Before the

DEPARTMENT OF COMMERCE,
National Telecommunications and Information Administration,

DEPARTMENT OF AGRICULTURE,
Rural Utilities Service, and the

FEDERAL COMMUNICATIONS COMMISSION

In the matter of	)	
	)	
American Recovery and Reinvestment Act of 2009 Broadband Initiatives	)	DoC Docket No. 090309298–9299–01
	)	
The Commission's Consultative Role in the Broadband Provisions of the Recovery Act	)	FCC GN Docket No. 09-40
_____	)	

CONSOLIDATED COMMENTS OF MICROSOFT CORPORATION

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Executive Summary

In its recent NOI seeking input on a National Broadband Plan, the FCC acknowledges that there is not enough money in the 2009 Recovery Act to underwrite the deployment of broadband to all Americans. Microsoft agrees. Given that reality, the Administration and the FCC now face the challenge of how to derive the most social benefit from the approximately $7 billion that has been allocated for broadband. As we have stated elsewhere, we believe the highest and best use of these limited funds is, at a minimum, to ensure all the nation's schools, public libraries and hospitals have robust, affordable connections to the Internet. With such connections, all Americans will have available to them the distance learning and telemedicine capabilities that 21st century learning and healthcare require. In this regard, by focusing broadband deployment funds on these anchor institutions, the federal government also will be supporting the Administration's broader goals of modernizing our educational and healthcare systems.

By "robust" connections, we mean at least 100 Mbps, symmetrical, capacity. Only this level of capacity is capable of supporting the video and multimedia-rich scenarios that are part and parcel of e-learning and e-medical care. By "schools," we mean K-12 institutions, community colleges and at least those universities that engage in basic research and, often at the same time, serve as hubs for creating connections to other schools and colleges. By "hospitals," we mean traditional hospitals, as well as the approximately 3,500 stand-alone ambulatory care facilities that often serve as stand-ins for hospitals in rural and inner city areas. By connecting these anchor institutions to fulsome capacity, the US government can assure that every community in the nation has multiple, credible on-ramps to a new Internet "highway" system. No community will be left off the network.

This approach will be costly. It could require almost 50 percent of the funds allocated by Congress for broadband subsidies. However, beyond the direct benefits to education and healthcare, we envision creating substantial leveraging opportunities. Once these connections are pulled deeper into every community in the nation, via Recovery Act funds, the US government also will have created jumping off points (or interconnection points) for commercial providers to step up and use for the deployment of broadband to Main Street and to neighborhoods. Moreover, this approach will leave sufficient funds available for the NTIA and the RUS to invest in connecting other community anchor institutions, as well as in replicable pilot projects that emphasize connecting hard to reach locales or populations.

The first half of our comments elaborates on this strategy. The second half provides guidance on mechanisms that can help make this concept a reality.

Table of Contents

I. A Strategic Approach to Distributing Recover Act Funds……..2

a. Priority Setting 4
b. Schools 4
c. Libraries 6
d. Hospitals 7
e. Priming the Pump 7
f. Opportunities for Other Pilot Projects 8

II. Key Definitions……..9

a. Broadband 9
b. Underserved and Unserved 11
c. Contractual Obligations 12

III. Other Salient Matters…… 13

a. Role of the States and Eligibility 13
b. Financial Contributions 14
c. NTIA and RUS Coordination 14

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Microsoft shares the US government's interest in seeing that all Americans have access to robust, affordable broadband service. Like the Administration, we also see the next 18 months as pivotal to putting the country on this course. And we see the process playing out in three main stages. Stage One is the review and award of applications for 2009 Recovery Act funds. Stage Two is the FCC's development of a National Broadband Plan. And Stage Three is implementation of that Plan. Ideally, the three stages will fit together like hand-in-glove. Below, Microsoft comments on Stage One questions posed by the agencies and the FCC, with an eye towards how Stage One activities can both meet immediate Recovery-related needs and create a foundation for the later stages.

