



**Verizon's Recommendations for Effective Implementation of the  
American Recovery and Reinvestment Act of 2009's Broadband Stimulus Programs**

National Telecommunications and Information Administration  
Rural Utilities Service  
Federal Communications Commission  
April 13, 2009

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## I. Executive Summary

Extending the reach of broadband services to all Americans is an important national priority, and one that Verizon fully supports. Broadband spurs innovation and economic growth; facilitates citizens' engagement with their communities and government officials; and can help to address critical social challenges like healthcare, education and energy efficiency. Just as important, given the country's current economic troubles, spreading broadband availability will create good quality jobs and increase the competitiveness of each of the communities that broadband reaches. Ensuring that every American community has access to broadband also will help promote the long-term competitiveness of the United States.

Over the last several years, tremendous amounts of private sector investment have enabled much progress towards these goals. In reliance on the light-touch regulatory approach designed to encourage network investment, broadband providers have invested hundreds of billions of dollars – and employed hundreds of thousands of employees – to deploy wireline and wireless broadband networks widely throughout the vast majority of the country. Verizon has been on the forefront of that investment. In addition to its continuing investment in DSL services, Verizon will spend over \$23 billion to build its all-fiber FiOS network through 2010 – offering next-generation wireline broadband services to 18 million homes. FiOS customers may currently select from services offering up to 50 Mbps downstream and 20 Mbps upstream. Likewise, Verizon Wireless has widely deployed its third generation (3G) wireless services, and will begin deploying its fourth generation (4G) service later this year, thus providing consumers with dramatically increased wireless broadband options. Investments such as these are driving Verizon's competitors to respond in-kind, thus providing most consumers with a choice among an array of ever-more-robust broadband services offered over competing broadband platforms. As a result of these investments, over 90 percent of households in the United States already have access to broadband, and that number continues to grow. Moreover, close to 80 percent of households with computers already subscribe to broadband.

Notwithstanding these successes, work remains to be done to achieve ubiquitous broadband availability and adoption. Some areas still lack access to broadband services from any provider, generally because of the high-cost of extending either last-mile or middle-mile facilities to those areas. And demand-side issues, such as computer literacy and ownership, have inhibited broadband adoption in areas where service is available. The more than \$7 billion in funding provided by the American Recovery and Reinvestment Act of 2009 (Recovery Act) to the National Telecommunications and Information Administration (NTIA) and the Rural Utilities Service (RUS) for broadband-related projects provides an unprecedented opportunity to address these obstacles that stand in the way of achieving the nation's broadband goals. Given the scope of the work to be done, it is essential that stimulus funds be effectively targeted and efficiently administered by NTIA and RUS in order to ensure the best use of taxpayer dollars and the most progress towards overcoming obstacles to broadband availability and adoption.

**Maintain Focus on the Biggest Issues: Unserved Areas and Demand-Side Factors.** Because the funds available for the NTIA and RUS broadband programs are

not unlimited, it is essential that NTIA and RUS target these funds efficiently towards the most pressing broadband need – extending broadband service to unserved areas. As long as pockets of Americans lack access to broadband services, federal funds should focus on those areas where market forces and private investment have not made broadband available.

If funds remain after funding projects targeted at the unserved, then NTIA should focus remaining funds on projects that address demand-side issues – such as computer literacy, computer ownership, and lack of understanding of the benefits of broadband – that limit broadband adoption in both unserved and underserved areas. Independent analysis shows that such demand-side issues contribute significantly more to decisions by consumers who have not adopted broadband than other issues such as availability or price. Moreover, projects aimed at these issues offer the benefits of being competitively and technologically neutral and of encouraging private investment to deploy or upgrade broadband networks.

**An Inclusive, Flexible, and Transparent Approach Will Benefit the Public Interest.** In order to best further the goals of broadband deployment, job creation, and economic stimulus, NTIA and RUS should take an inclusive and flexible approach that encourages broad participation and casts a wide net for meritorious projects focused on the country’s most pressing broadband needs. By doing so, NTIA and the RUS will have the benefit of the widest range of potential projects and applicants from which to choose, thus allowing them to select those projects that will best address the obstacles to broadband deployment and adoption and provide taxpayers with the best broadband bang for their buck. With the benefit of that deep pool of proposals, NTIA and RUS should administer their respective broadband programs in accordance with the following principles:

- **Be open to a wide range of projects to help finish what has already been started** – The top priority and primary goal should be to get broadband service to unserved areas while creating jobs and fostering economic activity, and the best way to achieve that goal is to encourage a wide range of proposals by providers (including qualified private entities) capable of effectively building and managing broadband facilities on a sustainable basis.
- **Rely on State and local expertise** – NTIA and RUS should rely on State-level availability maps and other information known to local officials in identifying unserved areas and priority projects, and existing FCC data can supplement and confirm this information.
- **Transparency and accountability** – NTIA and RUS should select projects and manage broadband programs in a way that promotes transparency and accountability, including by selecting responsible providers with sustainable plans to reach unserved areas with broadband.

**Avoiding Ancillary Regulatory Disputes and Restrictions Will Encourage Participation, Broadband Investment, and Job Creation.** In order to ensure that the Recovery Act’s broadband programs do not get bogged down in regulatory wrangling that would undermine quick job creation and economic stimulus, NTIA and RUS also

should avoid imposing regulatory “strings” or eligibility criteria that will deter participation or otherwise inhibit sustainable broadband investment and job creation.

Most notably, as it sets out any nondiscrimination and network interconnection requirements in its request for proposal, NTIA would best further the Recovery Act’s goals by sticking with the framework established by the FCC in its Broadband Policy Statement for wireline broadband providers. Those principles – together with consumer demands, competitive necessity, and active public attention and scrutiny – already protect consumer choice and ensure access to the full range of content, applications and services available over the Internet. The only additional interconnection condition that would be appropriate would be to specify that recipients may not refuse to deliver and terminate VoIP and other IP traffic to end-users over their local networks funded by grants on the grounds that the traffic originated as VoIP or other IP traffic. This requirement would respond to a recurring, documented issue that has arisen in some rural areas, and would ensure that consumers served by taxpayer-funded networks get the same benefits as others.

Similarly, NTIA should maintain the light regulatory touch that has encouraged innovation and competition in the wireless market, and should not extend the FCC’s wireline principles to wireless broadband. The FCC principles were crafted to address wireline broadband services, and good reasons exist not to apply those principles to wireless providers. Wireless networks present unique technical challenges and concerns that distinguish them from wireline broadband networks. Moreover, the level of competition in the wireless market ensures consumer choice without the costs of additional regulation. In any event, as a result of customer demand, the momentum in the wireless marketplace is already strongly in the direction of increased openness. Verizon Wireless’ Open Development Initiative, for example, encourages third parties to develop new devices and applications that will run on Verizon Wireless’ network, thus increasing consumer choice and providing a platform for innovation. And earlier this month Verizon Wireless announced that, together with China Mobile, SOFTBANK and Vodafone, it would join the Joint Innovation Lab, which will “focus on creating a single global platform for developers to encourage the creation of a wide range of innovative and useful mobile widgets . . . capable of enhancing the mobile Internet experience on a variety of smartphones as well as mid- and low-cost handsets on multiple operating systems.”<sup>1</sup> It also announced the creation of the Verizon Wireless LTE Innovation Center – an “incubator” to assist third-party device and application developers to create innovative new products and services for Verizon Wireless’ upcoming fourth-generation wireless network.<sup>2</sup> Such developments demonstrate the lack of any need for new regulatory mandates in the wireless market.

