

Putting the Angels in the Details

A ROADMAP FOR
BROADBAND
STIMULUS SUCCESS

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EXECUTIVE SUMMARY

The overarching goal of the American Recovery and Reinvestment Act (or “Stimulus Act”) signed into law by President Barack Obama on February 17, 2009, is to stimulate the economy and create jobs primarily through the temporary federal funding of various projects and programs, including infrastructure deployment. The president and Congress clearly recognize that funding broadband deployment and adoption will create substantial short- and long-term economic growth.

Now that the ink is drying on the Stimulus Act, the difficult work of implementing the unprecedented \$7.2 billion broadband investment begins. Three federal agencies and the states now must use the 17-page scaffold created by Congress to issue detailed rules, protocols and procedures. They will make value judgments about what projects deserve funding. The clock is ticking, and while it is imperative that these agencies act expeditiously, they must also ensure that their implementation efforts are completely consistent with the legislation’s objectives and that the public’s interest is always put first.

This policy brief summarizes the new law and offers specific recommendations for federal agencies on how to ensure the short- and long-term success of this investment.

Recommendations for the National Telecommunications and Information Administration

The Stimulus Act allocates \$4.7 billion to the National Telecommunications and Information Administration (NTIA), most of it for the establishment of the Broadband Technology Opportunities Program (BTOP). This program provides grants for broadband deployment in areas that are currently “unserved” and “underserved” and encourages sustainable broadband adoption in low-income communities. To help the agency achieve these goals, we offer the following recommendations:

- The Stimulus Act does not mandate specific speed requirements, but directs the NTIA to promote projects that will “provide the greatest broadband speed possible.” To ensure this outcome, the NTIA should:
 - » Establish speed guidelines for broadband deployment grants — modeled after those included in the original House stimulus legislation — to provide benchmarks to help the agency prioritize grant applications.
 - » Require grant applicants to state the minimum and average speeds their networks will be able to deliver to end-users under a variety of real-world situations.
 - » Require grant applicants to describe the contention ratios of their proposed networks, any network management techniques they intend to use, and how these techniques may impact the end-user experience.
- The central purpose of the BTOP grants is to fund deployment of broadband to unserved and underserved areas. To enable the NTIA and states to better prioritize grant applications and ensure fair allocation among states, the NTIA should:
 - » Work with the Federal Communications Commission to adopt definitions of “unserved” and “underserved” areas that are based on U.S. Census Bureau geographic boundaries

- (either census blocks, block groups or tracts), and are informed by new commission data.
- » Establish a three-tier definition for “unserved area” that includes “completely unserved areas,” “severely unserved areas,” and “moderately unserved areas.”
 - » Define “underserved area” as one where service is widely available, but no provider offers service capable of delivering downstream data at transmission speeds exceeding 3Mbps.
 - » Define “underserved persons” as those living in the underserved areas as defined above, or those living in low-income areas as defined by several pre-existing federal programs.
- The Stimulus Act requires grant applicants to show the NTIA that their proposed project would not have been implemented during the grant period without federal assistance — a crucial provision for ensuring efficient use of broadband stimulus funds. We suggest that the NTIA require applicants to:
 - » Provide an exhaustive list of documentation, including public statements, private correspondence and detailed capital expenditure plans that may not have been previously publicly disclosed. The NTIA should protect the confidentiality of such information where appropriate.
 - » Submit a signed affidavit attesting to the fact that the project meets the “new” standard and (if appropriate) certify that the area covered by the project is indeed an underserved or unserved area.
 - The Stimulus Act requires a 20 percent match for NTIA grant recipients, unless the Assistant Secretary of Commerce grants a waiver for demonstrating “financial need.” The NTIA should require applicants to file a business plan that includes estimates of ongoing operating costs and revenue, including the cost of capital for the grant’s matching funds. The NTIA should not grant a financial-need waiver if an applicant’s projection indicates reasonable profitability, even with the capital costs for matching funds.
 - The NTIA should require all grant applicants to disclose how they expect the grant funds and the resulting taxpayer-funded network will impact their future need for support from the Universal Service Fund. The NTIA should prioritize applications for projects that will reduce the future burden on the USF.
 - The Stimulus Act bars an applicant from receiving funds from both the U.S. Department of Agriculture’s Rural Utilities Service and the NTIA programs. While this prohibition of “double-dipping” is sensible, it is not clear how this prohibition will be enforced in practice, and potential applicants have no guidance as to which program to apply for, or if they are allowed to apply to both. NTIA, in coordination with RUS, should issue guidelines providing clarity on the application process for those providers who intend to deploy services to rural unserved areas.
 - The Stimulus Act appropriates \$350 million to the NTIA to implement the Broadband Data Improvement Act. While the stimulus legislation was still working through Congress, the FCC made substantial improvements to its broadband data collection program, and further changes are expected this year. These changes call into question the need for such a large sum of funds for mapping efforts. We suggest the NTIA instead focus these grants on projects that work to stimulate broadband demand, with requirements for achievement of benchmarks and focused program evaluation studies.

- The Stimulus Act requires the NTIA to create and maintain a fully searchable online database that includes information about broadband grant applicants and grant awards. The law also requires the RUS and RUS grant or loan recipients to file various reports and documents, but does not include the public-reporting requirement. To facilitate more accurate and meaningful public oversight and accountability of these programs, the NTIA and RUS should create a single Web-accessible database that hosts all information relevant to the broadband projects funded by the Stimulus Act.