Microsoft already has laid out its big-picture vision for Stage One in comments filed with the FCC in late March.[1] In a word, we advocate that stimulus dollars be maximally focused on ensuring schools, public libraries and hospitals have access to 100 Mbps, or greater, future-proof facilities so that these important anchor institutions can, in turn, meet the nation's need for 21st century educational and

[1] See "Comments of Microsoft," FCC GN Docket No. 09-29 (Mar. 25, 2009)

health services. For the benefit of the NTIA and RUS, we flesh out this point in Section One below. Those who already have read our earlier FCC submission might skim this section. The Agencies and the FCC also have asked how to further define certain key legislative terms that will govern the grant and loan programs. In Section Two below, we provide our input. In particular, we recommend that the U.S. government establish a uniform notion of "basic broadband" and that for community anchor institutions like schools, libraries and hospitals, 100 Mbps, symmetrical, should be considered basic broadband. It is these basic services that ought to be eligible for government grants and subsidies. Finally, NTIA and RUS ask a series of questions about how they should implement the grant and loan programs. While Microsoft does not intend to apply for any grant or loan, we provide our thoughts on how to run a well-targeted, efficient and results-oriented program in Section Three of our comments.

In the end, President Obama has been clear in articulating the Administration's strategy for a better future. It rests on modernizing education, healthcare and energy – on top of promoting jobs, growth and international competitiveness. Our recommendation for a broadband strategy directly supports this all-encompassing agenda. You cannot truly modernize education and healthcare – or improve our long-term competitiveness – without ensuring our schools, libraries and hospitals are plugged into future-proof, high-capacity broadband connections. As the FCC and its companion agencies go about distributing broadband subsidies and formalizing a National Broadband Plan, we urge that these anchor institutions be a top priority.

I. A Strategic Approach to Distributing Recovery Act Funds

The Federal Communications Commission and its companion agencies have an historic opportunity. In the context of the current economic crisis, Congress has asked the FCC, USDA and NTIA to establish a national broadband strategy, and to begin pursuing elements of that strategy by distributing billions of dollars in grants and loans for broadband deployment. Microsoft believes that if

the US government were to accomplish just one goal in this process, it should be to ensure that all schools, libraries and hospitals across the nation are connected to future-proof broadband facilities, such as fiber-optic cable. By offering these community anchor institutions connections with speeds that can approach 100 Mbps, plus expansion capacity, the federal government will bring communities nationwide into the larger national and international digital environment.

The benefits of such a strategy will be direct, tangible, rapid and profound. Regardless of their location, children and adult learners will be able to use anchor facilities to engage in distance learning. Medical professionals and their patients in underserved and unserved areas will be able to plug into the latest telemedicine capabilities. The indirect benefits will also be substantial and widely distributed. Once high-capacity and future-proof facilities are deployed to every community and embedded more deeply into those communities, the broadband pump will be primed. Commercial and, where appropriate, non-commercial entities will have jumping off points for distributing broadband services to Main Street and into neighborhoods.

This recommendation flows from our assessment of future needs, as well as the American experience. Throughout our history, policymakers have understood that connectivity sustains the nation's communities and our economy. From the digging of canals and the laying of railroad tracks, to the installation of wires and construction of highways, our leaders always have recognized that access to the best physical networks man can build generates opportunity. Future-proof, high-capacity access to the Internet is the next must-have connection. Without such connectivity, our most needy communities, the businesses that fuel them and their citizens risk economic and social atrophy. On the other hand, by connecting schools, libraries and hospitals to fiber using funds from the Recovery Act, this Administration and Congress will steer the nation as a whole towards a better future. Today, the federal government has a unique opportunity to create the Internet highway system. No community should be left behind.