By avoiding protracted debates concerning ancillary policy disputes – or hastily adopted and ill-considered requirements on such subjects – NTIA and RUS will have a broader slate of potential projects from which to choose and will be able to minimize delay and maximize the job creation and stimulative effects of the Recovery Act’s

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<sup>1</sup> Press Release, “Verizon Wireless to Join China Mobile, SOFTBANK and Vodafone in Creating the Largest Global Platform for Mobile Developers,” (April 1, 2009).

<sup>2</sup> Press Release, “Verizon Wireless LTE Innovation Center to Drive 4G Next Generation Wireless Product Development,” (April 1, 2009).

broadband provisions, while avoiding negative spillover effects on broadband investment and deployment more generally. Any new broadband policies should be addressed and developed in a more considered fashion on the basis of a full record in a rulemaking proceeding, not in the rushed context of stimulus grants.

## **II. Ubiquitous Broadband Availability and Widespread Adoption Are National Priorities and, Together With Job Creation and Economic Stimulus, Should Be the Focus of the NTIA and RUS Broadband Programs.**

The goals are clear: (1) ubiquitously available and widely adopted broadband throughout the United States, and (2) job creation and investment to stimulate the faltering economy and set it on track for sustainable growth in a competitive global marketplace. Verizon and other broadband providers share these goals and are doing much to make them reality, though work remains to be done.

### **A. Most Americans Have the Benefit of Broadband Competition.**

Private-sector investment in broadband is a fundamental driver of economic growth and innovation and has led to the rapid spread of broadband services in most areas. In December 2000, there were fewer than 7 million broadband connections nationwide. By the end of 2007, the number of wireline broadband connections had grown to nearly 70 million, not including an additional 52 million satellite and wireless connections.<sup>3</sup> And the robustness of services and number of competitors continues to grow – the most recent FCC report confirms this trend when it indicates that the number of zip codes with four or more broadband providers reporting connections in service grew from 51.5 percent at the end of 2004 to 87.9 percent at the end of 2007.<sup>4</sup> More than 90 percent of U.S. households already have access to broadband networks as a result of the private investment prompted by light-regulatory-touch, pro-investment policies, and the vast majority of the country is benefiting from the resulting robust, intermodal competition.

These broadband successes are the result of a tremendous amount of broadband investment. In fact, in 2007, the private sector invested more in broadband infrastructure than the federal government invested in all forms of transportation.<sup>5</sup> And while private investment throughout the economy dropped by 6 percent between mid-2006 and mid-2008, investment in communications equipment grew by nearly 10 percent over that same time period. *Id.*

The heavy investment in broadband also creates high quality jobs. The information technology sector accounted for more than half of all jobs created in the United States between April 2007 and April 2008. *Id.* These jobs are among the highest paying jobs in the economy, with hourly earnings for telecommunications workers averaging 42 percent higher than manufacturing jobs. *Id.* Moreover, broadband has a

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<sup>3</sup> FCC Wireline Competition Bureau, “High-Speed Services for Internet Access: Status as of December 31, 2007,” [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-287962A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-287962A1.pdf), at Table 1 (Jan. 2009).

<sup>4</sup> *Id.* at Table 15 & Chart 12.

<sup>5</sup> Jeffrey Eisenach, “The Telecom Sector and the Economy: How U.S. Broadband Policies Are Working for America,” (Sept. 2008).

multiplier effect on the economy, and increased availability also creates additional jobs outside of the telecommunications industry.<sup>6</sup>

Verizon is leading the charge in investing in America's broadband future. Verizon is investing over \$23 billion through 2010 to pass 18 million homes with its next-generation, all-fiber FiOS network, and has already passed 13 million of those homes. This network currently offers Internet access services of up to 50 Mbps upstream and 20 Mbps downstream, and Verizon will increase the available speeds over time. (The network also allows Verizon to offer its FiOS TV video service in direct competition with cable, in addition to its voice services.) Verizon committed to this substantial investment in its FiOS network after the FCC made clear that this next-generation network would not be subject to intrusive network-sharing or open access obligations.<sup>7</sup> Verizon also continues to spread the reach and capabilities of DSL in other areas.

Similarly, Verizon Wireless has been investing heavily to deploy wireless broadband services. Its third generation (3G) mobile wireless broadband capability using EV-DO Rev. A technology is already widely deployed. After successfully purchasing C Block spectrum in last year's 700 Mhz auction – thus allowing 22 MHz of contiguous spectrum throughout the continental United States – Verizon announced its plans to deploy its fourth generation (4G) wireless technology – LTE. The rollout of that next-generation wireless broadband service will begin later this year and will offer consumers much more robust wireless broadband services.

While Verizon is the clear leader in broadband investment, its investments are driving its competitors to respond in-kind – whether it's cable operators deploying DOCSIS 3.0 technology to add capacity and speed, Clearwire deploying its 4G WiMAX network, wireless Internet service providers (WISPs) deploying fixed wireless, or other intermodal competitors investing in their own innovative platforms to offer broadband.

Consumers are the beneficiaries of this robust, intermodal competition in broadband services, which is driving prices down and spurring companies to create faster and faster networks. As Dr. Everett Ehrlich recently noted, “[t]he data . . . indicate that the broadband market has grown rapidly while innovating – from speed and capacities, to new services and products enabled because of the new speeds and capacities – and maintaining price moderation.”<sup>8</sup>

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<sup>6</sup> See Robert Crandall, William Lehr and Robert Litan, “The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data” *Issues in Economic Policy* No. 6 (Brookings Institution, July 2007); Robert D. Atkinson, Daniel Castro and Stephen J. Ezell, “The Digital Road to Recovery: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America” The Information Technology & Innovation Fund (Jan. 2009); Stephen B. Pociask, TeleNomic Research, LLC “Building a Nationwide Broadband Network: Speeding Job Growth,” New Millenium Research (Feb. 25, 2002).

<sup>7</sup> Compare Triennial Review Order, 18 FCC Rcd 16,978, ¶¶ 272-84 (Aug. 2003); with Verizon Press Release, “Verizon Completes Fiber-to-the-Premises Vendor Selections by Choosing Corning and Three Other Companies; Deployment and New Product Rollout Begin in 2004,” available at <http://newscenter.verizon.com/press-releases/verizon/2003/page.jsp?itemID=29713847> (Dec. 22, 2003).