Recommendations for the Rural Utilities Service

The Stimulus Act appropriates \$2.5 billion to the U.S. Department of Agriculture’s Rural Utilities Service broadband loan and grant programs. Specifically, the RUS is directed to fund projects where at least 75 percent of the area to be served is a rural area “without sufficient access to high-speed broadband service to facilitate rural economic development.” To ensure that these funds are managed with efficiency and accountability, the RUS must make the following changes to its current policies:

- Existing RUS regulations for the broadband grant program specifically forbid grantees from offering telephone services over their grant-funded broadband facilities if a customer is already receiving such service from a local telephone company. This restriction undermines the ability of new entrants to operate profitably by offering “triple play” services of phone, Internet and television. If an existing local telephone company refuses to deploy broadband, this regulation creates a barrier to entry for any other broadband provider. The RUS should eliminate this restriction.
- Program grantees are also prohibited under existing RUS regulations from using grant monies for deploying their own broadband transport facilities. This restriction greatly reduces the ability of a non-telco incumbent (such as a wireless provider or a cable company) to use grant funds to upgrade their existing facilities to offer broadband services. The RUS should eliminate this restriction.
- The Food, Conservation and Energy Act of 2008 (“the Farm Bill”) eliminated a previous restriction that limited participation in the loan program to companies that serve less than 2 percent of the nation’s telephone customers. The new law, however, does limit the amount of funds that can be awarded to the larger companies to less than \$3.75 million per year. It is unclear if this restriction will still apply to the larger companies given the \$2.5 billion in additional appropriations made to the RUS by the Stimulus Act. The RUS should clarify the eligibility of larger providers.

Recommendations for the Federal Communications Commission

The FCC is the federal agency with the most experience in communications policy. While the FCC is not in charge of administering stimulus funds, the agency will play a central role in implementing the new law. The FCC is responsible for partnering with the NTIA to set key definitions for grant eligibility, public service conditions and the larger framework of telecommunications planning and policy into which this grant program fits. To ensure a successful partnership, we recommend the following:

- Under the Stimulus Act, the FCC is required to complete a national broadband strategy by February 2010. If rooted in empirical facts and rigorous policy analysis, this document could be the most important contribution to telecom policy since the 1996 Telecommunications Act.

Several outstanding items before the commission would provide invaluable data for this national broadband strategy. The FCC must immediately issue public notices to seek input on:

- » Implementing the Farm Bill's directive to craft a rural broadband strategy. This report is due to be delivered to Congress this June, but the commission has yet to seek public input on this issue.
 - » Conducting the international comparison of broadband markets that is required by the Broadband Data Improvement Act.
 - » Creating and administering the consumer survey of broadband service capability as required by the Broadband Data Improvement Act.
- The FCC, in coordination with the NTIA, should model the contractual conditions for interconnection after the "just, reasonable and nondiscriminatory language of the Communications Act. In addition, the two agencies should define the nondiscrimination contractual conditions as follows:
 - » Grant recipients must not provide or sell to Internet content, application, or service providers, any service that privileges, degrades, prioritizes, or discriminates against any lawful content transmitted over the grant recipient's Internet access service.
 - » Grant recipients must offer bandwidth for Internet service upon reasonable request, on rates, terms and conditions that are just, reasonable and nondiscriminatory. The nondiscrimination condition should not be construed to prohibit a grant recipient from engaging in reasonable network management consistent with the principle of nondiscrimination.
 - To help applicants and the states determine which areas are likely to qualify under the unserved and underserved definitions, the FCC, in cooperation with the NTIA, should use Form 477 broadband data (reported as of March 16, 2009) to produce and publish lists of Census tracts that are likely to be unserved or underserved areas.
 - The FCC should treat the massive investment in rural broadband as an opportunity to modernize the Universal Service Fund, moving away from a system of ongoing support to a system of infrastructure deployment support. The FCC should initiate a Notice of Inquiry to examine how best to monitor and incorporate the new stimulus spending in the commission's USF policies.
 - The FCC should use the stimulus as an opportunity to implement a pilot program to bring broadband to low-income households. The commission, along with the Universal Service Administration Corporation, should request a grant of \$300 million from the NTIA that would be used to provide subsidized monthly broadband service and Internet-access devices to participating households earning less than \$25,000 annually.