A. Priority Setting. Little need be said about the importance of connecting schools, libraries and hospitals to high-capacity facilities and, in particular, connecting those institutions located in rural America. Congress has made it clear that providing broadband to them is a national priority. For sure, they are just three of the many priorities Congress identified in the Recovery Act. However, Congress delegated to the FCC and to the Administration the task of establishing a strategy for ranking priorities. With less than $7 billion in recovery funds available, we believe it is impossible to blanket the nation with the broadband capacity that our local governments, anchor institutions, businesses and residents ultimately require. The question therefore becomes one of how to maximize the near- and long-term return on taxpayers' investment in broadband. Within the range of priorities set forth by Congress, which investments provide the greatest and most immediate benefit for the dollar? We recognize the political demand to ensure that taxpayer dollars are spread across Congress's different objectives. But in establishing and executing a strategy – in setting priorities among Congressional objectives – we believe that connecting schools, libraries and hospitals will generate the quickest, most impactful and most equitable distribution of social benefits.

B. Schools. One might ask why these specific anchor institutions require high-capacity connections today, with room for future expansion. There are many answers to this question, but the primary one is to enable the delivery of high-quality video and other bandwidth-intensive applications to the individual classroom and even student. The Internet can carry increasingly effective educational tools, be they lectures from the nation's best teacher-trainers or from leading experts in basic math, science, reading and special education – or be they new educational applications that enable students to interact with multimedia information (such as Microsoft's Worldwide Telescope) or interact with fellow students from faraway geographies. Each classroom or student would not required 100 Mbps to make use of these tools, but in aggregate a school needs to be able to support the collected, diverse demands

of its population. By prioritizing Recovery Act projects that install future-proof, high-capacity connections, the government can ensure schools have both near- and long-term access to such learning.

An example from Microsoft's own backyard is instructive. On Inauguration Day, a well-funded Seattle area school district told its teachers ***not*** to use the Internet to view inaugural events. It turns out that if all of the classrooms had tuned in via the Internet, they would have overwhelmed and crashed the district's system. That day, TV broadcasts served as good substitutes. But the story lays bare the fact that even a wealthy school district could not support Internet video into all classrooms all the time. Today, this school district is on a path to correct the problem. Local taxpayers have voted to fund fiber deployment to the district's schools. Without support from larger governmental entities such as the FCC, USDA and NTIA, we can be sure that rural and less wealthy districts will never get the same. Students and teachers in those areas will be left behind.

As the Recovery Act recognizes, unfortunately, there is no reliable data on the number or type of schools that have access to high-capacity connections. Based on anecdotal assessments and what information exists, we believe a vast number of schools across the nation have woefully inadequate connectivity. In some cases, the school may have as little as a T-1 connection; in others, they may have a first-generation DSL or cable-modem connection. In either case, schools cannot deliver video and media rich applications to all classrooms, let alone to individual students, with such technology.

A follow-on question is: which "schools" require the federal government's priority treatment? K-12 education is where the nation most desperately needs modernization. We would put community colleges in the same category. They have long been important for vocational studies, as a stepping stone for four-year college, and for workers and citizens exploring new fields. Now, community colleges are becoming even more central to the nation's education system. As the business world and technology continue to evolve rapidly, workers need to acclimate to lifelong learning, and for laid-off workers, retraining is often essential. Student preparedness for four-year college is another critical

issue. Sadly, the gap between much K-12 learning and university demands is increasing. As a society, we are relying more and more on community colleges to fill these gaps. Just as K-12 schools require future-proof, high-capacity connections, so too do the country's community colleges.

Last but not least, while most four-year colleges and universities have likely wired themselves with high-capacity lines, more demand exists in those environments. Massive capacity helps research institutions connect with each other and speed collaboration on tough, computationally intensive, basic research questions. In addition, many higher education institutions serve as coordinating bodies for the planning and deployment of broadband to in-region schools, community colleges and hospitals. For example, our home state of Washington has a "State K-20 Educational Telecommunications Network." While the organization received state funding and procured transport from network operators, the system itself was designed by University of Washington personnel and UW still serves as the network operations center. UW also helped create the Pacific Northwest GigaPoP, which has driven at least minimal broadband connectivity to educational institutions in Montana, Idaho and other parts of the Northwest. By establishing anchor tenants for these facilities, local network operators, in turn, have seen fit to lay fiber closer to remote locations than they might have otherwise, making that high-capacity capability accessible to other entities. Universities with these ambitions should be considered top-tier beneficiaries of Recovery Act funds as well.

