

Before the

DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration

DEPARTMENT OF AGRICULTURE
Rural Utilities Service

FEDERAL COMMUNICATIONS COMMISSION

Joint Request for Comments on)	NTIA Docket No.
Implementing the American Recovery)	090309298-9299-01
and Reinvestment Act of 2009)	
)	FCC GN Docket No. 09-40

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These comments are submitted in response to the Joint Request for Information and Notice of Public Meetings (the "Joint Request") and FCC Public Notice DA 09-668, in the above-referenced matters.

Section 6001 of the American Investment and Recovery Act of 2009 (the "Recovery Act") requires the National Telecommunications and Information Administration ("NTIA"), in consultation with the Federal Communications Commission ("FCC"), to establish the Broadband Technology Opportunities Program ("BTOP"). The purposes of BTOP include accelerating broadband deployment in unserved areas, improving access to broadband services to consumers residing in underserved areas, fostering broadband adoption and

¹ The views expressed herein are their own, and are not necessarily the views of the PFF board, fellows or staff.

affordability, and ensuring that strategic institutions that are likely to create jobs or provide significant public benefits have broadband connections.² The Recovery Act also establishes authority under a separate title for the Department of Agriculture's Rural Utilities Service ("RUS") to make grants and loans for the deployment and construction of broadband systems, for the purpose of improving access to broadband in areas without service or that lack sufficient access to high-speed broadband service to facilitate economic development.³

Through these provisions, the Recovery Act vests substantial discretion in the NTIA and RUS to fulfill the statutory objective of advancing the ability of all Americans to have access to broadband services and the means to utilize them. This discretion must be exercised with due care and in a manner consistent with the primary goal of the Recovery Act: to quickly provide economic stimulus that leads to immediate job creation. Only by carefully targeted funding of sustainable projects that bring the most "bits per buck per job created" will NTIA and RUS fulfill their mission to aid in the revitalization of the U.S. economy while making progress toward the ultimate goal of enabling broadband access for all.

As is evident from Section 6001(b), the broadband expansion provisions to be administered by NTIA were added to extend broadband communications capacity to parts of the country – mostly rural – that have yet to be adequately served by existing services. The vision of Section 6001 of the Recovery Act is

2 Department of Commerce, National Telecommunications and Information Administration, Department of Agriculture, Rural Utilities Service, Docket No. 090309298-9299-01, Joint Request for information and notice of public meetings, March 9, 2009 at 2 & n.2.

3 *Id.* at 2, 8 & n.17.

that, by helping to provide what is fast becoming essential communications capacity where it is now lacking, broadband stimulus dollars will have a multiplier effect on economic development in some of the most underdeveloped regions of the United States. In order to make that vision a reality, the agencies tasked with implementing Section 6001 must ensure that the program is not hijacked by special interests devoted to enhancing their own wealth and power rather than actually bringing needed broadband services to unserved and underserved populations and communities, thus enhancing job creation and economic recovery.

“Unserved” and “Underserved” Areas

For purposes of BTOP, the Recovery Act requires NTIA to consult with the FCC on defining the terms “unserved area,” “underserved area,” and “broadband.” Getting these definitions right will be critical to the success of the broadband stimulus program. Unfortunately, history suggests that the process of awarding broadband development grants and loans based on these categories is fraught with uncertainty, inconsistency, and may involve the occasional misallocation of funds. Indeed, the USDA Inspector General found only a few years ago, the Department of Agriculture's Rural Utilities Service ("RUS") broadband expansion program, which mirrors in some respects the broadband stimulus provisions in the Recovery Act, has had serious implementation anomalies. Most importantly, because essential terms such as "unserved area" and "underserved area" were not defined by statute, and funding prioritization decisions within and among eligible areas are largely a matter of discretion, the USDA IG found that RUS loans were made to “affluent suburban communities

while other more rural communities remained underserved." Indeed, the IG found that 42% of communities receiving funding under the RUS program already were served by competing providers.