<sup>8</sup> Everett Ehrlich, “The Reality of Competition in the Broadband Marketplace,” at 4 (Nov. 2008)

**B. NTIA and RUS Should Target Unserved Areas and Encourage Proposals That Address Demand-Side Issues.**

NTIA and RUS should seek to build on these privately-funded broadband successes as they structure and administer the Recovery Act's broadband programs. The top priority for broadband stimulus funds should be extending broadband service to unserved areas – *i.e.*, those parts of the country where end-users currently cannot obtain broadband service from any provider using any technology.<sup>9</sup> As long as gaps in broadband deployment exist that leave some Americans completely lacking in broadband, finite federal resources should be focused on finding those gaps and filling them. Any remaining funds should target the substantial demand-side issues that limit broadband adoption in both unserved and underserved areas.

1. Focus on Unserved Areas

Notwithstanding the vibrantly competitive broadband marketplace in most parts of the country, certain high-cost, hard-to-serve areas currently remain completely unserved by any forms of Internet access other than dial-up or satellite. These are the areas where the business case for private investment is most difficult to make – indeed, sometimes impossible using current technology – and where residents and businesses are being left unserved. Such areas present the strongest case for government assistance and are the areas where stimulus funds will have the greatest impact.

The reasons that unserved areas have not yet been reached with broadband vary, and NTIA and RUS should encourage projects that address the full range of obstacles faced by these areas. In some areas that are sparsely populated or that have difficult terrain, the primary issue may be the cost of deploying the “last mile” facilities to reach end-users. In other rural communities that are distant from the long haul facilities that can carry traffic to the Internet backbone, the problem maybe the lack of availability or high costs for the “middle mile” facilities. These are the facilities that connect a rural broadband provider to a long haul carrier that can carry the traffic to and from the Internet backbone. Without adequate middle mile capacity, a rural broadband provider may not be able to provide service that will meet the needs of its end-users, or may not be able to provide service at all, even if the “last mile” facilities are in place. And in still other areas, a combination of “last mile” and “middle mile” challenges may be present. Therefore, NTIA and RUS should consider both types of issues, and should encourage and fund projects that address each of these potential problems that may account for an area being unserved.

NTIA and RUS should take this historic opportunity to make significant steps towards ubiquitous broadband deployment by placing projects that target the unserved at the front of the line for potential funding. This approach – focused on building broadband facilities to unserved areas and bringing the residents and businesses in those areas online – will also further the Recovery Act's goals of creating and preserving good jobs, while stimulating economic activity both by broadband providers and their new subscribers.

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<sup>9</sup> Although satellite broadband and dial-up services are ubiquitously available and are used by many end users to obtain Internet access, it is clear from Congress' heavy focus on extending broadband to “unserved” areas that Congress did not intend for these technologies to be considered for this purpose.

Placing the primary focus on delivering service to unserved areas is consistent with the Recovery Act and its legislative history. Indeed, “provid[ing] access to broadband service to consumers residing in unserved areas of the United States” is at the top of the list of statutory “purposes” for NTIA’s grant program. *Id.* § 6001(b)(1). Likewise, while leaving NTIA discretion in choosing the most worthwhile projects, the Conference Report accompanying the Recovery Act recognizes that NTIA is to select projects that “assist infrastructure investments that would not otherwise be made,” in addition to those that “best achieve the broad objectives of the program,” that “best meet the broadband access needs of the area to be served.” H. Rep. 111-16 at 774 (Feb. 12, 2009) (“Conference Report”). Projects delivering broadband to the unserved go furthest towards accomplishing each of these directives.

Moreover, maintaining a focus on unserved areas helps to ensure that federal funding does not distort existing competition or deter private broadband investment by subsidizing certain providers but not others with whom they directly compete. In fact, such subsidies would harm consumers by discouraging additional *private* investment by existing providers to expand or upgrade their broadband facilities. Therefore, directing all available resources to truly unserved areas will provide the greatest public benefit and will be the most effective step towards realizing the goal of ubiquitous broadband availability.

## 2. Address Demand-Side Factors That Limit Adoption.

While reaching the unserved should be the top priority, NTIA and RUS should also encourage proposals that would address the various demand-side factors that prevent many Americans from subscribing to broadband services in both unserved and underserved areas.<sup>10</sup> A recent survey by the Pew Internet & American Life Project indicated that most people who do not subscribe to broadband cite “relevance” or “usability” – not availability or price – as their reasons for not doing so.<sup>11</sup> In fact, 68 percent of respondents pointed to either “relevance” – such as “not interested” or “too busy” – or to “usability” – such as difficulty, waste of time, or physical inability – as the reasons for not subscribing. Pew Study at 2-3. Another, related factor cited by consumers is the lack of computer ownership. *Id.* at 2. In fact, analyst reports suggest that broadband penetration among those owning computers is already around 80 percent.<sup>12</sup> As these statistics show, programs that increase computer ownership, teach people how to use those computers, and demonstrate the benefits of broadband to their lives could go far in increasing broadband adoption and increasing the incentives for private investment in broadband deployment.

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<sup>10</sup> The term “underserved” may apply to a wide range of demand-side and supply-side factors that limit broadband availability or adoption in certain areas or within certain populations. An applicant should be required to clearly identify, however, the sense in which a proposed project would improve service or make it more available for an “underserved” population or area. For the reasons explained above, projects that address demand-side issues – such as lack of computer literacy or ownership – should be the priority in any “underserved” areas where broadband is available today.

<sup>11</sup> John B. Horrigan, “Obama’s Online Opportunities II,” Pew Internet & American Life Project (2009) (“Pew Study”).

<sup>12</sup> *Downgrading Telecom Services to Market Weight*, Credit Suisse, at 3 (Feb. 19, 2008).

Moreover, projects that increase broadband demand and adoption yield numerous additional benefits. Given the potential of broadband to address many significant societal concerns – such as energy efficiency, economic development and improved healthcare – the benefits from increased broadband adoption extend far beyond the new subscribers. Demand-side projects also have the added benefit of being competitively and technologically neutral. Stimulating broadband demand will encourage additional *private* investment in broadband facilities by increasing the demand for services over those facilities. Subsidizing particular providers in a marketplace where broadband is already being offered, on the other hand, would have precisely the opposite effect and would harm consumers by undermining existing investments or deterring future investments by those providers not receiving the subsidy.

Congress recognized the significance of demand-side programs by dedicating certain broadband funds for this purpose. The Recovery Act requires NTIA to devote *at least* \$250 million to “innovative programs to encourage sustainable adoption of broadband services,” although it allows NTIA the discretion to exceed this floor. Programs such as the “No Child Left Offline” projects underway in some states – initiatives that provide refurbished computers to students – offer one successful model for addressing demand-side issues, although applicants should be encouraged to develop other, creative approaches to improve computer ownership and literacy.