C. Libraries. The role of the nation's public libraries is also in transition. Access to physical books and other materials will be important for a long time to come. But, increasingly, libraries are becoming community hubs for digital access and e-learning. They complement the role of K-12 schools, community colleges and other social hubs in expanding patrons' knowledge. Uniquely, they foster broad, self-directed learning. Not every adult learner will enroll officially in a school. Libraries are the community's focal point for ad hoc, highly individualized learning. This is especially true in rural and hard-to-reach communities where, unlike in suburbia or city centers, there is not a sufficient

concentration of people or wealth to foster a large market for Internet cafes, coffee shops and other access points. At libraries, Internet usage is and will be, in our estimation, comparable to usage in schools. Yet libraries' Internet access today is in many, many cases, again, a minimally useful T-1 connection or an increasingly strained DSL or cable-modem connection.

D. Hospitals. Investing in high-capacity connections for schools and libraries is an investment in human learning capacity and the future ability for people to use that capacity in the workplace and social life. Investing in connectivity for hospitals brings near-term improvements in the quality and efficiency of healthcare. Improving healthcare efficiency is, of course, intimately tied to our economic growth goals, and quality healthcare is an unalloyed social good. By assuring that the nation's hospitals have access to future-proof, high-capacity connections, the FCC and its companion agencies will dramatically help spread those benefits to all communities. And as in the school environment, there is value in distributing that capacity among treatment rooms throughout the hospital.

In pursuing this strategy, it also will be important to use an appropriately flexible definition of a hospital. Many rural and inner city communities lack easy access to a true hospital. Instead, they primarily rely on stand-alone emergency care or other treatment centers. Accordingly, the government's ultimate goal should be to ensure that every community in the nation has a medical facility with a high-capacity connection to the Internet.

E. Priming the Pump. By pursuing this strategy, the federal government will do more than connect important anchor institutions to the digital world in a robust way. Fiber or other future-proof technologies will be brought to all communities and will be deployed deep into those communities. Schools, libraries and hospitals are distributed hubs. K-12 schools, in particular, are frequently considered to be the central neighborhood hubs in rural towns. By pulling this capacity deeper into communities, barriers to extending broadband to others will be reduced. In some cases, they will be reduced dramatically. We understand from some network operators, for example, that the local cost of

upgrading wires and distributing broadband is not a hurdle. The marginal cost of adding subscribers to broadband systems can be more than covered by subscriber fees. However, rural or remote providers cannot take advantage of those economics, because the cost of acquiring high-capacity facilities between the Internet backbone and the community is too high. Once this middle-mile hurdle is overcome, we believe that in many instances the market can remedy the problem of delivering affordable broadband to Main Street and neighborhoods.

F. Opportunities for Other Pilot Projects. We recognize that by ranking schools, libraries and hospitals as the most deserving recipients of Recovery Act funds, we necessarily place less emphasis on other important needs. Bringing schools, libraries and hospitals up to appropriate, minimum levels of connectivity will not be inexpensive. There are approximately 89,000 schools, community colleges and research universities nationwide; 11,000 public libraries; 6,500 hospitals; and 3,500 free standing ambulatory care facilities. In total, we recommend ensuring that these 110,000 institutions have access to 100 Mbps, future-proof facilities. One organization has put the cost of fiberizing the schools at an average of $30,000 each (with actual costs ranging from $5 to $60k, depending on distance from a node).[2] Using the $30k estimate as a proxy, the schools-libraries-hospitals strategy could consume $3.3 billion or about 48% of the total Recovery Act funding available. The cost could be greater in individual cases, or it could be negligible in those cases where, for instance, a hospital already has access to ample bandwidth. Regardless, the size of the allotment for schools, libraries and hospitals begs the question as to how to fairly treat other interested entities.