Using RUS funds to support overbuilding, the IG noted, raised three troubling questions: 1) "[c]an the sparsely populated rural areas for which these loans are intended reasonably support multiple broadband service providers," or are the loans being made to systems that are doomed to fail? 2) "What is the government's responsibility if, due to subsidized competition, a preexisting, unsubsidized broadband provider goes out of business?" And 3) as an equitable matter, "why should the government subsidize some providers in a given market and not others?"

These same concerns apply to the extent Recovery Act broadband stimulus funds are used to support infrastructure development in affluent non-urban communities or even in undeveloped areas near urban centers, rather than in the less-affluent, rural areas and inner-city neighborhoods that the program was intended to benefit. Consistent with the text and intent of the Recovery Act, therefore, broadband stimulus funds should be used first and foremost to support broadband development in unserved and markedly underserved areas of the country, and to support the first broadband providers in these areas rather than overbuilding by second or third entrants. By "markedly underserved," we mean areas in which broadband service is available to only a small fraction of those residing within the chosen geographic area. Only after funds have been expended to reach unserved, markedly geographically underserved areas, and to

address adoption problems where broadband is underutilized, should funds be granted to support programs intended to address qualitative shortcomings in existing broadband services.

“Broadband”

The NTIA and the FCC are required to coordinate on determining how to define "broadband" for BTOP purposes. The Joint Request for Information explores whether to set threshold transmission speeds for purposes of determining whether an area is unserved or underserved and prioritizing grant awards, as well as other options for dealing with the varying transmission speeds that different technology platforms are capable of providing. The NTIA should forgo creating new definitions, where possible, in the interests of expediting the awarding of the grant monies. For this reason, the NTIA should utilize the FCC's existing definition of "basic broadband tier 1" service (at least 768 kbps in at least one direction)⁴ for the definition of which areas are "unserved" by "broadband" and which areas are "underserved" by broadband. This will avoid unnecessary and distracting disputes over whether the U.S. should aspire to ubiquitously-provided super-fast networks. Of course it should, but that is not the primary purpose of the Recovery Act.

We suggest that "unserved areas" be defined to mean areas with no terrestrial broadband service providers. Although satellite broadband services

4 In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriberhip Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriberhip, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 08-89 (adopted March 19, 2008; released June 12, 2008), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-89A1.doc.

may achieve the minimum speeds necessary to qualify as “broadband” under the FCC’s definition, including such services in the determination of unserved areas would defeat the statutory purpose of creating an "unserved" category because technically, satellite services can be said to provide service across the continental United States and can additionally reach Alaska, Hawaii and other U.S. territories.

The ill-defined concept of "underserved" areas is fraught with problems for those required to quickly and efficiently dispense public moneys. For example, does underserved mean lower speed broadband services or the lack of a second provider? While the goal of bringing consumers the benefits of competition among service providers is laudable, the unfairness of government-subsidized competition is evident.

Accordingly, the best course of action to stimulate economic recovery and create jobs with a future is to give priority to extending broadband infrastructure to serve presently unserved and geographically underserved areas and to enable greater adoption of broadband where it is available, but under utilized. Only after these most pressing needs are addressed should grants be awarded to underserved areas defined in terms of qualitative measures relative to current broadband services, such as bandwidth and other capabilities.

The \$7.2 billion dollars Congress has designated for broadband stimulus efforts is a sizable amount, and if appropriately targeted, can bring immediate public interest benefits to many Americans. Above all, the stimulus funds should be directed at supporting capital expenditures for infrastructure and equipment

for both middle-mile and last-mile networks. Recovery Act funds should not be provided for operational expenditures as that carries the likelihood of creating a post-stimulus dependency on public support which will be difficult to end and/or will overburden existing support programs.