Likewise, demand-side stimulation should play a significant role in the \$200 million allocated for public computer center capacity. As with other types of potential subscribers, some public computer centers, including some schools or libraries, are prevented from fully taking advantage of broadband services because of the lack of computers or other resources. Programs that increase computer availability for these institutions would make public computer centers more useful for the public, while also benefitting surrounding areas by encouraging the deployment of more robust broadband facilities to those areas to serve the public computing centers.

### **III. NTIA and RUS Should Take a Flexible and Inclusive Approach That Encourages Participation and a Wide Range of Projects, While Ensuring that Funds Are Targeted to Unserved Areas and Are Used in a Manner That Promotes Transparency and Accountability.**

In order to ensure that their programs achieve the maximum public benefit, NTIA and RUS should take a flexible and inclusive approach that encourages a broad range of qualified applicants and meritorious pool of proposals from which to choose. NTIA and RUS should also rely on the information held by State and local officials, together with existing broadband data collected by the FCC, to ensure that funds are targeted to the unserved areas that are most in need. Moreover, NTIA and RUS should operate the programs in a manner that fosters transparency and accountability both for those agencies and for program participants.

#### **A. NTIA and RUS Should Encourage a Wide Range of Grant and Loan Applicants and Projects.**

NTIA and RUS will serve the public interest by encouraging the widest possible range of applicants – including existing broadband providers with demonstrated capability in building and operating networks – to put forth their ideas and by taking a

flexible approach that permits and encourages a wide range of proposals for extending service to unserved areas.

First, NTIA should permit and encourage existing broadband providers, including private entities, to participate in the Recovery Act's broadband programs. The Conference Report confirms the benefit of casting a wide net for qualified applicants, noting that "[i]t is the intent of the Conferees that, consistent with the public interest and purposes of this section, as many entities as possible be eligible to apply for a competitive grant, including wireless carriers, wireline carriers, backhaul providers, satellite carriers, public-private partnerships, and tower companies." Conference Report at 775. Given that private entities have the most experience in building and operating broadband networks – and that they are well positioned to quickly and efficiently deploy networks – NTIA should conclude that the public interest would be furthered by encouraging existing broadband providers to participate. This approach also benefits the public by increasing the pool of proposals from which NTIA can select meritorious projects.

Moreover, regardless of the type of entity that seeks funding, NTIA and RUS should require that applicants have the demonstrated capability and competence to carry out their proposed projects and to operate them in a sustainable manner following the grant period. In order to ensure that taxpayer money is used wisely, NTIA and RUS should require each applicant to demonstrate both the technical and financial ability to complete the proposed project and to ensure the sustainability of the project after the funding period. Entities without the technical and financial competence either should not participate or should be required to partner with entities with such competence. Without such a requirement, stimulus funds are likely to be wasted on unsustainable or unrealistic projects with little long-term public benefit.

Similarly, NTIA and RUS should take a flexible and inclusive approach that encourages a wide range of project proposals. While maintaining a focus on unserved areas and demand-side issues, NTIA or RUS should not require a one-size-fits-all approach for projects. Instead, NTIA and RUS should encourage a wide range of proposals and should take a flexible approach in deciding which projects would be most effective and efficient in the context of particular unserved areas. Each unserved area is likely to have unique resources and challenges that affect the choice of technology or that influence the types of projects that are needed. Indeed, the Conference Report acknowledges that the needs of particular unserved areas could be met "by a wireless provider, a wireline provider, or any other provider," and that the appropriate projects include not only "last-mile" facilities, but also "middle-mile" facilities to connect currently unserved areas to the long haul providers who connect them back to the Internet backbone. *Id.* at 774. This flexibility will allow NTIA and RUS to address the particular reasons why an area remains unserved, and to do so in a cost-effective manner that makes the most sense for that area.

Likewise, in order to provide flexibility in addressing the needs of particular unserved areas in a cost-effective manner, NTIA and RUS should not adopt arbitrary, new speed thresholds or other new definitions of "broadband" for purposes of eligibility. Instead, NTIA and RUS should rely on the definition of "broadband" already adopted by the FCC as the baseline, recognizing that proposals could benefit consumers by providing higher speeds. This flexible approach is consistent with Congress's intent, as the

Conference Report noted that the “Conferees are mindful that a specific speed threshold could have the unintended result of thwarting broadband deployment in certain areas.” *Id.* at 775. Given the varying needs and circumstances of particular communities – and the varying capabilities, limitations and costs of different technological approaches – a one-size-fits-all approach could result in an inefficient use of taxpayer dollars on gold-plated projects.

**B. NTIA and RUS Should Utilize State and Local Expertise, Including State-Level Broadband Maps, to Identify Unserved Areas.**

In order to put stimulus funds to their most efficient and effective use, NTIA and RUS should rely on high quality data identifying those areas that currently are unserved by broadband and should welcome State input on the relative priority of proposed projects to reach the unserved areas within their jurisdictions. As recognized by the Recovery Act, States have an important role to play in this regard. Many States or state-level public-private partnerships are engaged in broadband mapping, and the outcome of those projects is a good starting point for identifying unserved areas. And even in those States that have not yet been mapped, State and local officials are likely to have information that could help NTIA and RUS to target funds to unserved areas. States are also well-positioned to provide information about which projects within their territories will provide the most public benefit as they extend broadband service to unserved areas.

**Identifying Unserved Areas and Mapping Broadband.** The most important role for State and local officials is to identify areas that are unserved by broadband. While the Recovery Act devotes up to \$350 million for state-level broadband mapping initiatives, many States are already actively involved in mapping, either independently or in conjunction with public-private partnerships such as Connected Nation. For example, States including Kentucky, North Carolina, Ohio, Tennessee, and West Virginia have public-private partnerships up and running.<sup>13</sup> Other States, including California, Vermont, and Virginia, have state broadband task forces to assess the status of broadband deployment and adoption within their territories. *Id.* The output of these mapping projects and other state initiatives provide a good starting point for identifying the unserved areas.

Even where formal initiatives are not yet underway, State and local officials are likely to have information about the location of unserved areas, and NTIA and RUS should rely on their local expertise – backed up by other objective, quantifiable and verifiable data – in making funding determinations. NTIA and RUS could compare such information to the granular broadband data now being collected by the FCC on the Form 477 – which provides considerable information at the Census Tract level – to confirm that proposed projects are appropriately targeted at unserved areas. Subject to appropriate protections for competitively sensitive and other confidential information, the FCC should make such information readily available to NTIA and RUS for purposes of administering the Recovery Act’s broadband programs.

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<sup>13</sup> Alliance for Public Technology and the Communications Workers of America, “State Broadband Initiatives: A Summary of State Programs Designed to Stimulate Broadband Deployment and Adoption,” [http://www.apt.org/publications/reports-studies/state\\_broadband\\_initiatives.pdf](http://www.apt.org/publications/reports-studies/state_broadband_initiatives.pdf), at 3 (Nov. 2008).