Here, we believe the appropriate course for the FCC and the agencies is to support the most promising pilot projects. By "promising," we mean those projects that have the greatest potential to address a local need in a cost-effective manner, and in a manner that can be replicated relatively easily across the nation or at least across a meaningful segment of the population. Congress has made it clear

[2] See "Community Condo Fiber Networks," St. Arnaud, Bill & Macneil, David, CANAIRE, Inc. (Feb. 2001); available at http:// net.educause.edu/ir/library/powerpoint/NET0011.pps.

that the nation's broadband priorities are many, but it has not provided funds to meet all those needs. The Obama Administration, broadly speaking, has honed in on the systemic need to modernize our education and healthcare systems. In that context, allocating 48% of Recovery Act dollars to broadband for educators and healthcare providers seems reasonable. To begin to address the nation's remaining broadband needs, the US government should develop a deep understanding of the types of investments and projects that (1) meet a local need and (2) can be replicated with future RUS loans and/or universal service fund grants. Within a short time after Recovery Act funds are exhausted, therefore, the government will have achieved a tangible, important milestone in the education and health arenas, and it will have data which will allow it to fill in remaining gaps in national broadband coverage.

II. Key Definitions

The Recovery Act instructs the FCC and the Agencies to flesh out the meaning of several key terms: unserved, underserved, and broadband, as well as the contractual conditions that should apply to those who receive grants under the Broadband Technologies Opportunities Program. We cannot say enough about the importance of getting these definitions right. As the US government embarks on developing a long-term National Broadband Plan, and as it begins to take steps in that direction via Recovery Act grants and loans, it is essential that the government adopt clear, practical and uniform definitions across the agencies involved. Ambiguous, arcane and potentially contradictory definitions will inject friction into the system, wasting resources on legalistic debates and turf battles, delaying the delivery of the connectivity the nation needs.

A. Broadband. For years, the FCC has struggled (as have other regulators) in defining this essential term. In the context of the Recovery Act and the National Broadband Plan, we believe the most important step is to define the ***minimum*** connectivity characteristics that ought to be made available nationwide. The broadband market is diverse and dynamic. Trying to define every flavor of

broadband delivered, or to be delivered, by the market is foolhardy. Instead, flowing from the Commission's mandate to make available nationwide "rapid, efficient" communication services; from the Commission's and Administration's traditional goal of assuring universal access to widely available telecommunications services; and the government's interest in assuring access to basic video programming services; we believe it important to establish a baseline – or "basic" -- level of broadband connectivity to the Internet. This baseline level not only can suit the needs of those weighing the pros and cons of grant and loan applications, but also can feed into forthcoming decisions on how to redefine and fund Universal Service.

The following table encapsulates our view of the appropriate levels of service:

First Generation High Speed	Basic Residential Service	Basic Anchor Institution Service
256 kbps up	4 Mbps up and down	100 Mbps up and down

These figures represent the average speeds available to the end user during peak hours for access to the Internet with best-efforts quality of service. They ought to apply irrespective of the technology used (including wireless), and they ought to apply to the end-to-end experience (rather than the last-mile experience). For the service to be considered "available," it ought to have these characteristics and it ought to be available to end users at a reasonable price. While we by no means would advocate price regulation, you can conceive of a measure of affordability tied to the average price of comparable services offered in urban or suburban rivalrous markets. As an example, a service might be deemed affordable if it is available at no greater than 120% of the price for a comparable service in a nearby rivalrous market.