SUMMARY OF THE BROADBAND PROVISIONS IN THE AMERICAN RECOVERY AND REINVESTMENT ACT

AGENCY	National Telecommunications and Information Administration (NTIA)				U.S. Department of Agriculture (USDA)
PROGRAM	BTOP General Division B Grants	BTOP Specified Division B Grants for Public Computer Center Capacity	BTOP Specified Division B Grants for Sustainable Broadband Adoption	Broadband Data Improvement Act (P.L. 110-385)	Rural Utilities Service Broadband Loans, Loan Guarantees and Grants
APPROPRIATION	\$4.35 billion	\$200 million (minimum; additional grants could come out of General Division B funds)	\$250 million (minimum; additional grants could come out of General Division B funds)	\$350 million	\$2.5 billion
PURPOSE	Broadband infrastructure deployment in unserved and underserved areas; equipment and training targeted at schools, libraries, healthcare providers and community centers; funding for greater use of BB by low-income and aged populations; grants to improve BB use and access at public safety agencies; general broadband demand stimulation			Establish state broadband data and development programs that will map and perform demand stimulation	Deployment of broadband infrastructure in rural areas
GEOGRAPHIC TARGET	Focus on unserved and underserved Areas (not defined); no specification for rural versus urban	Any	Any	State-level (maps entire states, with particular emphasis on under- and unserved areas); demand stimulus is carried out by single agency per state	Rural areas, with each project required to serve an area where 75% of the area is "without sufficient access" to broadband
ELIGIBILITY	Any state or political subdivision thereof (including DC, territories and possessions, and Indian tribes); nonprofits; current broadband service or infrastructure providers. Grant application requires "showing that the project would not have been implemented during the grant period without Federal grant assistance." Federal share of project may not exceed 80% without a waiver			Agency or instrumentality of a State; 501(c)(3)'s	Constrained by current RUS requirements; legislation gives priority to current or former borrowers from RUS
PRIORITY FOR AWARDS	1 grant minimum per state; project increases affordability and subscribership; project will provide "greatest broadband speed possible to the greatest population of users;" project will not "result in unjust enrichment" from other Federal support, such as USF; consideration given to socially and economically disadvantaged businesses			None; though grant applications are subject to peer review and require a 20% match	Projects delivering users a choice of > 1 provider; projects that serve the highest proportion of users that have NO providers (yes, this is contradictory)
TIMELINE	All funds must be awarded by Sept 30, 2010; All projects completed within two years of award			No timeline	Completely open-ended; no requirements to expend funds by any date. No requirements for project completion
OVERSIGHT/ ACCOUNTABILITY	Non-discrimination and openness consumer protections are condition of grant contract; grantees are to issue quarterly reports; NTIA will create a publicly searchable database for public monitoring of BTOP			Grantees must submit one report to Commerce Dept. on use of funds	Quarterly reports made by SecAg on fund use to House and Senate Approps; no new reporting requirements on fund recipients; no specific openness or non-discrimination protections
FCC ROLE	Broad authority to consult with NTIA in establishing the BTOP program; will likely need to provide Form 477 broadband data to states to assist in prioritizing areas for service, and to NTIA for the creation of the national broadband inventory map; works with NTIA to publish contractual non-discrimination and openness conditions; tasked with writing a National Broadband Plan within one year			Delivery of Form 477 data to grantees; annual consumer survey; international comparisons; census-based inventory of BB availability	None; might be asked by SecAg to help identify unserved rural areas
STATE ROLE	Will work with NTIA to identify areas to target grants, and informally to help prioritize grant applications; states can themselves be grantees			Can get grants themselves or can designate a single eligible entity to receive grant	None; might be asked by SecAg to help identify unserved rural areas

WHAT DOES THE NEW LAW DO?

The American Recovery and Reinvestment Act (the Stimulus Act) appropriates a total of \$7.2 billion for various programs related to broadband deployment and adoption.¹ Specifically, the Act appropriates \$2.5 billion to the U.S. Department of Agriculture's Rural Utilities Services broadband loan and grant programs and \$4.7 billion to the National Telecommunications and Information Administration for the establishment of the Broadband Technology Opportunities Program (BTOP). From the \$4.7 billion allocated to the NTIA, \$350 million is to be used to implement Public Law 110-385, the Broadband Data Improvement Act.² The NTIA is also directed to allocate at least \$200 million of the remaining \$4.35 billion to expand computer center capacity in various institutions of higher learning and other community centers, and to make a minimum of \$250 million in grants aimed at encouraging sustainable adoption of broadband services.

WHAT IS THE PURPOSE OF THESE PROGRAMS?

The overarching goal of the Stimulus Act is to jumpstart the economy and create jobs primarily through the temporary federal funding of various projects and programs, including infrastructure deployment. The president and Congress clearly recognize that funding broadband deployment and adoption will create substantial short- and long-term economic growth, by creating the new jobs needed to implement new construction and training programs, and through the multiplier and network effects that will result from the availability of the new IT-based economic infrastructure.

The Broadband Technology Opportunities Program

The core purpose of the NTIA's BTOP program is to provide grants for the deployment of broadband services and infrastructure in currently unserved and underserved areas (it should be noted that the Stimulus Act explicitly avoids defining the terms "broadband," "unserved" and "underserved"). However, deployment is not the only focus of BTOP. The Act also envisions grants to organizations "to facilitate greater use of broadband service by low-income, unemployed, aged, and otherwise vulnerable populations." This is a very broad category that could include programs that provide computer training at community centers in low-income neighborhoods, or projects that provide low-cost wireless Internet service in Section 8 housing developments.

The Stimulus Act also appropriates \$350 million for the NTIA to implement the Broadband Data Improvement Act, legislation enacted by Congress in 2008. The bulk of this funding will be awarded by the NTIA to states or state-designated entities (including non-profits) for the purpose of inventorying and mapping broadband deployment, and administering programs that will aggregate and stimulate demand for broadband service. Funds will also be available to the Small Business Administration to conduct a survey of business use of broadband. The Broadband Data Improvement Act grew out of frustration with the FCC's data collection efforts, and the perceived (yet unproven) success of state-based programs like that of ConnectKentucky.³ However, the FCC has since made substantial improvements to their broadband data collection program, and further changes are expected this year.⁴ These changes call into question the need for such a large sum of funds for mapping efforts. We suggest that the NTIA instead focus these grants on projects that work to stimulate broadband demand, with requirements for achievement benchmarks and proper program evaluation studies. The latter will help inform how best to allocate future grants to programs that produce tangible positive results.