There is evidence that broadband deployment in the United States is more widespread than currently believed. However, in rural areas, it has been difficult to adequately assess where broadband has been deployed, where it is inadequately deployed, and where it is completely unavailable.⁵ The simultaneous broadband mapping efforts also to be funded through the Recovery Act should address this problem. In the meantime, given the speed with which the BTOP funds must be dispersed (likely within only 12 months from the issuance of the initial Notice of Funding Availability), NTIA should prioritize funding of projects, consistent with the overarching goals of stimulating spending in the economy and job creation, that (1) extend broadband to known unserved and markedly underserved areas (supply-side programs) and (2) support programs aimed at problems of low adoption rates where broadband is available but not subscribed to for reasons such as affordability, computer illiteracy and lack of personal computers (demand-side programs). In other words, to close the broadband gap in America, BTOP stimulus funding should be awarded first to projects addressing immediately-ascertainable areas of unmet demand for broadband service due to unavailability of infrastructure and addressing the

5 See GAO Report, "Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas," May 2006.

inability of certain populations to benefit from available broadband service due to lack of funds or computer illiteracy.

Eligibility

Stimulus funds should not be used to favor political allies or prop up otherwise failed business models.⁶ The Recovery Act's stimulus funds were intended to do just that: stimulate economic development. The funds should not be used for market manipulation or social engineering. For that reason, grants to provide service where it is otherwise lacking or inadequate should not be limited to particular entities, technologies, or types of service providers. Instead, NTIA

6 Government entities as well as public-private partnerships are eligible to receive Recovery Act funding. In awarding grants, NTIA should take account of the fact that the past few years have evidenced the widespread failure of large-scale Wi-Fi projects, and that most, but not all, of these failed projects have involved either municipally-owned Wi-Fi systems or public-private partnerships between municipalities and private Internet service providers. BTOP funding is intended to be “timely, targeted and temporary,” and should not be spent on risky ventures or failed business models. Critics of municipal Wi-Fi networks have noted that the projects usually fail for one or more of the following reasons: (1) Under-estimating the number of antennas that will be needed per square mile (in some cases by a factor of 2-3), which greatly increases the cost of deploying the network; (2) Over-estimating the demand—the number of paying customers that will sign up for the new service, which greatly decreases the revenue received; (3) Under-estimating the pace of technology, such that by the time the projects are ready to sign up new *customers*, there are other broadband options (e.g. cellular 3G, WiMax, and plain old cable modem and DSL service) providing much faster speeds. See, e.g., James Valvo, *Municipal Broadband's Record of Failure: A Profile in Market Intrusion*, Americans for Prosperity, Policy Paper No. 0309, March 2009, http://www.americansforprosperity.org/files/Municipal_Broadband_Policy_Paper.pdf; Adam Thierer, *Risky Business: Philadelphia's Plan for Providing Wi-Fi Service*, The Progress & Freedom Foundation, Progress on Point No. 12.4, April 2005 at 10, <http://www.pff.org/issues-pubs/pops/pop12.4thiererwifi.pdf>. “Even when municipal Wi-Fi projects are successful, they “can have a ‘crowding out’ effect on private sector competition, innovation, and investment. ... [T]ax, financing, and regulatory advantages create a very unlevel playing field between municipal entities and private network operators. These unfair advantages also explain why many municipalities claim they can offer citizens lower-priced service than private providers.” *Id.* Even proponents of municipal Wi-Fi systems recognize that the collapse of high-profile projects such as Philadelphia's venture with Earthlink was due to inadequate investment by both government and business. See Howard Buskirk, Tim Warren, *Communications Daily*, “WiMAX Offers Less Bang than Fiber, Panelists Say,” March 31, 2009. This suggests that municipal Wi-Fi projects are likely to require substantial continued public financial support to maintain viability and have yet to develop a sustainable business model. The track record on municipal Wi-Fi projects is not encouraging, a factor which must be taken into account in evaluating the viability and sustainability of proposals seeking BTOP grants.

and RUS should consider all entities – public and private -- and all technologies, including wireline, terrestrial and mobile wireless, satellite, and point-to-point microwave as appropriate for the geographic area, terrain, population density or other location-specific factors.

