts around items that could be modified with some ease. These items could be the National Environmental Policy Act (NEPA) as well as issues around access to "Right of Way" areas for installing infrastructure (Fiber, etc.) around roads and rails.

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?

#### Response

Provide education, information and training via public resources like libraries and other groups willing to provide the education. Also work with industry to lower access costs.

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?

## Response

[Include response here]

## 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?

## Response

[Include response here]

Focus should be on streamlining any laws and regulations that drive up costs and slow implementation, while not sacrificing the protection of life and property.

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?

## Response

[Include response here]

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.

## Response

[Include response here]

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?

## Response

## [Include response here]

When RUS funding supports a particular area for high speed broadband a second service provider is prohibited from receiving RUS funding for that same area, thus limiting competition. If instead RUS

supported middle mile open access dark fiber and supported multiple last mile providers in an area this would spur competition.

There should be fair and open competition so that all competitors have an equal opportunity to deploy broadband. There should be no monopolies. There are several locations for which there is only one internet provider available and not at the broadband speeds needed to be effective.

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?

## Response

## [Include response here]

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?

## Response

## [Include response here]

The federal government should absolutely promote cooperative projects for broadband implementation. This is an excellent way to save both funding and time. The example of USDA and IDOT is a perfect one, since adding a fiber optic cable installation to an existing roadway project is a fairly minor incremental cost to the roadway project, and the cable installation component would be far less expensive than starting an installation project on its own. Not to mention the coordination and design efforts to install fiber optic cables in ways that they are not in the way for future road construction projects. Roadway projects referenced here include for example building new roads or expanding existing roads where the installation of empty conduit and/or fiber makes sense. We understand that not every roadway project, for example road repairs, is amenable to placing empty conduit and/or fiber.

Another pairing would be to combine broadband installation projects with the upcoming FirstNet implementation. In many cases, FirstNet will be installed in rural areas that have little to no fiber or wireless cellular broadband services available. Combining these projects in some areas would again help by saving time, and spreading costs among the different players, as opposed to each entity having to pay for the same services over and over again.

## 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?

If the federal government approaches this opportunity in the framework of an economic development plan the rate of adoption in rural areas and the probability of cost competitiveness will greatly increase. Offering "seed money" to begin construction in a region where providers would normally not serve because of the low return on investment. Also eliminating obstacles that slow implementation and increase cost for the project will be essential. The speed to market and amount of money required to build in new markets will affect the cost of providing services to rural consumers.

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?

## Response

## [Include response here]

In many cases, complying with environmental requirements, including the various studies and other regulations can add a significant cost to the installation of last mile services. These include trenching in buried cables and/or building towers to provide the services. Both of these types of construction projects can be significantly slowed by environmental regulations, in addition to incurring significant costs. The federal government should streamline, or otherwise fast-track some of the approval processes. Additionally, if there were to be consistent implementation standards for broadband deployments, (see Item 21, below), regulatory agencies would know what work is being performed on a consistent basis. Having a level of consistency between project implementations would speed the approval process.

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?

## Response

[Include response here]

15. How can Executive Branch agencies incentivize new entrants into the market by lowering regulatory or policy barriers?

## Response

[Include response here]

## 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?

Any federal program that depends in any way on broadband services to fulfill its mission should be allowed to use federal funding to enhance broadband adoption. Also, the federal government should look for areas where vastly different federal programs have similar dependencies on broadband data and allow / require them to combine and share funding for these projects. This would spread the funding out and not cause too much of a burden to individual federal agencies.

Many community computer centers have had success with broadband adoption in rural communities. There are also successful telehealth initiatives in place. We welcome BroadbandUSA helping facilitate the duplication of best practices and success scenario's.

17. Typical barriers to broadband adoption include cost, relevance, and training. How can these be addressed by regulatory changes by Executive Branch agencies?

## Response

[Include response here]

## 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?

## Response

[Include response here]

19. What federal barriers do state, local, and tribal governments confront as they seek to promote broadband deployment and adoption in their communities?

## Response

[Include response here]

20. What can the federal government do to make it easier for state, local, and tribal governments or organizations to access funding for broadband?

## Response

[Include response here]

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?

Ideally, the Federal Government, through NTIA, would provide a comprehensive guide to building broadband networks. It would provide almost a step-by-step how to guide covering everything from regulatory issues, planning, funding models, design, procurement, implementation, and operations, to name a few. This provides consistent network implementation projects across the US. This consistency would enhance economies of scale, where if most networks are built to a common standard, understood by all suppliers and vendors, they can compete better, have lower risks in working with the project, which all leads to lower costs to the individual projects. Also, providing in-depth technical and project assistance reduces the need for each community to spend precious funding on design consultants. The communities would be able to leverage the knowledge they received from NTIA towards keeping design and project costs lower.

