EXECUTIVE SUMMARY

Massachusetts applauds the Rural Utilities Service ("RUS") and the National Telecommunications and Information Administration ("NTIA") for their work thus far in administering a successful first funding round under the Broadband Initiative Program ("BIP") and the Broadband Technology Opportunities Program ("BTOP").

Going forward, the Commonwealth believes that the NTIA and the RUS should continue to carefully balance the complexity of the grant application and evaluation process against the urgent need to quickly fund worthwhile projects to stimulate broadband infrastructure and adoption, create jobs, and improve the economy. We believe that certain changes can be made based on experiences learned from the initial funding round. With that in mind, Massachusetts respectfully offers the following suggestions.

We believe that there are several ways in which the application and review process can be improved to be simpler, more efficient and more transparent. This can be achieved primarily by streamlining the application process, especially by removing the requirement that applicants submit a list of census blocks for large projects and simplifying the online service area mapping process; revising the rules so that BTOP applicants proposing coverage in rural areas are not required to also apply to BIP; increasing transparency, particularly with respect to the application review process and incumbent provider coverage challenges; improving outreach and support; and using only agency or contracted staff to review applications.

With respect to policy issues addressed in the July 2009 Notice of Funding Availability ("NOFA"), Massachusetts believes that the RUS and the NTIA should prioritize projects that will deliver high-performance broadband service to anchor institutions, especially public safety sites. Priority should be given to middle-mile projects that have a "comprehensive community" approach, promote regional economic development, and address last-mile solutions. Additional points should be awarded based on the "reach" of projects as a percentage of available anchor institutions. A project with a "comprehensive community" approach is one that prioritizes delivering service to local residents and businesses as well as to anchor institutions and maximizes the use of shared network assets. Other important factors that should be considered are the level of government sponsorship, the level of bandwidth to be provided, and the potential impact on improving the provision of government functions and reducing state and local government information technology operating budgets. It is also important that projects spur last-mile investment, so that private providers can utilize networks to serve residents and businesses.

The NTIA and the RUS should also provide more information about how provider coverage challenges are evaluated and weighed, and challenges to proposals for deploying infrastructure through served census blocks should be precluded if the purpose is simply to transport the public Internet into unserved and underserved areas. They should also consider a multitude of factors when making cost effectiveness assessments, and take each region's particular cost-related challenges, as well as the public good, into account. Finally, the Commonwealth believes that Governors should continue to be provided with an opportunity to offer recommendations on proposals affecting their states. Doing so will allow states to identify shovel-ready projects that are both consistent with broader economic development priorities, balance existing initiatives within the states, and have the greatest potential of creating sustainable, long-term regional growth.

These and other recommendations are provided in more detail in the comments below. Again, thank you for the opportunity to comment on the implementation of BIP and BTOP.

COMMENTS OF THE COMMONWEALTH OF MASSACHUSETTS

The Commonwealth of Massachusetts hereby submits these comments in response to the Joint Request for Information promulgated jointly by the National Telecommunications and Information Administration ("NTIA") and the Rural Utilities Service ("RUS") bearing the docket number 0907141137-91375-05 and published in the *Federal Register* on November 16, 2009.

I. The Application and Review Process

A. Streamlining Applications

i) Remove or simplify the requirement to submit a list of census blocks for large projects

The first round application included "Question 14 - Proposed Funded Service Area (Middle Mile Projects)," which required middle-mile applicants to list all census blocks in the proposed project service area. The Massachusetts Broadband Institute's ("MBI") proposal for western Massachusetts covers over 1,500 square miles and over 4,000 census blocks. Inserting this information into the online application was a burdensome and labor-intensive task. All told, the MBI's application required over 100 pages to list its complete service area. We infer that the intended purpose of this task is to accurately depict the proposed project service area at the census block level. This purpose can be accomplished by requiring applicants to submit a GIS-compatible file detailing the proposed service area.