Moreover, consistent with the Broadband Data Improvement Act and in order to improve the effectiveness of the Recovery Act's broadband programs, NTIA should encourage all States, that have not already done so, to work with state-level public-private partnerships to complete broadband mapping of their territories as quickly as possible. The mapping already being performed by public-private partnerships like Connected Nation provides the best template for such state-level initiatives. These maps – based on a “bottoms-up” approach that combines providers' information about the location of their broadband infrastructure with detailed, on-the-ground knowledge about local terrain, resources, and challenges – provide granular information sufficient to identify unserved areas and to provide additional information useful to numerous stakeholders.

NTIA also should take the lead role in setting the requirements for state-level mapping efforts and in rolling up the state maps into a single nationwide map. In specifying the information that should be reflected on state-level broadband maps, NTIA should closely follow the existing model being used by many public-private mapping initiatives. The model established by existing mapping initiatives has a track record of success and reflects experience concerning the types of information that are both reasonably available and useful. Consistent with the work being done by Connected Nation, maps should be required to reflect available broadband services throughout the state. This information should be reflected on a geographic information system map that should be searchable by address. The maps also should provide consumers with links to the web sites, or other contact information, for providers offering service in their area so that the consumers can readily contact those providers.

In light of competitive and security concerns, however, the public version of broadband maps should not reflect the competitively sensitive or confidential information of broadband providers, including the boundaries of service territories of particular providers, the exact location and details of network infrastructure, the particular technology being used to provision service at specific locations, the available speeds tiers (which could reveal technology), or pricing information.<sup>14</sup> As the courts have recognized, disclosure of granular broadband data of this type would likely cause competitive harm given the existing competition for broadband in most places. *See, e.g., Center for Public Integrity v. FCC*, 505 F. Supp. 2d 106 (D.D.C. 2007). Likewise, the FCC has acknowledged that providers could be harmed by release of the gathered data concerning broadband, as competitors could “take the data submitted and tailor market strategies to quash nascent competition, protect areas that are being subjected to increased competition, or deploy facilities to defend strongholds.”<sup>15</sup> For this reason, the FCC consistently has taken steps to protect such data. *Id.* Protecting competitively sensitive information will not undermine the usefulness of broadband maps to the public but is necessary to protect the competitive process and to promote speedy cooperation by broadband providers. To the extent that more detailed information is collected by the

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<sup>14</sup> While the Broadband Data Improvement Act requires that broadband maps reflect the speed tiers of available services, it did not require that such competitively sensitive information be disclosed publicly.

<sup>15</sup> *See Local Telephone Competition and Broadband Reporting*, Report and Order, 15 FCC Rcd 7717, ¶ 88 (2000).

state mapping entities, however, it could be made available to NTIA, RUS, the FCC or other policymakers subject to appropriate confidentiality protections.

**Prioritizing Projects.** State and local government also should have a voice in the relative priority of proposed projects within their jurisdictions, given their understanding of community needs and insight into the best ways to use broadband to stimulate regional economies. State and local governments could be instrumental in organizing public-private partnerships to address such concerns and to directly seek federal funding. Or they could play more of a consultative role by weighing in with NTIA and RUS on the relative merits of proposed projects in their territories or on the identification of qualified providers with sustainable business plans. In either case, and consistent with the principle of focusing on unserved areas, NTIA and RUS should carefully consider the views of State officials as they determine which projects to fund.

**C. The NTIA and RUS Broadband Programs Should Promote Transparency and Accountability.**

In order to further the public interest and ensure that stimulus funds are put to good and appropriate use, NTIA and RUS should ensure that transparency and accountability are built into every aspect of the Recovery Act's broadband programs. Doing so is necessary in order to ensure taxpayer money is being spent wisely and efficiently.

Among other things, NTIA and RUS should provide ready public access (subject to appropriate protections for proprietary or competitively sensitive information) to information about selection criteria, applications for funding, the status of such applications, decisions to fund projects, and the status and results of funded projects. In order to promote transparency and accountability, NTIA and RUS should also accept and consider relevant information provided by the public concerning both applications and funded projects.

In order to prevent waste or abuse, agency coordination will be particularly important in the case of applications directed to, or projects jointly funded by, NTIA and RUS. Any applicant applying for funds from both should disclose that fact to both agencies, and should also disclose whether completion of the project will be contingent on receiving funds from both programs. An entity seeking or receiving funding from both programs for the same project also should be required to provide detailed descriptions of the use of funding that ensure that the funds are being used for different purposes (*i.e.*, no double-dipping). The entity should show how the use of particular funds furthers the goals and purposes of the particular funding program.

After funds have been awarded, NTIA and RUS also should require periodic reports – subject to audit – that confirm that a grant or loan recipient is using funds in a manner that is in the public interest and consistent with its application. Any substantial deviations should be fully explained, and NTIA and RUS should consider, in appropriate cases, whether deobligation or some other action – such as seeking alternative entities to complete a project or amending the scope of the project or level of funding – is appropriate. Before taking any action against a grant or loan recipient, however, NTIA and RUS must afford the recipient due process, including the opportunity to defend its actions or respond to any concerns.

Appropriate steps to ensure transparency and accountability will show taxpayers how their money is being spent, and will help to ensure that the Recovery Act's broadband programs effectively promote their underlying purposes.

**IV. By Avoiding Ancillary Regulatory Disputes and Unnecessary Restrictions, NTIA and RUS Will Encourage Participation, Broadband Investment, and Job Creation.**

In order to encourage broad participation and to increase the chances of success for the Recovery Act's broadband initiatives, NTIA and RUS should not impose new regulatory requirements that are unnecessary to protect consumers. As the recent experience with the D block auction demonstrates, restrictive regulation discourages participation in government programs and may prevent programs from achieving their intended objectives. On the other hand, the history of the broadband marketplace shows that a lighter regulatory touch encourages investment and deployment of broadband, and maintaining that approach in the context of the NTIA and RUS programs will encourage qualified applicants to participate, with the result of more robust broadband deployment and more job creation and economic stimulus. Moreover, the existing regulatory framework has safeguarded consumer choice, without hampering broadband deployment. Therefore, consistent with the terms of the Recovery Act, any "nondiscrimination and network interconnection" terms that apply to recipients of NTIA grants should not expand upon the current FCC framework set out in the Broadband Policy Statement that applies to wireline providers and should not extend to wireless broadband services.