## 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.

## Response

[Include response here]

23. How can the federal government make broadband technologies more available and relevant for vulnerable populations?

## Response

[Include response here]

## G. Issues Specific to Rural Areas

24. What federal regulatory barriers can Executive Branch agencies alter to improve broadband access and adoption in rural areas?

## Response

[Include response here]

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?

## Response

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?

## Response

## [Include response here]

Unfortunately, because of the lack of infrastructure in rural areas, the cost to build in these areas is much higher on both a per-person and a per-mile basis. This comes down to a simple question of funding, and the way for the federal government to spur development is through funding, either through grants or some other means of financial assistance. However, one way to help keep costs down, and assess the progress and suitability of the grant projects, would be to require grantees to follow consistent standards and guidelines of the type described in Item 21, above. If there is a consistent set of standards, it is much easier to have consistent cost estimates, time estimates, and much easier project tracking than if each grantee follows a different method.

## 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?

## Response

## [Include response here]

Information we believe the Executive Branch should collect at least annually includes:

- Locations served with a fiber connection
- Anchor institutions served with a fiber connection
- Communities served with wireless connections and speed of those connections
- Availability of open access middle mile dark fiber

In addition to the collection of broadband data, we believe the data should be normalized between the different Executive Branch agencies and then made available via API's. Having consistency of data definitions and location information between agencies will greatly help with data analysis and help better assess the state of broadband deployment in Illinois.

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?

## Response

29. What additional research should the government conduct to promote broadband deployment, adoption, and competition?

## Response

## [Include response here]

Funding. Create grants that vendors can apply for to better market and research product offerings.

The cost of fiber deployment in rural areas to first connect anchor institutions then residences. At what point, based on both demographic and geographic attributes, in remote rural communities are non-fiber and wireless technologies practical.

30. How might the federal government encourage innovation in broadband deployment, adoption, and competition?

## Response

## [Include response here]

Conduct a vendor Summit where vendors can demonstrate new products, technologies and software. Also conducting webinars with Vendors so they can demonstrate new products, technologies and software. Discussions with other states that have best practices already in place and willing to share.

Introduce more widespread use of reverse auctions to distribute broadband grant funds to targeted areas. Illinois would be pleased to provide input on target areas for high speed broadband deployment.



OFFICE OF THE GOVERNOR JRTC, 100 W. RANDOLPH, SUITE 16–100 CHICAGO, ILLINOIS 60601

June 10, 2015

The Honorable Lawrence E. Strickling Assistant Secretary for Communications and Information U.S. Department of Commerce 1401 Constitution Avenue, N.W. Washington, D.C. 20230

The Honorable Lisa Mensah Under Secretary for Rural Development U.S. Department of Agriculture 1400 Independence Avenue, S.W. Washington, D.C. 20250

Dear Assistant Secretary Strickling and Under Secretary Mensah,

The State of Illinois is pleased to submit the attached response to the Broadband Opportunity Council Request for Comments. This response represents a consolidated response from Illinois state agencies.

We welcome this effort to reduce federal regulation impeding broadband deployment and adoption and welcome the Request for Comments seeking ideas and approaches as to how federal agencies can facilitate broadband deployment and adoption.

We recognize the importance of high speed broadband for economic development, education, health and safety and we view the access of high speed broadband by all Illinois citizens as a priority. In particular, we fully support initiatives that help address the broadband gap in rural Illinois communities.

Our response covers reducing regulations, implementing clear guidelines at the federal level, deployment of open access middle mile dark fiber and input on how support should be provided to remote rural communities.

We recognize it will continue to be a challenge for the private market to deliver high speed broadband to remote rural communities, and thus we support a reverse auction approach for cost effectively directing federal grant funds to remote rural communities.

We would be pleased to answer any further questions or provide more detail on the state of broadband in Illinois,

Sincerely,

BLOTT

Hardik Bhatt

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## [Include response here]

The National Telecommunications and Information Administration (NTIA) is ideally placed to be able to assist communities with broadband network development. They have existing engineering and regulatory expertise, and their engineering capability should be enhanced to be able to provide technical assistance to communities who do not have this type of experience. The NTIA would be able to bring lessons learned from network implementations around the US as examples of broadband deployments.

Guidance on secure access and methodologies to reduce data breaches would be welcome by communities and in particular anchor institutions within those communities.