The RUS and NTIA should also consider developing an easier process or format for submitting the required information. For example, service areas that contain entire census tracts or block groups should not require census blocks to be listed individually. Applicants should also be given the ability to upload an attachment, such as a comma delimited file, containing the census block list, rather than requiring the applicant to copy and paste the list directly into the application. Applicants with GIS capabilities could also be given the option to upload a GIS dataset, in a pre-defined format, containing the census blocks and any other relevant GIS-related information.

ii) Simplify the online service area mapping process or eliminate it entirely

Given the importance of census blocks in defining the service areas, the process of drawing the service areas using the online mapping tools could be simplified by adding the census block boundaries to the map layers and/or having the map automatically display relevant census blocks based on an uploaded dataset. In addition, it would be very helpful to include a utility to allow applicants with GIS capabilities to upload more complicated service areas boundaries in a pre-defined format, such as a geo-referenced shape file with specifically defined projection parameters. We believe that this would have the following outcomes:

- Significantly decrease the amount of time required to complete the task;
- Reduce the amount of manual labor required for large service areas or middle-mile areas that pass through many census blocks; and
- Increase the accuracy and comparability of the service area boundaries, which now would match the list of census blocks submitted in Question 14 of the application (referenced in item "I.A.i" above).

iii) Preclude challenges to proposals that deploy infrastructure through served census blocks if the purpose is simply to transport the public Internet from served to unserved and underserved areas

As with any stimulus-related projects, delays are costly both to the applicants as well as to the public. The Commonwealth believes that including served census blocks presents an issue for middle-mile applicants. In order to deploy a broadband network that is connected to the public Internet, the network needs to interconnect at a Point of Presence ("POP") or some other interconnection point necessarily located in a "served" area. Neither the NOFA nor the FAQs provided guidance on acceptable ratios of served to underserved census blocks. It was also unclear to the MBI how to make allowances for the routing of broadband infrastructure to facilitate the transfer of the public Internet from served areas to unserved and underserved areas. Further, "Question 17 - Methodology for Area Status" requires applicants to calculate the percentage of unserved, underserved and rural areas in a proposed service area. Again, there should be an accounting for those served areas included as part of the route in order to reach unserved and underserved areas which will ultimately make up the intended last-mile service area.

B. Relationship between BIP and BTOP

i) Do not require BTOP applicants to apply to BIP

There should be one application for both BIP and BTOP, and applicants should have the ability to apply independently to either program regardless of the percentage of rural areas served by the application's project. This would not preclude either organization from evaluating specific applications according to their own criteria.

Further, the requirement that applicants with proposed projects in service areas greater than 75% rural must first apply to, and be rejected by, BIP in order to be considered for BTOP funding is highly inefficient given the different rules and questions associated with each application. It also presents an unfair disadvantage to applicants whose proposed service areas are very rural but also non-remote. A rural, non-remote classification means that an applicant is ineligible for full grant funding from BIP, but must apply to and be rejected by BIP before being considered by BTOP. The BIP rules should be changed so that these applicants are either 1) eligible to receive full BIP grant funding; or 2) eligible to apply directly to BTOP.

It would seem to be more efficient if the delineation between BIP and BTOP were further clarified by considering the population density of a proposed project service area.

Similarly, the RUS should provide a greater percentage of grant funding for rural areas and make it available to non-remote projects in areas more than 75% rural.

C. Transparency and Confidentiality

i) Increase application transparency

The Commonwealth fully supports making more application information available for public viewing, especially information surrounding contested areas of coverage and information regarding the application review process. These recommendations are explained in more detail in sections below. However, as with the current funding round, proprietary information, such as project financials and network diagrams, should not be publicly released without the consent of applicants.

D. Outreach and Support

i) Assign a qualified staff member to assist each state or territory

The Commonwealth suggests that it would be very helpful to assign each state or territory qualified contact(s) from the RUS or the NTIA who are available to answer questions to applicants from that state or territory.