**A. A Lighter Regulatory Touch Encourages Broadband Investment.**

As an initial matter, as the administration's new regulatory czar has explained, "the use of rigid, highly bureaucratized 'command-and-control' regulation" is a "pervasive source of regulatory inefficiency."<sup>16</sup> Such regulation often ignores the "enormous differences among" regulated parties and pays "inadequate attention to the problem of incentives." *Id.* at 97-98. Therefore, "[f]or the most part, the policy instruments of choice should not involve rigid dictates or commands, which are expensive and potentially counterproductive, and in any case ill-suited to an era of rapidly changing technology."<sup>17</sup>

These observations have proven true in the case of the competitive and emerging broadband marketplace. Recently, Professor Thomas Hazlett performed a rigorous empirical analysis to examine the effects of various episodes of deregulation of DSL services on broadband investment and deployment.<sup>18</sup> As Professor Hazlett notes, the history of broadband regulation in the U.S. created a natural experiment, given that cable modem service has been largely deregulated from the beginning while the treatment of DSL service has shifted over time from intrusive regulation to a more deregulated regime. *Id.* at 460-65. This analysis showed that a decreasing regulation has resulted in more broadband deployment and adoption. While cable modem services "held a nearly

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<sup>16</sup> Richard H. Pildes & Cass R. Sunstein, "Reinventing the Regulatory State," 62 U. Chi. L. Rev. 1, 96 (1995).

<sup>17</sup> Cass R. Sunstein, "Television and the Public Interest," 88 Calif. L. Rev. 499, 563 (2000).

<sup>18</sup> Thomas W. Hazlett & Anil Caliskan, "Natural Experiments in U.S. Broadband Regulation," 7 Review of Network Economics 460 (Dec. 2008).

two-to-one market share advantage when DSL” was subject to intrusive regulations that were not applied to cable modem, ”[o]nce the FCC eliminated a key provision of the access regime, ending line sharing in a February 2003 ruling, DSL subscribership increased dramatically.” *Id.* at 477. Indeed, “[b]y year-end 2006, DSL subscribership was 65% higher – more than 9 million households – than it would have been under the linear trend established under” the previous, more intrusive regulatory framework. *Id.* And the growth in DSL adoption continued with a subsequent decision in August 2005 to classify wireline Internet access services as information services not subject to traditional Title II regulation. *Id.* As Professor Hazlett notes, “[t]his robust deployment response is inconsistent with the view that broadband regulation promotes innovation that spurs infrastructure investment or deployment . . . [and] presents a strong case for protecting such growth dynamics in public policy.” *Id.*

While this study focused largely on the effects of regulation on DSL deployment and adoption, the results of decisions to forego intensive regulation of next-generation fiber networks is perhaps even more dramatic. At the time that the Commission substantially removed unbundling obligations on next-generation fiber networks back in 2003, fewer than 200,000 homes nationwide were passed by fiber. The response to that policy determination was dramatic. In reliance on that decision, Verizon and other broadband providers promptly responded with increased investment in next-generation, fiber networks. As of the end of 2008, Verizon alone had passed 12.7 million homes with its all-fiber network, and Verizon will have spent over \$23 billion to pass 18 million homes with this network by the end of 2010.

As a result of policies aimed at encouraging broadband investment and deployment, the broadband marketplace in this country demonstrates intense competition across a number of dimensions. Dr. Everett Ehrlich, the Under Secretary of Commerce for Economic Affairs under President Clinton, recently documented the competitive and dynamic nature of the broadband marketplace, which has demonstrated increases in quality, output, and available platforms, at the same time as decreases in price.<sup>19</sup> Dr. Ehrlich summarized the broadband marketplace as follows:

Cable and telco broadband providers produce a rapidly-changing product with high fixed costs and with new competitors poised to enter the market. They have produced a steady stream of innovation themselves, while their networks have enabled boundless amounts of innovation, from applications to services to hardware. They are expanding connectivity and effectively reducing prices.<sup>20</sup>

Likewise, NTIA, the FCC, courts, and state regulators also have all recognized that the market for present and future broadband subscribers is vigorously competitive, and that the removal of unnecessary regulation has contributed to additional deployment and investment of broadband.<sup>21</sup> In a report released last year, NTIA observed the benefits

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<sup>19</sup> Everett Ehrlich, “The Reality of Competition in the Broadband Marketplace,” at 2-6 (Nov. 2008).

<sup>20</sup> *Id.* at 11.

<sup>21</sup> See *EarthLink Inc. v. FCC*, 462 F.3d 1, 11 (D.C. Cir. 2006) (upholding as “reasonable” the Commission’s determination that “[t]he broadband market is still an emerging and changing market, where, as the [Commission] previously has concluded, the preconditions for monopoly are not present. In

of “pro-investment, deregulatory policies,” including “substantial growth in the broadband marketplace punctuated by increases in capital investment, innovation, and market entry” that have led to an “increasing array of broadband services, available from a growing number of service providers, using a variety of technologies.”<sup>22</sup>

Under these circumstances – and particularly in the context of programs seeking to entice investment in areas that have proven hard-to-reach or to serve – imposing new regulatory burdens would be counterproductive. Regulatory restrictions on business practices are warranted only in clear cases of demonstrated market failure, and, even then, only when the benefits of government intervention outweigh the costs.<sup>23</sup> When those conditions are absent, directing markets is a job best left to competitive forces in order to maximize long term consumer welfare. In nascent industries that are undergoing rapid technological change – like today’s broadband marketplace – it is particularly difficult for even the most capable regulator to keep up with the market’s evolution.<sup>24</sup>

### **B. The Existing Framework Protects Consumer Choice.**

In order to encourage broad participation in the broadband stimulus programs and prevent these programs from becoming bogged down in ancillary policy debates, any NTIA grant conditions should go no further than is required by the statute and is necessary to protect consumers. In the context of wireline broadband services, that means requiring compliance with the FCC’s Broadband Policy Statement and the additional requirement that grant recipients accept and terminate VoIP traffic. In the context of wireless services – with its different technical and competitive circumstances – no additional requirements are appropriate.

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particular, actual and potential intermodal competition informs rational competitors’ decisions concerning next-generation broadband technologies.”) (internal quotation marks omitted); *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 582 (D.C. Cir. 2004) (“agree[ing]” with Commission’s determination that “intermodal competition in broadband, particularly from cable companies,” ensures “vigorous competition” in the broadband market); see also N.Y. Dep’t of Pub. Serv. Staff, *Telecommunications in New York: Competition and Consumer Protection*, Case 05-C-0616, App. E (Sept. 21, 2005), [http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/Web/C76443168615205885257083006ADF64/\\$File/05c0616.coverltr.09.21.05.pdf](http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/Web/C76443168615205885257083006ADF64/$File/05c0616.coverltr.09.21.05.pdf) (“As noted above, 93% of Verizon NY’s customers have two alternative platforms available to them.”).

<sup>22</sup> NTIA, “Networked Nation: Broadband in America 2007,”

<http://www.ntia.doc.gov/reports/2008/NetworkedNationBroadbandinAmerica2007.pdf>, at i-ii (Jan. 2008).