2. How can the federal government best promote the coordination and use of federally-funded broadband assets?

#### Response

#### [Include response here]

A single integrated unified approach. The coordination will only be effective if managed with a single entity. Sharing among many agencies will cost time and money. Also, keeping the states and territories well informed of progress, continually asking for input, and actively looking to better manage expectations and incorporating the needs of the consumers. The coordination and use of federallyfunded broadband assets should also be done cost effectively.

3. What federal regulations and/or statutes could be modernized or adapted to promote broadband deployment and adoption?

#### Response

#### [Include response here]

Again as discussed above, a single agency needs to coordinate all efforts around items that could be modified with some ease. These items could be the National Environmental Policy Act (NEPA) as well as issues around access to "Right of Way" areas for installing infrastructure (Fiber, etc.) around roads and rails.

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?

#### Response

Provide education, information and training via public resources like libraries and other groups willing to provide the education. Also work with industry to lower access costs.

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?

## Response

[Include response here]

## 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?

## Response

[Include response here]

Focus should be on streamlining any laws and regulations that drive up costs and slow implementation, while not sacrificing the protection of life and property.

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?

## Response

[Include response here]

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.

## Response

[Include response here]

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?

## Response

## [Include response here]

When RUS funding supports a particular area for high speed broadband a second service provider is prohibited from receiving RUS funding for that same area, thus limiting competition. If instead RUS

supported middle mile open access dark fiber and supported multiple last mile providers in an area this would spur competition.

There should be fair and open competition so that all competitors have an equal opportunity to deploy broadband. There should be no monopolies. There are several locations for which there is only one internet provider available and not at the broadband speeds needed to be effective.

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?

## Response

## [Include response here]

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?

## Response

## [Include response here]

The federal government should absolutely promote cooperative projects for broadband implementation. This is an excellent way to save both funding and time. The example of USDA and IDOT is a perfect one, since adding a fiber optic cable installation to an existing roadway project is a fairly minor incremental cost to the roadway project, and the cable installation component would be far less expensive than starting an installation project on its own. Not to mention the coordination and design efforts to install fiber optic cables in ways that they are not in the way for future road construction projects. Roadway projects referenced here include for example building new roads or expanding existing roads where the installation of empty conduit and/or fiber makes sense. We understand that not every roadway project, for example road repairs, is amenable to placing empty conduit and/or fiber.

Another pairing would be to combine broadband installation projects with the upcoming FirstNet implementation. In many cases, FirstNet will be installed in rural areas that have little to no fiber or wireless cellular broadband services available. Combining these projects in some areas would again help by saving time, and spreading costs among the different players, as opposed to each entity having to pay for the same services over and over again.

## 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?

If the federal government approaches this opportunity in the framework of an economic development plan the rate of adoption in rural areas and the probability of cost competitiveness will greatly increase. Offering "seed money" to begin construction in a region where providers would normally not serve because of the low return on investment. Also eliminating obstacles that slow implementation and increase cost for the project will be essential. The speed to market and amount of money required to build in new markets will affect the cost of providing services to rural consumers.

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?

## Response

## [Include response here]

In many cases, complying with environmental requirements, including the various studies and other regulations can add a significant cost to the installation of last mile services. These include trenching in buried cables and/or building towers to provide the services. Both of these types of construction projects can be significantly slowed by environmental regulations, in addition to incurring significant costs. The federal government should streamline, or otherwise fast-track some of the approval processes. Additionally, if there were to be consistent implementation standards for broadband deployments, (see Item 21, below), regulatory agencies would know what work is being performed on a consistent basis. Having a level of consistency between project implementations would speed the approval process.

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?

## Response

[Include response here]

15. How can Executive Branch agencies incentivize new entrants into the market by lowering regulatory or policy barriers?

## Response

[Include response here]

## 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?

Any federal program that depends in any way on broadband services to fulfill its mission should be allowed to use federal funding to enhance broadband adoption. Also, the federal government should look for areas where vastly different federal programs have similar dependencies on broadband data and allow / require them to combine and share funding for these projects. This would spread the funding out and not cause too much of a burden to individual federal agencies.

Many community computer centers have had success with broadband adoption in rural communities. There are also successful telehealth initiatives in place. We welcome BroadbandUSA helping facilitate the duplication of best practices and success scenario's.

17. Typical barriers to broadband adoption include cost, relevance, and training. How can these be addressed by regulatory changes by Executive Branch agencies?

## Response

[Include response here]

## 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?

## Response

[Include response here]

19. What federal barriers do state, local, and tribal governments confront as they seek to promote broadband deployment and adoption in their communities?

## Response

[Include response here]

20. What can the federal government do to make it easier for state, local, and tribal governments or organizations to access funding for broadband?