The Commonwealth is grateful to the RUS and the NTIA for holding one of the first national workshops on their respective grant programs in Massachusetts in July. This event was extremely helpful and provided direct access to RUS and NTIA staff for the hundreds of those who attended. The most helpful and effective way to communicate complex information and clarify points of confusion is through direct communication with a qualified person. The FAQs were useful, but given the amount of information required to respond and the specific particularities of each proposal, some responses to frequent questions were vaguely written and did not fully clarify questions or provide the complete answer in a timely fashion. Additionally, it was the MBI's experience that the help desk staff was not always reachable. When the MBI was able to contact staff, they were often unable to answer difficult questions and, in some cases, provided different answers to the same question.

E. NTIA Expert Review Process

i) Use only agency or contracted staff for the application review process

Step II of the first round has been delayed from the initial timeline provided in the NOFA. The Commonwealth believes that this is in large part because of the enormity of the task before the RUS and the NTIA and the volume of applications filed. To speed the process and ensure impartiality and consistency, we believe that the RUS and the NTIA should use federal or contracted staff to review the applications.

ii) Provide scoring criteria for BTOP proposals

The RUS provided a comprehensive breakdown for BIP scoring. In the second round, the NTIA should consider providing similar scoring criteria for BTOP. These criteria will help applicants provide the most relevant information that the RUS and the NTIA need to completely and accurately assess the qualifications of each proposal.

F. Other

i) Do not require applicants to secure formal commitments from Disadvantaged Small Businesses to receive credit for partnering with them

Question 43 in the NOFA indicates that additional points are awarded to applicants that can demonstrate that they have an existing partnership with a Disadvantaged Small Business. This question is potentially unfair to public entities that must adhere to state procurement laws and issue competitive solicitations to formalize such a relationship.

ii) Increase space allotment for narrative responses and increase file size limits for attachments

When it came time to upload or paste material into the online application, some size limits became apparent that were not stated elsewhere. In some cases, the size allowed differed from what was stated in the NOFA, and this was only discoverable during the upload process. It would be helpful if all space and size limitations and other restrictions were clearly stated in the NOFA. Also, as a general matter, the space allotted to answer questions should be longer.

II. Policy Issues Addressed in the NOFA

A. Funding Priorities and Objectives

i) Investments in infrastructure should be a priority

The Commonwealth believes that deployment of new broadband infrastructure is an essential objective of BIP and BTOP. In order to create robust networks that will meet future bandwidth requirements and provide last-mile access to end users, the focus of BIP and BTOP should be on creating infrastructure first. The NTIA should fund projects that fulfill the objectives of ARRA and the five defined statutory purposes for broadband stimulus. These purposes do not distinguish between "last-mile" and "middle-mile," but rather focus on ensuring broad short-term economic stimulus / job creation and long term public benefit from broadband investments.

ii) Focus on "Comprehensive Community" projects and give priority to proposals that leverage large, publicly-managed networks for connecting anchor institutions

We believe that that RUS and the NTIA should strongly consider funding large-scale public network infrastructure projects. These projects are generally most effective at providing long-lasting returns on investment, improving service to citizens through increased access to government services, enhancing public safety, and creating jobs. Public projects are also accustomed to the stringent internal controls necessary to avoid waste, fraud and abuse—and they do not pose the same sustainability challenges as many private sector applicants. As a result of inadequate broadband infrastructure, Massachusetts and other states have been unable to deploy emerging technologies, such as e-health applications and Next Generation 911 services, which require large amounts of bandwidth and network interoperability capabilities. These technologies are critical for governments to offer the services they are required to provide on a day-to-day basis.

Accordingly, the objectives of the programs can be achieved most effectively through "Comprehensive Community" projects which provide these capabilities to a broad swath of community anchor institutions. We believe that additional points should be awarded to infrastructure projects that:

- Increase capacity and connection for governmental and public institutions specified in ARRA without increasing their operating costs;
- Improve the provision and lower the costs of government services by delivering high bandwidth broadband access and services to institutions like community colleges, libraries, hospitals, medical centers, job training centers, public housing projects, and, most importantly, state information technology and public safety facilities using a shared network infrastructure;
- Intend to utilize the middle-mile network as a way to spur last-mile investment so the network can be utilized by residents and small businesses and so broadband competition increases;
- Demonstrate breadth of coverage within a state or larger geographic region.