The Rural Utilities Service Broadband Loan and Grant Programs

The Stimulus Act also appropriates \$2.5 billion to the USDA's RUS broadband loan and grant programs. The RUS was established to fund the deployment of utility services to farms, but has since been expanded to include support for construction of broadband services in rural areas.⁵ The program has an annual appropriation of nearly \$20 million, with approximately \$13 million dedicated to the Community Connect Grant program, and \$7 million directed to subsidizing low-interest loans and loan guarantees for broadband buildout. Both the RUS grant and loan programs are intended to target deployment projects to rural areas that lack broadband service. However, to date, nearly 45 percent of the RUS funds have been used to support projects deploying broadband service to areas that are already served by two or more providers.⁶ Accusations of waste, fraud and abuse have plagued the program, and the RUS itself has been criticized for moving too slowly.⁷ This critique is rooted in the fact that the program has never allocated the entirety of its annual appropriation.

Given these problems and the current need to expedite the allocation of the stimulus funds in a responsible manner, it is somewhat perplexing that the USDA was chosen to administer any of the broadband funds. However, while the Senate's version of the legislation⁸ appropriated no broadband monies to the USDA, the House gave the agency control over half of the funds.⁹ In the end, the conference committee split the difference, with the RUS getting control of about one-third of the total dollars for broadband stimulus. Defenders of the RUS state that the Farm Act of 2008 addressed the program's problems, and that they are prepared to responsibly oversee the distribution of stimulus funds.¹⁰

WHICH AREAS OF THE COUNTRY ARE TARGETED?

The Broadband Technology Opportunities Program

The NTIA's BTOP program has no specific geographic requirements, though a central purpose of the BTOP grants is to fund deployment of broadband to "unserved" and "underserved" areas. While these terms are not defined in the Stimulus Act, they are included in the original Senate legislation. In Section 48 of S.AMDT.98, "unserved area" is defined as a Census Tract "in which no current generation broadband services are provided," with current generation services defined as 5Mbps downstream/1Mbps upstream on wireline infrastructure, and 3Mbps downstream /0.768Mbps upstream on wireless infrastructure.

This same section of the Senate legislation defines "underserved area" not according to the level of broadband service in a given area, but the income status of a given Census Tract, such as empowerment zones, enterprise communities, renewal communities, or Section 45D low-income communities. Using the income of an area as the basis for an "underserved" definition is common in markets such as health care, but is perhaps less fitting for infrastructure-based services like broadband. In telecommunications policy circles, "underserved" usually refers to the quality of service deployed. For example, an area might be served by just a single broadband provider offering 512kbps service. This level of service is far below what is commonly available in most areas of the country, and such an area would thus be considered "underserved."

Because the final Stimulus Act did not define the terms "unserved" and "underserved," the NTIA and FCC have wide latitude in interpreting the language of the Act. We suggest that for the purposes of the BTOP program, these terms be defined as follows: "Unserved area" should be defined in three

stages. “Completely unserved areas” are those Census Blocks (CBs), Census Block Groups (CBGs) or Census Tracts (CTs) where terrestrial non-dial-up Internet access service is only available to less than 10 percent of occupied residential premises.¹¹ “Severely unserved areas” are those CBs, CBGs or CTs where terrestrial non-dial-up Internet access service is available to more than 10 percent of homes, but less than 50 percent of homes. “Moderately unserved areas” are those CBs, CBGs or CTs where non-dial-up terrestrial Internet service is available to more than 50 percent of homes, but less than 90 percent of homes. “Underserved” areas are those CBs, CBGs or CTs where terrestrial non-dial-up Internet access service is considered available, but where the level of service is below 3Mbps in the downstream direction. “Underserved persons” are those who live in an underserved area as defined above, or reside in a low-income community designated under Section 45D, an empowerment zone or enterprise community designated under Section 1391, the DC enterprise zone, or a renewal community designated under Section 1400E.

These definitions will enable the NTIA to effectively target grants both to areas that lack adequate broadband deployment, and to low-income areas where broadband deployment may exceed the standard definition of “underserved,” but where the population is likely to adopt broadband at a rate far lower than the general population.

To help applicants and the states determine which areas are likely to qualify under the above unserved and underserved definitions, the FCC should use the new Form 477 broadband data (reported as of March 16, 2009) to produce and publish lists of Census Tracts that are likely to be unserved or underserved areas. Because this information is only a proxy for actual availability information, a grant applicant, in an affidavit accompanying the grant application, should attest to an area’s status.

The Rural Utilities Service Broadband Loan and Grant Programs

The \$2.5 billion allocated to the RUS broadband grant and loan programs must be used to fund projects where at least 75 percent of the area to be served is a rural area “without sufficient access to high-speed broadband service to facilitate rural economic development.” The Stimulus Act directs the Secretary of Agriculture to determine where these areas are, but provides no detail on how that process would take place. It is possible that the RUS could rely on FCC data, along with state and applicant self-certification that a project meets this geographic requirement. The FCC’s new broadband data will allow for the identification of Census Tracts that likely are unserved, however, in rural areas the geographic scope of Census Tracts is often quite large. This means that the FCC data will at most serve as a first-step guide for identifying the rural areas to target. In these instances, the RUS should require applicants to sign affidavits that affirm the proposed project area comports with the requirements of the Stimulus Act.

WHO IS ELIGIBLE TO PARTICIPATE IN THESE PROGRAMS?

The Broadband Technology Opportunities Program

The BTOP program is open to any state or political subdivision thereof (including DC, territories and possessions, and Indian tribes), non-profits, and current broadband service or infrastructure providers.