<sup>23</sup> See, e.g., Cable Services Bureau, *Broadband Today: A Staff Report to William E. Kennard, Chairman, Federal Communications Commission, on Industry Monitoring Sessions Convened by Cable Services Bureau*, <http://www.fcc.gov/Bureaus/Cable/Reports/broadbandtoday.pdf> at 41 (Oct. 1999) (“The Commission’s public interest mandate requires it to forbear from regulation and allow market forces to flourish, but to intervene in the event of market failure.”); Jerry Hausman, *Internet-Related Services: The Results of Asymmetric Regulation*, in *Broadband: Should We Regulate High-Speed Internet Access?* 139 (Robert Crandall & James Alleman, eds., Dec. 2002) (“Regulation should be used only in the situation of market failure”).

<sup>24</sup> See Christopher S. Yoo, *Beyond Network Neutrality*, 19 Harv. J.L. & Tech. at 67 (“*Beyond Network Neutrality*”) (“[S]cholars from across the political spectrum have warned of the dangers of regulatory lag in industries that are technologically dynamic”); Stephen Breyer, *Regulation and Its Reform* 286-87 (1982) (“[B]ecause regulation, once in place, is hard to dismantle, one would like to know whether future technological change is likely to transform an industry that is now a natural monopoly, making it structurally suited to competition.”); Alfred E. Kahn, *The Economics of Regulation* 127 (1971) (“In the presence of such rapid change, the natural monopoly of yesterday may be transformed into a natural arena of competition today; and vice versa.”).

**Statutory Requirement.** As an initial matter, the Recovery Act provides NTIA with discretion to craft appropriate grant conditions and does not require that any particular requirements apply to all grant recipients. To be sure, the statute does require NTIA to “publish the non-discrimination and network interconnection obligations that shall be contractual conditions of grants,” including “at a minimum, adherence to the principles included in the Commission’s broadband policy statement.” *Id.* § 6001(j). But that provision does not say that these particular requirements must apply to *all* grant recipients nor did it say they would apply to *all* types of service. Indeed, nondiscrimination and network interconnection conditions may make no sense in the context of many proposed projects, such as demand-side projects to increase computer literacy or provide computers to schools or libraries. And while the statutory language clearly suggests that the FCC’s Broadband Policy Statement framework should apply in the context of wireline broadband services – the context for which that framework was created – it does not require an extension of the wireline principles to other types of broadband services for which the principles were not designed and to which they have never been applied. Therefore, rather than taking a one-size-fits-all approach, NTIA may settle on nondiscrimination and interconnection obligations appropriate to the projects or services at issue.

**Wireline Broadband Services.** As the statute suggests, in the context of wireline broadband services, the FCC’s Broadband Policy Statement has proven sufficient to protect consumers’ interests and should be the primary obligation for grant recipients. The FCC’s principles address consumers’ ability to access the content, application, and services, and to connect devices of their choice when using their wireline Internet services, and provide the key guidelines that protect consumer choice. Moreover, wireline broadband providers have every incentive to conduct their business in accordance with those principles in order to satisfy customer expectations for wireline broadband services and compete effectively in today’s competitive broadband marketplace. Providers also have a strong incentive to attract traffic to their networks in order to recover the costs of network investment. For these reasons, broadband investment and adoption has flourished under these principles, and no demonstrated, recurring problems exist that warrant new regulation. The existing principles will ensure that wireline broadband providers maintain open networks and provide access to all of the benefits the Internet has to offer. And given the potential for new requirements to discourage participation in the NTIA grant program and broadband deployment more generally, NTIA should not wade into controversial policy disputes by creating new obligations in this context.

The only additional condition that would be appropriate in the context of stimulus funds would be to make explicit that carriers receiving stimulus funds to build their local networks agree to exchange VoIP and other IP traffic (including the termination and delivery of this traffic to their end users) over their local networks funded by grants. This additional requirement would respond to the only concrete recurring issue to arise related to some providers’ handling of Internet traffic. In one documented episode, a rural telecom provider named Madison River briefly blocked ports in order to prevent customers from sending or receiving certain VoIP traffic before the FCC swiftly stepped

in and put a stop to that practice.<sup>25</sup> Since that time, other rural carriers have occasionally asserted that they had no obligation to accept or terminate VoIP traffic.<sup>26</sup> These assertions have been addressed, and rejected, by both the FCC and States in a number of cases since the Madison River episode. In order to ensure that similar episodes do not recur, it would be appropriate for NTIA to specify that grant recipients may not refuse to deliver and terminate traffic over their local networks funded by taxpayer dollars on the grounds that the traffic originated as VoIP or other IP traffic. This will ensure that consumers in rural areas are able to receive those services as do consumers in other areas.

**Wireless Broadband Services.** In the context of wireless broadband services, even the principles included in the FCC's Broadband Policy Statement are unnecessary, and NTIA should not extend the FCC's Broadband Policy Statement to wireless broadband services. The FCC's broadband principles were expressly designed for wireline broadband providers. They were not designed for, and have never been applied to, wireless broadband providers, nor should they be applied to wireless providers in the context of the stimulus grants.

On the contrary, good reasons exist not to apply those principles to wireless providers because wireless networks present unique technical challenges and concerns that distinguish them from wireline broadband networks. Applying the wireline principles to wireless broadband would ignore the fundamental differences between wireless and wireline networks, such as the necessity that the operation of wireless handsets be closely coordinated with operation of the wireless network.

As an initial matter, the spectrum over which wireless broadband services are provided is finite and shared, and there are generally a limited number of radio channels that may be simultaneously used at a single cell site. In other words, because wireless communications occur through the transmission of RF energy over shared radio spectrum, wireless broadband technology requires users of a wireless network to share available bandwidth with other users in their vicinity. Limited, shared bandwidth results in users' individual actions affecting the quality of service for all other users of the bandwidth on the same common channel.

Because wireless devices operate in this environment, every device and every cell site operating on the network has a significant impact on the aggregate resources available to all consumers attempting to access a given carrier's resources in a given geographic area. Should any component of the network environment – *e.g.*, an incompatible device – fail to operate as planned, the impact is not only on this component, but also on the network and its ability to serve other subscribers. For such reasons, wireless broadband services generally have a heightened need for network management in order to ensure a high-quality service for other users sharing the same

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<sup>25</sup> *Madison River Communications, LLC and affiliated companies*, Order, 20 FCC Rcd 4295 (2005); *see also FCC Chairman Michael K. Powell Commends Swift Action to Protect Internet Voice Services*, News Release (Mar. 3, 2005).

<sup>26</sup> *See Time Warner Cable Request for Declaratory Ruling that Competitive Local Exchange Carriers May Obtain Interconnection Under Section 251 of the Communications Act of 1934, as Amended, to Provide Wholesale Telecommunications Services to VoIP Providers*, Memorandum Opinion and Order, 22 FCC Rcd 3513 (2007).

spectrum (or even to ensure that broadband service is available to other users at all) and in order to meet statutory and other public interest obligations.

Moreover, the wireline principles also envision an environment in which the network and the computers that attach to it are essentially independent. But, Congress and the FCC developed different regulatory regimes for wireline and wireless networks in part because of the technical differences between the two services, and those differences remain.