New shared, public infrastructure that includes middle-mile and last-mile networks will deliver dramatic savings to state and local anchor institutions and public safety entities. These savings will achieve another main goal of ARRA, which is to improve and lower the costs of government services after the immediate job creation / economic stimulus has been achieved.

iii) Public safety sites should be considered "priority" anchor institutions

It is similarly critical that public safety sites be identified as core common anchor institutions across communities. Providing broadband infrastructure for public safety is a requirement of Congress and the President and is set forth expressly in ARRA. Certain governmental and anchor institutions should be given greater weight based on the value these institutions deliver to the community, and additional points should be awarded

based on the "reach" of projects as a percentage of available anchor institutions. In the next funding round, we believe that public safety sites should be first on the list.

iv) Middle-mile proposals that have last-mile solutions should be a priority

Priority should be given to middle-mile projects that intend to spur last-mile development. Given potential state procurement laws, however, there should not be a requirement for formal commitments with last-mile providers prior to the submission of applications.

B. Economic Development

i) Applications that promote regional economic development should be a priority

Regional economic development should be an important factor in the RUS's and NTIA's funding decisions, and we believe that additional points should be awarded to proposals that coordinate with regional economic development agencies. Doing so will help ensure that a collaborative and systematic approach is taken to broadband deployment and that funds are used to enhance regional prosperity and maximize job creation. Regional approaches to broadband deployment also bring the benefits discussed in our comments on "Comprehensive Community" projects above. In addition, coordination with regional economic development agencies will help ensure that areas affected by infrastructure deployment have "buy-in" from local communities, minimizing the potential hurdles associated with regional permitting and zoning that could otherwise impede the swift and efficient expenditure of stimulus funds and the successful deployment of projects.

ii) Governors should again be provided an opportunity to offer recommendations on proposals affecting their states

The Commonwealth recommends that Governors should once again be provided an opportunity to offer recommendations on proposals affecting their states. Doing so will allow states to identify shovel-ready projects that are both consistent with broader economic development priorities and have the greatest potential of creating long-term, sustainable regional growth.

C. Program Definitions

i) Modify the definition of "Remote" to allow Rural, Non-Remote applicants to apply directly to BTOP and allow these projects to be eligible for BIP grants if they can meet a combination of rural and low population density requirements

The Commonwealth agrees that a significant amount of funding should be made available to the most remote areas. However, as discussed in our comments on the "Relationship between BIP and BTOP" above, changes should be made so rural, non-remote projects do not need to apply to the RUS first. Rural, non-remote applicants

should be allowed to apply for either BIP or BTOP and should be eligible for BIP grants if they can demonstrate a combination of rural and low-density requirements.

ii) "Rural" areas should be determined by population density, not population size

The current definition of rural focuses on the population size of communities. A more appropriate definition might include population density. The Commonwealth suggests that the use of population density, as measured by households per square mile, may be a useful qualifier for identifying rural areas. This can also be achieved by defining rural areas as those that are not "urban," as defined by the U.S. Census Bureau.

D. Public Notice of Service Areas

i) Provide more information about provider coverage challenges, including the grounds for the challenges and how they are evaluated and weighed, and provide applicants an opportunity to cure their applications if necessary

Currently, notice of challenges to service areas by existing providers does not occur directly to applicants. While a summary of the "public notice response" is posted on the NTIA's website, a process notifying applicants directly of such challenges should be implemented. For example, an email notification to the applicant's listed contact would ensure that applicants are aware of potential challenges. Additionally, the public notice response summary, accessible through the website as mentioned, is generalized and does not contain any specifics about the nature of the challenge or the claims made by providers, including the service territory in question and the level of data offered to support the provider's claims. Without this information, applicants lack clarity about the type and reliability/verifiability of a challenge and its effect, including potential disqualification. The RUS and NTIA should consider making this summary broader to include more of the provider's specifics, such as the census block(s) or tract(s) challenged by providers; the level, granularity, or type of support offered by the provider; and other information, as appropriate.