The Stimulus Act directs the NTIA when establishing eligibility rules to “promote the purposes of [the BTOP program] in a technologically neutral manner.” While some may view this as language that implies that any non-dial-up Internet technology may be eligible to receive grant funds, it does not mean that the NTIA is to award grants based on a lowest-common-denominator standard. A central purpose of the BTOP program is to fund deployment of broadband technologies that offer the “greatest speed possible.” If the NTIA establishes speed guidelines that some specific technologies are not able to meet, this would not be a violation of “technological neutrality.” Instead, the establishment and use of such speed guidelines will carry out the law’s directive to promote the deployment of a certain level of service in a technologically neutral manner. It is important that the NTIA recognize this distinction and not become trapped by certain providers’ semantic games.

Grant applicants must make a “showing that the project would not have been implemented during the grant period without Federal grant assistance.” This provision is key to ensuring the maximum level of economic stimulus is achieved, and that scarce resources are well targeted. To implement this provision, we suggest that the NTIA require an exhaustive list of documentation from applicants in order to make this showing. Required documentation may include public statements, private correspondence and detailed capital expenditure plans that may not have been previously publicly disclosed. The NTIA should protect the confidentiality of such information where appropriate.

Additionally, under the BTOP program, the federal share of a given project may not exceed 80 percent without a waiver from the NTIA. The Assistant Secretary of Commerce may grant a waiver if he/she determines that “the petition demonstrates financial need.” It is unclear what such a demonstration would entail. While matching requirements are important because they require a grantee to incur some of a project’s risk, in some instances, it is possible that the financial cost of capital that will be required to make the 20 percent match may make some otherwise-viable rural deployment projects unprofitable. The NTIA should take such situations into account when determining the practical effects of a match requirement.

It is important to note that the NTIA has wide latitude in deciding the types of programs that can receive BTOP funds. While deployment projects are a core focus of BTOP, so too are programs that facilitate adoption of broadband in low-income communities. Subsidizing communications services in low-income households is not a new concept. The FCC’s Lifeline/Linkup program currently provides \$800 million per year to lower the cost of basic local telephone service to low-income households. Last fall the commission published a proposal that would test the expansion of this program to support broadband adoption in low-income households. While this specific proposal contained some flaws, the underlying idea certainly has merit, and fits well within the overall goals of the BTOP program.

We therefore suggest that the commission, along with the Universal Service Administration Corporation (USAC), request a grant of \$300 million from BTOP that would be used to implement a “Broadband Lifeline/Linkup Pilot Program.” This one-year pilot program would provide participating households earning less than \$25,000 annually a \$15 per month subsidy for broadband service and a

one-time \$150 subsidy for the purchase of an Internet access device. We estimate that a \$300 million pilot fund would increase the low-income broadband household penetration rate from 24 percent to 27 percent. This increase would correspond to support for nearly 1.4 million low-income homes, and would add more than 800,000 net new low-income broadband homes, at a cost of approximately \$370 per new home added.

The Rural Utilities Service Broadband Loan and Grant Programs

Eligibility for participation in the RUS broadband grant and loan programs is much more constrained than it is for BTOP. The Stimulus Act specifically directs the RUS to give priority to project applications that are “from borrowers or former borrowers under title II of the Rural Electrification Act of 1936.” This provision heavily weights the RUS award process in favor of small rural telephone companies. Further, while the 2008 Farm Bill made changes that disfavored larger companies, it is unclear under existing regulations if larger companies will be able to qualify for awards larger than \$3.75 million.¹² Given that the larger companies have the poorest track record on rural broadband deployment, clarification of their eligibility to receive stimulus funds is critical.

Prior to the enactment of the 2008 Farm Bill, RUS rules restricted the eligibility of state and local governments to participate in the loan program. State or local governments were only eligible for a broadband loan if no other eligible entity was already offering or had committed to offer broadband services to the community.¹³ There was no similar prohibition against overbuilding placed on non-municipal borrowers. Given this change in policy, we suggest that the RUS affirm that no such restrictions will be placed on state and local government eligibility for new stimulus funds.

The RUS broadband grant program specifically forbids grantees from offering telephone services over their grant-funded broadband facilities if a customer is already receiving such service from a local telephone company.¹⁴ In practice, this means that in those areas where a new entrant is willing to offer grant-funded broadband service, the new entrant will not be able to offer services as a part of a “triple play” bundle (phone, Internet, TV). In many cases, this will cripple the new entrant’s business case for deployment, and will leave an area without any broadband service provider.

RUS grantees are also prohibited from using grant monies for deploying their own broadband transport facilities.¹⁵ This restriction means that a non-telco incumbent grantee will be forced to purchase unregulated monopoly broadband transport service (i.e., service that carries a customer’s Internet traffic back and forth from the Internet backbone) from a telco provider, which again completely undermines the business case for broadband deployment. Small cable operators, for example, will in theory be able to offer fast broadband services over their cable plant, but will be forced to rely on the possibly outdated and slow transport service offered by the local telco incumbent.

Such restrictions greatly hinder the RUS’ ability to meet the goals of the Stimulus Act. We strongly suggest that the USDA revisit and revise these regulatory roadblocks.

Finally, the Stimulus Act forbids a project from receiving funds from both the BTOP program and the RUS program. While this prohibition against “double dipping” is sensible, it does introduce practical concerns. In particular, it remains far from clear what level of cooperation the NTIA and RUS will have in the sorting of applications. Should a grant hopeful apply to both programs, and assume that the agencies are in coordination, or would simply applying to both be grounds for refusal? The RUS and the NTIA need to quickly address these practical issues in order to preempt a confusing application process.

HOW ARE THE AGENCIES TO PRIORITIZE THE DISTRIBUTION OF THESE FUNDS?