A wireless device operates as an integral part of the provider's network, unlike the wireline world in which the carrier's network and end-user equipment generally are more easily distinguished. A wireless device is considered a "mobile station" that, together with cell sites, constitutes the wireless network.<sup>27</sup> Indeed, a network's effective coverage area can only be defined in relation to the design and power levels of both the fixed antennae that serve as "base stations" and the portable transceivers contained in each subscriber's wireless device that serves as the "mobile station." Similarly, a wireless voice or data session involves continuous communication between base stations and mobile devices that is separate and apart from the content of the communication.

These technical differences carry through to the regulatory framework for wireless service, which is built on the basic concept that wireless licensees are responsible for equipment and operations that use radio spectrum. In order to comply with a variety of FCC rules – including both technical rules and public interest obligations, such as E911 requirements – wireless carriers generally must be able to ensure that all aspects of their network, including the devices attached to the network, are coordinated and compliant with relevant regulatory obligations.<sup>28</sup>

The FCC also has lightly regulated the wireless market because it has long been competitive – and the same is true in the case of emergent wireless broadband services. The wireless marketplace has long exhibited intense competition, including multiple national competitors and many regional competitors. As the FCC has recognized, these providers are now aggressively rolling out wireless broadband services in competition with each other and selling wireless devices capable of broadband access.<sup>29</sup>

Also, even in the absence of government mandates, momentum in the wireless industry is clearly in the direction of openness as a result of customer demand. For example, Verizon Wireless' Open Development Initiative (ODI), initiated in November 2007, is paving the way for third-party devices and services to access Verizon's wireless networks. For ODI, Verizon Wireless announced that it would provide customers the

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<sup>27</sup> See, e.g., 47 U.S.C. § 153(27)-(28); 47 C.F.R. § 22.923.

<sup>28</sup> Indeed, the FCC's rules are clear that CMRS providers are accountable for devices on their networks. Section 22.3 of the FCC's rules states that "[a]uthority for subscribers to operate mobile or fixed stations in the Public Mobile Services ... is included in the authorization held by the licensee providing service to them." 47 C.F.R. § 22.3(b). Section 22.305 in turn states that "[s]tation licensees are responsible for the proper operation and maintenance of their stations, and for compliance with FCC rules." 47 C.F.R. § 22.305. Similarly, Section 22.927 of the Commission's rules notes that "[c]ellular system licensees are responsible for exercising effective operational control over mobile stations receiving service through their cellular systems."

<sup>29</sup> *Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Thirteenth Report, WT Docket No. 08-27, DA 09-54, at 9 (Jan. 16, 2009).

option to use any device that meets the company's published technical standards and to use any application the customer chooses on such devices. Verizon Wireless subsequently published standards for its ODI, held a developer's conference, established a certification procedure for third-party devices, and began certifying third-party devices for use on its network.

Through ODI, device manufacturers and applications developers can create and market wireless products on their own using the Verizon Wireless network. This initiative gives consumers an opportunity to use third-party devices, onto which they can load the applications of their choice. This consumer-driven initiative "has spurred a flurry of research and development, from handsets to software and applications"<sup>30</sup> While Verizon Wireless' goal had been to certify one device through ODI by the end of 2008, in fact it ended the year with 36 certified devices. As Verizon's CEO recently noted, "the market is pressing the wireless industry towards openness and compatibility," and the "new business model [that] is emerging" will lead to "growth and innovation" that will be "hugely beneficial to the U.S. economy."<sup>31</sup> And Verizon Wireless is embracing this model, as evidenced by its recent announcements concerning its participation in the Joint Innovation Lab and creation of the LTE Innovation Center, as discussed above.<sup>32</sup>

Notwithstanding the momentum towards openness, the wireless marketplace also shows that many consumers may prefer a more highly-managed network environment for their wireless devices, such as the one generally available using popular Blackberry devices. Wireless providers should be permitted to continue to respond to those consumer choices as well.

#### **Applying Old Telecom Regulation Would Undermine the Recovery Act.**

Contrary to the suggestions of some parties, NTIA should not subject wireline or wireless grant recipients to the ill-fitting restrictions of common carriage or other Title II regulation, such as interconnection requirements under Section 251(c). It would be antithetical to the purposes of the Recovery Act to bog down new broadband projects with the regulatory uncertainty, delay and costs that would come with that approach. As the history following the Telecommunications Act of 1996 clearly showed, requiring such things as regulatory arbitrations concerning the terms of interconnection would be an invitation to litigation and inefficiency – not quick jobs, economic stimulus, or increased broadband deployment. In order to comply with such regulatory requirements, providers would also have to incur massive added costs and inefficiencies in the way they structure their networks and configure their systems, thus adding complexity and costs for providers in those areas that are already most difficult to serve. Indeed, the cost of the wholesale systems and processes for narrowband services that were required in the wake of the 1996 Act ran into the multiple billions of dollars, and extending those requirements to broadband services would require massive additional expenditures. In any event, as the FCC previously concluded, common carriage and other Title II restrictions are out of place in the fast-evolving Internet space and would get in the way of the innovation and investment that is benefitting consumers.

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<sup>30</sup> "2009 Leadership Awards: Lewis Opens Up About Open Networks," *Wireless Week* (April 1, 2009).

<sup>31</sup> "Verizon's Seidenberg: Wireless Industry Innovation Can Help Put Economy Back on Path to Growth and Prosperity," (April 1, 2009).

<sup>32</sup> See *supra* at 3.

**Any New Broadband Policies Should Be Addressed In A More Considered Fashion.** Issues surrounding broadband regulation are complicated, and any new broadband policies are likely to have significant consequences for broadband deployment and investment. Such issues should be addressed in a more considered and less-hurried manner – not in the rushed context of stimulus programs necessarily subject to tight time constraints.

The appropriate level of broadband regulation is a broad issue of more general interest, and should not be determined in the context of a grant program that only applies to a limited number of providers and in a limited number of areas. Allowing such issues to be addressed on an industry-wide basis would allow full consideration of the costs and benefits of new regulation so that policymakers could make informed decisions and minimize the chances of unanticipated and harmful consequences from rushed and ill-considered new requirements on broadband services and the Internet.

## **V. Conclusion**

Everyone shares the goal of ubiquitous broadband availability – and widespread adoption – throughout the United States. The Recovery Act’s broadband programs provide an unprecedented opportunity to address obstacles to that goal. NTIA and RUS should focus the substantial, but limited, resources allocated to these programs to address the most pressing needs – extending broadband to unserved areas and addressing demand-side factors that limit broadband adoption. NTIA and RUS will maximize the impact of these programs – and do the most to spread broadband, create jobs, and stimulate the economy – by taking a flexible and inclusive, yet transparent, approach that encourages participation and meritorious proposals, while leaving debates about ancillary policy disputes to be addressed in a more considered fashion than is possible under the time constraints here.