Should an application be denied upon determination by the RUS or NTIA that the service area does not meet the definition of "unserved" or "underserved," the applicant should be provided the opportunity to cure its application if a significant, contiguous portion of the proposed service area still meets the definition of "unserved" or "underserved."

ii) Revise rules regarding the public disclosure of provider challenge information

Currently, information or data submitted by existing broadband service providers for purposes of public comment are considered proprietary, pursuant to the NOFA. This practice is potentially problematic for both applicants and the state broadband authority or mapping agency, as potential decisions or disqualifications could be made based upon information that states cannot access and cannot verify. In addition, any such

information, especially granular, census block or street level service data, would be invaluable to state mapping efforts.

Any information submitted to the agencies by providers seeking to challenge the proposed service area of an application should be provided to the designated state broadband mapping authority, provided the authority can adhere, at a minimum, to protections afforded by federal confidentiality statutes and rules for any such information that is deemed proprietary by the agencies. This would ensure that any such information is considered and appropriately included in the state broadband mapping efforts, helping states meet the Congressional mandate to produce an accurate map of deployment and adoption that will ultimately assist in the development of broadband technology across all regions of the nation.

The Commonwealth recognizes that the NTIA recently requested access to certain data that the FCC collects on Form 477 from broadband providers to help validate service area classifications in applications for funding. The Commonwealth supports the NTIA's access to this data, and we further suggest that state mapping authorities should similarly be allowed to access any such data to enhance state mapping efforts.

iv) Seek comments only from providers that have contributed data in states and territories in which they operate

The Commonwealth believes it is a fair and useful process to allow existing providers an opportunity to comment on broadband proposals. As mentioned above, the Commonwealth believes that statewide availability mapping funded by the State Broadband Data and Development Program will provide a useful tool for identifying unserved and underserved areas. To leverage provider participation in the mapping project, the RUS and the NTIA should consider allowing comments from providers only if they have cooperated and contributed data to the state entity in states in which they operate. The state mapping entity should be able to provide the RUS and the NTIA a list of participating providers in their respective states. This provides an incentive to participate in the mapping project as well as contribute to the creation of accurate and complete maps of unserved and underserved areas.

v) Although superseding the Public Notice Process with data produced through the State Broadband Data and Development Grant Program is a worthwhile goal, there may be limitations

Current limitations to state mapping programs could potentially prevent state maps from being used as tools to verify the classification of specific areas. In particular, there is ambiguity with regard to the authority of state agencies to *require* broadband related data from service providers.[1] Upon request from the National Association of

[1] National Association of Regulatory Utility Commissioners Petition for Clarification or Declaratory Ruling that No Order or Regulation Issued by the Federal Communications Commission Limits State Authority to Collect Data Directly from any Broadband Infrastructure or Service Provider.

Regulatory Utility Commissions ("NARUC"), the Federal Communications Commission ("FCC") is seeking comment on the necessity of the FCC issuing a declaratory ruling regarding state authorities to obtain broadband related data.[2] NARUC requested that the FCC issue a declaratory ruling specifying that no FCC order or regulation currently limits state authority to collect data from any broadband infrastructure or service provider. This existing ambiguity over the scope of state authority has the effect of limiting granularity and accuracy of any map developed as a result of the state mapping program, and thus limiting its potential for verification purposes.

Additionally, broadband related data that is presently collected by the FCC may not be sufficient to properly determine the classification of any particular area for broadband service. Currently, Form 477 instructions require providers to identify the number of residential broadband connections by speed and technology within each census tract it is providing service.[3] For the purposes of BIP and BTOP, the agencies appropriately require service areas to be defined by classification of census blocks, a more geographically granular area than census tracts. It is reasonably foreseeable that any census tract could be identified as "served" by broadband providers, but census blocks within the same tract may be "unserved" or "underserved" according to the NOFA definitions. Therefore, reliance on Form 477 data may not accurately capture the classification of more granular areas.