The Broadband Technology Opportunities Program

Under the BTOP program, the NTIA must award a minimum of one grant per state. When awarding deployment grants, the NTIA must, “to the extent practical,” give consideration to applications that can meet several criteria, including whether a deployment project will increase the affordability of, and subscribership to, broadband. The NTIA is also to give consideration to project applications submitted by “socially and economically disadvantaged businesses.”

Consideration must also be given to projects that will provide the “greatest broadband speed possible to the greatest population of users.” Of all the considerations specified, we believe Congress intended the NTIA to pay special attention to this particular goal. Though specific speed requirements were included in the House legislation, the Senate opted not to do the same. This was likely due to the Senate’s concern that speed requirements might result in some areas remaining unserved. However, this concern should not be construed to mean that the Senate has no desire to see robust speeds deployed with BTOP grants. In the statement accompanying the final compromise bill, the conferees stated:

“While the House bill had included specific speed thresholds that an applicant must have met to be eligible for a grant, the substitute requires only that the NTIA consider the speeds that would be delivered to consumers in awarding grants. The Conferees are mindful that a specific speed threshold could have the unintended result of thwarting broadband deployment in certain areas. The Conferees are also mindful that the construction of broadband facilities capable of delivering next-generation broadband speeds is likely to result in greater job creation and job preservation than projects centered on current-generation broadband speeds. Therefore, the Conferees instruct the NTIA to seek to fund, to the extent practicable, projects that provide the highest possible, *next-generation* broadband speeds to consumers” (emphasis added).¹⁶

Through this statement, the language in the House bill and in the tax credit provision of the Senate bill, and in the final act itself, we see a clear congressional intent to fund deployment of next-generation broadband services. Thus, we think it is perfectly consistent with the law for the NTIA to establish speed *guidelines* for BTOP applications, and that these guidelines should adhere closely to those proposed in the House legislation. Applicants would be encouraged to meet or exceed the speed guidelines, but would not be foreclosed from receiving grant funds if they are unable to meet these thresholds (and no other applicant could for a particular area.)

Furthermore, the conferees made it clear that they were concerned about actual and not just advertised broadband speeds. In their statement, the conferees told the NTIA “to consider the actual speeds that broadband networks are able to deliver to consumers under a variety of circumstances.” We therefore urge the NTIA to require grant applicants to state the minimum and average speeds their networks will be able to deliver to end users under a variety of real-world situations. Grant applicants should also describe the contention ratios of their proposed networks, and any network management techniques they intend to use, and how these techniques may impact the end-user experience.

The NTIA is also to consider whether awarding a grant to a project will “result in unjust enrichment as a result of support for non-recurring costs through another Federal program for service in the area.” This provision is likely a counterpart to the language in the RUS section of the legislation that prevents a project from receiving awards from both the RUS and BTOP. However, we suggest that this provision

is particularly important given that grants will be awarded to fund infrastructure that will in many cases be in so-called “High Cost” areas, where providers are eligible for ongoing support from the Universal Service Fund (USF). Currently, most rural Eligible Telecommunications Carriers are supported based on their historical costs — that is, they earn a mandated 11.25 percent rate of return on the historical cost of their network investment. But what if a rural carrier uses grant funds to deploy fiber optics to the customer premise, then uses that infrastructure to offer both Internet and local exchange telephone service? It is possible that the provider will, under current USF accounting rules, be able to earn an 11.25 percent rate of return on the “historical cost” of that network, even though that cost was paid for with grant funds, and not by the carrier. The prospect of double-dipping into subsidies from taxpayers and ratepayers is troubling.

We believe this situation, as well as the “unjust enriching” clause, get to the heart of the need for comprehensive USF reform. Under the current model, carriers receive ongoing USF support for local telephone service that is heavily price-regulated and that only brings in small per-customer revenues. This along with so-called “carrier of last resort obligations” necessitates ongoing universal service support for carriers operating in high-cost areas. But this regulatory model is now outdated. Today’s technology enables a provider to offer phone, cable TV and broadband Internet over the same infrastructure. Carriers can thus earn far more revenue per customer, lowering or completely eliminating the need for ongoing USF support. This is especially the case if the high upfront costs of broadband network deployment are paid for out of USF or stimulus funds.

We therefore strongly urge the NTIA to direct applicants to address how the grants will impact their future need for universal service support. If there are competing applications, priority should be given to those that place no or little future burden on the USF. We also urge the FCC to immediately open a proceeding that examines these issues in the context of broader USF modernization reform.

The Rural Utilities Service Broadband Loan and Grant Programs

Under current RUS rules, grant applications are prioritized according to three general guidelines: the “rurality” of the project, the economic need of the project’s service area, and the “community-oriented connectivity” benefits derived from the proposed service.¹⁷

The Stimulus Act further requires that the RUS give priority to applications for “broadband systems that will deliver end users a choice of more than one service provider.” Priority is also to be given to “projects that provide service to the highest proportion of rural residents that do not have access to broadband service.” At first glance, these two priorities appear to be in direct conflict. If a project will result in an end user having service from more than a single provider, then that service by definition will be provided to residents that already have access to broadband service. If we assume that Congress did not intend to saddle RUS with such conflicting priorities, we must assume that the first provision directs the agency to prioritize applications that will deploy broadband services that are sold on a wholesale basis to multiple retail providers.

WHAT ARE THE TIMELINES FOR THESE PROGRAMS?

The NTIA is required to award all \$4.35 billion in BTOP grants by September 30, 2010. The agency is also supposed to “seek assurances” from grantees that they will “substantially complete” projects within a two-year timeframe, from the time the award is made. These provisions are critically important to ensuring the overall success of the stimulus legislation.