Indeed, eligibility restrictions of any kind necessarily undermine the potential success of the program. The U.S. is a large, geographically-diverse nation; projects that are ideal for rural Alaska or the upper reaches of Vermont and Maine will vary from those well-suited to inner city low income neighborhoods. To maximize the practical impact of Recovery Act funds, the program should be technologically-neutral and applicant-agnostic. That is, grant decisions should be made based on who can best deliver, in a sustainable manner, broadband services where needed, and who can do so quickly, efficiently, and cost-effectively, while at the same time creating the most number of jobs. Put another way, applicants should be judged on who can provide the most bits per buck per job created. It is highly likely that in many cases, existing private providers will be in the best position to quickly extend or upgrade existing infrastructure to provide higher-speed services to unserved or geographically underserved areas, and to do so in a sustainable manner. NTIA should, therefore, find by rule that limiting eligibility to those entities listed in Section 6001(e)(1)(A) & (B) would be contrary to the public interest, and find by rule that all broadband service or infrastructure providers are eligible to apply for BTOP grants, regardless of the technology utilized.

Broadband (Internet) Policy Principles, Nondiscrimination and Network Interconnection Obligations

The Recovery Act requires that NTIA shall, in coordination with the FCC, publish nondiscrimination and network interconnection obligations that shall be contractual conditions of grant awards, including, at a minimum, adherence to the principles contained in the FCC's Internet Policy Statement (FCC 05-15), adopted August 5, 2005.⁷ Because the top priority of Recovery Act funding is immediate economic stimulus and job creation, NTIA should eschew calls for the creation of a new set of nondiscrimination and network interconnection rules for BTOP grant recipients. Consistent with the plain language of the Recovery Act, NTIA may satisfy its statutory obligation by contractually requiring BTOP grant recipients to adhere to the principles contained in the FCC's Internet Policy Statement. It would be unwise to go beyond these principles in establishing the contractual conditions of grant awards for fear of deterring the applicants whose projects would otherwise be most likely to fulfill the goals of the Recovery Act but for their desire not to have their business plans altered by government mandate.

As conceived, the FCC's principles articulate aspirational goals intended to preserve the key attributes of "openness" for consumers associated with today's broadband Internet access services.⁸ They were developed with industry input and reflect a consensus of many Internet stakeholders. There will be ample time to debate whether the FCC can and should adopt these principles into its

7 NTIA, RUS, Joint request for information and notice of public hearing, at 7-8; Section 6001(j).

8 The separate questions whether the FCC may *enforce* these principles against private entities in an adjudication will be resolved by the D.C. Circuit Court of Appeals in the Comcast P2P case. *Comcast Corp. v. FCC*, No. 08-1291, *review granted* (D.C. Cir. filed Sept. 4, 2008).

rules and whether the National Broadband Policy that the FCC is entrusted with developing under the Recovery Act will include these principles.⁹ But now is not the time for the federal government to adopt contentious new social policies under the cover of contractual conditions, when such action could put the program at risk of failing to achieve its primary goals: economic recovery and job creation through the extension of broadband services to all Americans.

Conclusion

Although the Recovery Act funding will provide a needed first step along the path to universal broadband access, the \$7.2 billion allotted to broadband funding pales in comparison to the annual capital expenditures of current broadband providers, which runs into the tens of billions annually. However, because the infusion of government supported broadband carries with it the very real potential of disrupting the capital formation necessary to sustain the long term network expansion and economic growth that will be required to bring next generation network architecture to the U.S., the public monies should be employed in ways that *catalyze*, rather than replace or deter, private investment. As Margaret Thatcher famously said in a speech to the Zurich Economic Society, "[I]n a mixed economy, as in a cocktail, it is the mix that counts."¹⁰ Like a few

9 In fact, the FCC has launched such an inquiry. In the Matter of A National Broadband Plan for Our Future, *Notice of Inquiry*, GN Docket No. 09-51, FCC 09-31, April 8, 2009, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-31A1.doc (seeking comment whether it is necessary to explicitly add a "fifth principle" of "nondiscrimination" to its four existing Internet policy principles, and on "whether open network principles should be incorporated into a national broadband plan.").

10 Margaret Thatcher, Speech to Zurich Economic Society ("The New Renaissance"), March 14, 1977, available at <http://www.margaretthatcher.org/speeches/displaydocument.asp?docid=103336>.

drops of vermouth in a dry gin martini, the Recovery Act funding should catalyze the dominant ingredient -- the private capital -- to bring about a well-balanced broadband cocktail that will refresh our economy for years to come.

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