## Response

[Include response here]

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?

Ideally, the Federal Government, through NTIA, would provide a comprehensive guide to building broadband networks. It would provide almost a step-by-step how to guide covering everything from regulatory issues, planning, funding models, design, procurement, implementation, and operations, to name a few. This provides consistent network implementation projects across the US. This consistency would enhance economies of scale, where if most networks are built to a common standard, understood by all suppliers and vendors, they can compete better, have lower risks in working with the project, which all leads to lower costs to the individual projects. Also, providing in-depth technical and project assistance reduces the need for each community to spend precious funding on design consultants. The communities would be able to leverage the knowledge they received from NTIA towards keeping design and project costs lower.

## 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.

## Response

[Include response here]

23. How can the federal government make broadband technologies more available and relevant for vulnerable populations?

## Response

[Include response here]

## G. Issues Specific to Rural Areas

24. What federal regulatory barriers can Executive Branch agencies alter to improve broadband access and adoption in rural areas?

## Response

[Include response here]

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?

## Response

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?

## Response

## [Include response here]

Unfortunately, because of the lack of infrastructure in rural areas, the cost to build in these areas is much higher on both a per-person and a per-mile basis. This comes down to a simple question of funding, and the way for the federal government to spur development is through funding, either through grants or some other means of financial assistance. However, one way to help keep costs down, and assess the progress and suitability of the grant projects, would be to require grantees to follow consistent standards and guidelines of the type described in Item 21, above. If there is a consistent set of standards, it is much easier to have consistent cost estimates, time estimates, and much easier project tracking than if each grantee follows a different method.

## 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?

#### Response

## [Include response here]

Information we believe the Executive Branch should collect at least annually includes:

- Locations served with a fiber connection
- Anchor institutions served with a fiber connection
- Communities served with wireless connections and speed of those connections
- Availability of open access middle mile dark fiber

In addition to the collection of broadband data, we believe the data should be normalized between the different Executive Branch agencies and then made available via API's. Having consistency of data definitions and location information between agencies will greatly help with data analysis and help better assess the state of broadband deployment in Illinois.

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?

## Response

29. What additional research should the government conduct to promote broadband deployment, adoption, and competition?

## Response

## [Include response here]

Funding. Create grants that vendors can apply for to better market and research product offerings.

The cost of fiber deployment in rural areas to first connect anchor institutions then residences. At what point, based on both demographic and geographic attributes, in remote rural communities are non-fiber and wireless technologies practical.

30. How might the federal government encourage innovation in broadband deployment, adoption, and competition?

## Response

## [Include response here]

Conduct a vendor Summit where vendors can demonstrate new products, technologies and software. Also conducting webinars with Vendors so they can demonstrate new products, technologies and software. Discussions with other states that have best practices already in place and willing to share.

Introduce more widespread use of reverse auctions to distribute broadband grant funds to targeted areas. Illinois would be pleased to provide input on target areas for high speed broadband deployment.



OFFICE OF THE GOVERNOR JRTC, 100 W. RANDOLPH, SUITE 16–100 CHICAGO, ILLINOIS 60601

June 10, 2015

The Honorable Lawrence E. Strickling Assistant Secretary for Communications and Information U.S. Department of Commerce 1401 Constitution Avenue, N.W. Washington, D.C. 20230

The Honorable Lisa Mensah Under Secretary for Rural Development U.S. Department of Agriculture 1400 Independence Avenue, S.W. Washington, D.C. 20250

Dear Assistant Secretary Strickling and Under Secretary Mensah,

The State of Illinois is pleased to submit the attached response to the Broadband Opportunity Council Request for Comments. This response represents a consolidated response from Illinois state agencies.

We welcome this effort to reduce federal regulation impeding broadband deployment and adoption and welcome the Request for Comments seeking ideas and approaches as to how federal agencies can facilitate broadband deployment and adoption.

We recognize the importance of high speed broadband for economic development, education, health and safety and we view the access of high speed broadband by all Illinois citizens as a priority. In particular, we fully support initiatives that help address the broadband gap in rural Illinois communities.

Our response covers reducing regulations, implementing clear guidelines at the federal level, deployment of open access middle mile dark fiber and input on how support should be provided to remote rural communities.

We recognize it will continue to be a challenge for the private market to deliver high speed broadband to remote rural communities, and thus we support a reverse auction approach for cost effectively directing federal grant funds to remote rural communities.

We would be pleased to answer any further questions or provide more detail on the state of broadband in Illinois,

Sincerely,

BLOTT

Hardik Bhatt