For residential services, the Consumer Federation of America, Consumers Union and the UK's Ofcom make similar recommendations as to residential speed. In the FCC's Rural Broadband item, CFA and CU recently urged that the government ensure that all residential customers have access to 3 Mbps

down and 1 Mbps up, and Ofcom suggested that the appropriate benchmark for the UK's Universal Service purposes ought to be 2 Mbps symmetrical. The CFA/CU viewpoint is that such a benchmark is (1) quite functional and (2) one that can be delivered by a multiplicity of technologies and, thus, one that will create a strong competitive environment for providing access to everyone. Ofcom's analysis is similar, adding that with speeds in this range, the typical user can avail herself of commonplace applications and services such as email, instant messaging, fast Internet browsing, network storage and back-up, and fast music downloading. These speeds also can support basic p2p, VoIP, online radio, telehealth, video streaming, video downloading and near VHS-quality conference calling capabilities.[3]

Connectivity offered at greater speeds and/or with greater quality of service should be considered premium services. In contrast to the FCC's decision in the 2008 Data Gathering Order, for the sake of simplicity and administrative manageability, we would not further subdivide categories of broadband service nor would we differentiate services between mobile and fixed when it comes to the question of assuring national access. Moreover, as Congress and the FCC have suggested elsewhere, we also believe these measures should be dynamic, not static, and that the FCC, NTIA and RUS ought to revisit their relevance every three years, or so, to ensure the minimum capacity available across the nation is roughly in-line with what is available to mainstream, entry level consumers in well-populated, rivalrous markets.

B. Underserved and Unserved. By using this simplified, yet fulsome definition of broadband, it is relatively trivial to develop workable definitions of underserved and unserved Americans. An unserved area is one in which no first-generation high-speed Internet access is available at an affordable rate. An underserved residential community or anchor institution would be one that lacks affordable access to 4 Mbps symmetrical or 100 Mbps symmetrical, respectively. And as the FCC suggests

[3]See "Comments of the Consumer Federation of America and Consumers Union," FCC GN Docket No. 09-29 (Mar. 25, 2009) pp. 4-5, and "Digital Britain: Interim Report," Departments for Business Enterprise & Regulatory Reform and for Culture, Media & Sport (Jan. 2009) p.56.

elsewhere, for purposes of assessing the scope of underserved areas, it will be useful to look at data at the Census Tract level.

One could imagine extending the definition of "underserved" to those communities which have access to at least basic broadband services, but which do not subscribe to those services in large numbers. We prefer not to inject confusion into the definitional process in this way, but instead suggest that the FCC and Administration look at these problems with up-take as ones that relate to "sustainable adoption." Programs to support sustainable adoption might be helpful irrespective of amount of broadband available in a given area; i.e., irrespective of whether the area or community only has access to affordable first-generation high-speed service, or whether it has access to premium broadband services. Up-take is different from availability and the government's definitions should not confuse that point.

C. Contractual Obligations. The Recovery Act also requires the NTIA, in consultation with the FCC, to publish "the non-discrimination and network interconnection obligations that shall be contractual conditions of grants awarded under [the BTOP.]" Our views here are likewise aimed at simplifying the broadband regulatory regime as it unfolds with the distribution of Recovery Act funds and with the FCC's development of the National Broadband Plan. Despite the urgency to distribute funds, we believe the FCC and the Administration need to simultaneously keep their eyes on the need to flesh out a holistic, national regulatory regime that can support the broader National Plan. This medium-term goal will be frustrated if one set of regulations (or contractual obligations) established in the near-term is out of synch with the regulatory framework established in the Plan. Bifurcated regulatory regimes or similar regulatory complexities will only engender confusion and legal disputes down the road. So, notwithstanding the fact that a core part of our recommended Recovery Act strategy is to ensure competitors can interconnect with Recovery Act-funded facilities, we believe that the near term regulatory goals should be framed by the long-term objectives. More specifically, to

minimize regulatory flip-flopping and confusion, grants and loans should be awarded subject to those obligations that will be fleshed out in the Broadband Plan itself. With the Plan to be published in no more than ten months, we believe the very short term uncertainty this approach will require is worth waiting for the benefit of a uniform, national approach.

III. Other Salient Matters

The joint NTIA-RUS notice in the *Federal Register* sets forth a range of other questions on how to implement the Recovery Act. Below, we address those questions most relevant to effectuating the strategy outlined above.