E. Cost Effectiveness

In the RFI, the RUS and the NTIA ask for suggestions on how to assess cost effectiveness and how to consider the unique circumstances that affect the cost of a particular project. The Commonwealth agrees that using single factors, such as cost per homes passed or cost per mile covered, does not provide a complete and accurate measure of cost effectiveness and does not allow for an accurate comparison between proposed projects.

We believe that the two most important issues to consider in determining budget effectiveness are 1) whether the individual unit costs and the total amount of units requested are reasonable in comparison to the projects scope; and 2) whether costs budgeted to address particular project circumstances are reasonable. The RUS, the NTIA and applicants have limited time and resources to devote to BIP and BTOP. However, by modifying existing application materials, the RUS and the NTIA may obtain information that will allow for a better assessment and comparison of cost effectiveness with minimal extra time, effort, and expense for applicants and reviewers.

i) Create a budget benchmarking tool for units costs

We recommend that the RUS and the NTIA use the existing "Attachment G - Detailed Project Cost" and "Question 46 - Reasonableness" to create a budget tool that

[2] Comment Sought on NARUC Petition for Clarification or Declaratory Ruling Regarding State Authority to Obtain Broadband-Related Data, WC Docket No. 09-193 (October 22, 2009).
[3] http://www.fcc.gov/Forms/Form477/477inst.pdf.

will help applicants and reviewers identify potentially excessive costs. In the current application, "Question 46" requires applicants to submit industry benchmarks to justify costs. To better analyze budget reasonableness, we suggest that the RUS and the NTIA develop these benchmarks. "Attachment G" requires applicants to list all project components, the unit costs, and the number of units needed for a particular project. If the NTIA and the RUS develop a budget tool for "Attachment G" that lists a reasonable range for each component or service based on industry benchmarks, it would help identify any unit costs that exceed that range. Realizing that every project is different, this tool would not be applied in a restrictive or absolute manner. Rather, it would provide a benchmark based on industry standards and the budgets developed in the first round of BIP and BTOP applications.

"Question 46 – Reasonableness" can then be used in a more direct manner, allowing applicants to demonstrate the reasonableness of proposed costs for a particular project. The first part of "Question 46" already asks applicants to explain unit price and the number of units needed. Using the reasonableness range, applications would be required to explain requests for unit costs above the range. For example, the components required to construct a standard wireless tower should be relatively constant, but would reasonably cost more if they needed to be shipped to a remote location or installed in a difficult site. The number of units needed should be justified by relating them directly to elements of the proposed project scope, as submitted in "Question 10 - Description of BTOP Project Purpose" and "Question 29 - System Design."

Given the importance of budget reasonableness, we also believe that "Question 46" should be increased from one page to five pages to provide applicants sufficient room for complete answers.

ii) Add a new question to the "Project Budgeting" section to allow applicants to provide information about the specific costs associated with each project

As noted in the RFI, there are a number of factors that can contribute to increased costs for a particular project. The RUS and the NTIA should consider adding a new question in "Section H - Project Budget" to provide applicants with a specific space to explain what these factors are and how they directly impact unit and / or project costs.

The Commonwealth believes the remaining unserved and underserved areas in the United States and its territories have specific characteristics with financial implications that have impeded the deployment of broadband infrastructure. These characteristics are important for the NTIA and the RUS to consider when evaluating projects, and we urge the RUS and the NTIA to look beyond single factors such as cost per household or cost per mile.

F. Other

i) An auction-like process for awarding grants would not be beneficial

Given the paramount importance of rapid awarding of grants for the maximum impact on economic stimulus, Massachusetts does not believe that an auction process would be beneficial. Any such process will introduce delays in awarding funds and will result in a situation where many worthwhile projects may be under-funded. Massachusetts recommends that the exact funding amounts be determined during the detailed evaluation of each proposal, and that applicants are provided an opportunity to modify proposals, if necessary, to fit the amount of the awards.

III. Conclusion

Again, the Commonwealth of Massachusetts thanks the RUS and the NTIA for their joint efforts in implementing BIP and BTOP and looks forward to continuing to work together to fulfill the goals of ARRA.