However, the RUS program has no timelines whatsoever. There is absolutely no requirement for the RUS to make awards by a certain date, nor are there timeline requirements for the completion of projects. The program’s only time constraints are contained in the legislative language that requires the RUS to give priority to “activities that can commence promptly following approval.”

WHAT ARE THE OVERSIGHT AND ACCOUNTABILITY MECHANISMS THAT WILL ENSURE EFFICIENT AND PROPER USE OF THESE FUNDS?

The Broadband Technology Opportunities Program

In the Stimulus Act, Congress struck an appropriate balance between the need to get funds out the door quickly, and the need to ensure basic consumer protections and proper accountability. In the BTOP program, Congress rightly recognized the need to proactively ensure that taxpayer funds would not be used to construct a closed Internet. The legislation directs the NTIA and FCC to “publish the non-discrimination and network interconnection obligations that shall be contractual conditions of grants awarded.” These conditions “include at a minimum adherence to the principles contained in the Commission’s broadband policy statement.”

Thus, any BTOP-funded network must be operated in a manner that allows consumers to access the lawful content, applications and services of their choice, and consumers must be allowed to attach any device of their choosing to the network.¹⁸ It is important to note that the FCC’s broadband policy statement applies to all networks, not just networks built with stimulus funds. Therefore, the bill’s language merely affirms the obligation to abide by these principles, even in the event that they are modified or changed either by the commission or by court action. These provisions, in essence, ensure “no blocking” and device freedom, but they do not by themselves prevent non-blocking discriminatory behavior, such as favoring one provider’s content over another’s. Thus, Congress directed the FCC and NTIA to also incorporate non-discrimination conditions.

The FCC should model the BTOP contractual conditions for interconnection after the “just, reasonable and non-discriminatory” language in Sections 251, 252 and 256 of the Communications Act. We suggest the following language:

The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the grant recipient’s network: A) for the transmission and routing of telephone exchange service and exchange access and for broadband service and access; B) at any technically feasible point within the carrier’s network; C) that is at least equal in quality to that provided by the grant recipient to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and D) on rates, terms and conditions that are just, reasonable and nondiscriminatory.

This language should be buttressed with interconnection negotiating conditions that are similar to Section 252(b) of the Communications Act, which calls for mandatory arbitration by the relevant state commission between 135 and 160 days after a request for interconnection.

In addition to adherence to the four principles contained in the commission's *Broadband Policy Statement*, we suggest that the FCC define the non-discrimination contractual conditions for BTOP grants as follows:

Grant recipients A) must not provide or sell to Internet content, application or service providers, any service that privileges, degrades, prioritizes or discriminates against any lawful content transmitted over the grant recipient's network; and B) must offer bandwidth for Internet access upon reasonable request, on rates, terms and conditions that are just, reasonable and nondiscriminatory. Nondiscrimination shall not be construed to prohibit a grant recipient from engaging in reasonable network management consistent with the principle of nondiscrimination.

In addition to the openness conditions, BTOP grantees are required to submit quarterly reports to the NTIA detailing how they are using the funds and their progress on fulfilling the "objectives for which such funds were granted." The legislation requires the NTIA to create a publicly searchable Web site that hosts these reports, as well as other detailed information about BTOP program activities.

Entities receiving grants through the Broadband Data Improvement Act have only the obligation to submit a single report to the Commerce Department on the use of grant funds. The legislation also requires the Commerce Department to host this and other relevant information on a publicly accessible Web site. We suggest that this information be hosted on the main BTOP Web site.

The Rural Utilities Service Broadband Loan and Grant Programs

While the stimulus legislation did not attach specific interconnection and non-discrimination conditions to RUS funds, the FCC's Broadband Policy Statement, as mentioned above, applies to all broadband networks in the United States, not just those built with stimulus funds. Any RUS-funded network operator that engages in blocking would be subject to the complaint process at the FCC, just as any other network provider would.

The Secretary of Agriculture is required by mid-May to submit to Congress a report on the planned spending of the \$2.5 billion allocated to the RUS broadband grant and loan programs. Further quarterly reports must be submitted thereafter, until all funds are disbursed. These quarterly reports are in contrast to the current requirement of RUS grantees, which mandates annual status reports.¹⁹ Current RUS rules also require grantees to submit annual audits.²⁰

Though there is no specific requirement in the Stimulus Act, we suggest that the RUS provide all quarterly reports and other oversight documents to the NTIA for hosting on the NTIA's publicly searchable Web site, in order to facilitate better accountability and transparency.

WHAT IS THE FEDERAL COMMUNICATIONS COMMISSION'S ROLE IN THESE PROGRAMS?

Under the Stimulus Act, the FCC is given broad authority along with the NTIA to develop and establish the BTOP. While the NTIA is the final administrator (due in part to the fact that the FCC lacks the legal authority to make grants), the FCC should play the role of equal partner in crafting the BTOP program. The commission, through its work on the Universal Service Fund, is the single agency that has the most experience in overseeing the subsidization of telecommunications services to both unserved areas and underserved populations. Further, the commission has far more expertise in the technical and regulatory issues surrounding broadband than any other agency, including the NTIA and, of course, the USDA.

Confirming this expertise, the Stimulus Act directs the commission to formulate a national broadband plan, to be submitted to Congress within one year. The legislation also authorizes the NTIA to appropriate a portion of the BTOP funds to the FCC to carry out this obligation. Congress required the FCC to use the national broadband plan to further the goal of universal affordable broadband access. The report is to include benchmarks for meeting this goal along with "a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes."