A. Role of the States and Eligibility. We believe it is appropriate for NTIA and RUS to communicate to the States the federal government's national priorities; such as its desire to ensure schools, public libraries and hospitals have access to 100 Mbps, symmetrical, connections at affordable rates. Where a state's application – or the regional or local applications from within a state – map to the national priorities, the NTIA and RUS in turn should afford those applications priority in receiving awards. State or state-designated entities might be granted exceptions to national priorities in those cases where the state or applicant can show compelling need and that, in addressing that compelling need, the federal funds will be used to underwrite a widely useable, replicable pilot project.

As to eligibility, we see no reason why any entity willing to meet federal priorities and with the wherewithal to follow through should be denied the chance to participate in the grant and loan making process. On the flip side, we see no reason to grant priority to entities that are putting other (non-broadband) Recovery funds to use. We do not believe a rational process could be developed for distinguishing between the merits of a broadband-only project, on the one hand, and a broadband project that is linked to some other Recovery Act undertaking.

B. Financial Contributions. The Recovery Act requires that grant applicants demonstrate that their proposals would not have been implemented without federal assistance, and it establishes a presumption that grantees will be awarded no more than 80 percent of the cost of a project. We agree that it is important that applicants demonstrate their own financial commitments to their projects and that federal funds should not be used to underwrite projects that, all things being equal, would have been funded anyway. On the other hand, we encourage the agencies to avoid creating laborious paperwork requirements or requiring detailed financial statements to show that federal funding is necessary. Such paperwork could generate more friction in the grant-making system than is necessary, thereby stalling the processing of applications and the deployment of new facilities. A better course would be to put the onus of compliance squarely on the shoulders of the executive officer who signs off on an application, with an attestation, under penalty of perjury if necessary, swearing to the validity of the representations made within the application.

To prevent gaming of the system, moreover, the federal government might consider creating a post-application and pre-grant review period. NTIA, for example, could publish a list of grants that it "tentatively" approves and it could provide the public a short (two week) period to challenge the bona fides of an application, including its attestations. The applicant would have a short period to respond, and the agency would need to take a minimum amount of time to investigate and resolve the disagreement. While this approach of course would delay the processing of some applications, only those challenged applications would face the burden of further review. The vast majority of applications likely would proceed without challenge and, necessarily, without the burden and costs associated with "defending one's application" in advance.

C. NTIA and RUS Coordination. Like the Agencies, we are hopeful that NTIA and RUS will maximally coordinate their programs so that – when the Recovery Act programs are complete – this Administration can proclaim that "In the midst of the financial crisis, the United States government saw

fit to create an Internet highway system connecting all communities to the larger network." More specifically, the Administration has the opportunity to take all steps necessary to ensure the nation's schools, public libraries and hospitals have access to robust, affordable broadband connectivity. And with that connectivity, all communities will have access to the latest distance learning and telemedicine capabilities, both improving service and lowering costs. Moreover, by assuring these connections penetrate far into the nation's communities, the federal government will have made it possible for the commercial sector to bring basic broadband connectivity to all the nation's residences and businesses.

For this vision to become a reality, NTIA and RUS will need to share their responsibilities like never before. If an application covers a rural locale, the Administration as a whole should first look to whether the identified need can be met with funds available to the RUS, so that a maximum amount of money is kept available for projects in areas that do not qualify as rural. The allocation of funds to the RUS makes it clear that Congress places a high priority on assuring that rural America derives substantial benefit from the Recovery Act funds. However, our experience is that the broadband needs exist in pockets across the nation, and the joint mission of the two Agencies should be to assure that, when all is said and done, no community is left without several robust, affordable broadband connections to the larger Internet.

* * * * *

We respect the incredible time-pressure the agencies face, as well as the political complexity of the tasks before them. We trust our comments have been helpful. To the extent the agencies seek additional details on our proposals, we are happy and ready to continue the dialogue.

Respectfully submitted,

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