Though the Stimulus Act does not require it, it is very likely that the FCC's broadband data (collected under Form 477) will be critical for the states, the RUS and the NTIA when they work to identify the unserved and underserved areas, and will also likely be the basis for the NTIA's national broadband inventory map. This is confirmed in the statement accompanying the conference report, wherein the conferees instructed "the NTIA to coordinate its understanding of these terms ["unserved" and "underserved"] with the FCC, so that the NTIA may benefit from the FCC's considerable expertise in these matters."

The Broadband Data Improvement Act also requires the FCC to cooperate with the states and their designees by providing access to raw Form 477 broadband data. The Data Improvement Act also requires the FCC to conduct annual consumer surveys on broadband use, and to conduct comparisons of international broadband markets and regulatory policies.

The international comparison, the consumer survey and the new Form 477 broadband data, along with the rural broadband strategy (required by the 2008 Farm Bill, which is to be delivered to Congress by June), will prove useful as the commission formulates the national broadband plan. However, the commission has yet to issue any public notices seeking input into the design of the consumer survey or the international comparison study, and has not sought input into the crafting of a rural broadband strategy. We urge the FCC to immediately open proceedings into these matters, as well as to initiate a proceeding examining the role of the stimulus legislation in the context of broader USF reform. Specifically, the commission should treat the massive investment in rural broadband as an opportunity to modernize the USF, moving away from a system of ongoing support to a system of infrastructure deployment support.

WHAT ROLE DO THE STATES AND LOCAL GOVERNMENTS PLAY IN PARTICIPATING, ADMINISTERING AND OVERSEEING THESE PROGRAMS?

States and local governments (or their designees) can receive grants under both the BTOP and the Broadband Data Improvement Act's State Broadband Data and Development Grant Program. Under the RUS program, the states could play a role in helping the Secretary of Agriculture identify the areas that are eligible for funds.

Where the states will play the largest role is in the process of deciding which areas and what projects are most deserving of BTOP grants. Under the legislation, the NTIA is to consult with the states to identify unserved and underserved areas, and to determine the allocation of grant funds within each respective state. In their statement, the conferees recognized:

"States have resources and a familiarity with local economic, demographic, and market conditions that could contribute to the success of the broadband grant program. States are encouraged to coalesce stakeholders and partners, assess community needs, aggregate demand for services, and evaluate demand for technical assistance. The Conferees therefore expect and intend that the NTIA, at its discretion, will seek advice and assistance from the States in reviewing grant applications, as long as the NTIA retains the sole authority to approve the awards. The Conferees further intend that the NTIA will, in its discretion, assist the States in post-grant monitoring to ensure that recipients comply fully with the terms and conditions of their grants."

States are particularly well suited to administer grant programs that target sustainable broadband adoption by low-income and otherwise vulnerable populations. While we have suggested the FCC, along with USAC, apply for a \$300 million BTOP grant to establish a pilot Broadband Lifeline/Linkup program, the states could play a role here similar to their current subsidy of low-income telephone service. States could establish their own qualification criteria (though for budgetary purposes, it would need to be somewhat in step with the default FCC criteria) and provide matching funds.

ENDNOTES

- 1 American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5 (2009).
- 2 Broadband Data Improvement Act, Pub. L. No. 110-385 (2008).
- 3 Reply Comments of Free Press, et al., *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Aug. 1, 2008, pp. 16-26.
- 4 See *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, 2708; Order on Reconsideration, 23 FCC Rcd 9800 (2008).
- 5 7 C.F.R. §§ 1735-1739
- 6 "USDA Rural Development: Bringing Broadband to Rural America", USDA, June 2007, available at <http://www.rurdev.usda.gov/rd/pubs/RDBroadbandRpt.pdf>.
- 7 Cecilia Kang, "Broadband Program Oversight Questioned," *Washington Post*, Feb. 12, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/11/AR2009021103832.html>.
- 8 S.AMDT.98 (amends H.R.1), 111th Congress, 1st Sess. (2009).
- 9 American Recovery and Reinvestment Act of 2009, H.R. 1, 111th Congress, 1st Sess. (2009).
- 10 *Supra* note 7.
- 11 U.S. Census Bureau, "Census 2000 Geographic Definitions," July 27, 2001, available at http://www.census.gov/geo/www/geo_defn.html.
- 12 Prior to the enactment of the 2008 Farm Bill, RUS funds were only available to companies that serve less than 2 percent of the nation's telephone lines. Under the new law, any entity that provides telecommunications or broadband to at least 20 percent of U.S. households is prohibited from receiving more than \$3.75 million per year in funds (15% of the total annual appropriation for the RUS broadband program, set by the Farm Bill at \$25 million for each fiscal year 2008 through 2012).
- 13 7 C.F.R. § 1738.16(b). The 2008 Farm Bill did explicitly state that States and local governments are eligible to participate in the loan program, and removed the clause about other entities offering service (Pub. L. 110-246; 7 U.S.C. § 950bb (d)(4)).
- 14 7 C.F.R. § 1739.13(b).
- 15 7 C.F.R. § 1739.13(a).
- 16 H.Rept. 111-16, 111th Congress, 1st Sess. (2009).
- 17 7 C.F.R. § 1739.17.
- 18 Federal Communications Commission, CC Docket Nos. 95-20, 98-10, 01-337, 02-33; GN Docket No. 00-185, CS Docket No. 02-52, Policy Statement (rel. Sept. 23, 2005).
- 19 7 C.F.R. § 1739.19.
- 20 7 C.F.R. § 1739.20.