Before the
United States Department of Commerce
National Telecommunications and
Information Administration
Washington, D.C.

In the Matter of:	)	
American Recovery and Reinvestment Act of 2009 Broadband Initiatives	)	Docket No. 090309298-9299-01

COMMENTS

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EXECUTIVE SUMMARY

The American Cable Association ("ACA") urges NTIA and RUS to do the following in distributing and administering broadband stimulus funds under the BTOP:

- Apportion funds to both "unserved" and "underserved" areas, and not prioritize the allocation of grants and loans to one of these areas over the other;

- Determine that eligible applicants include any entity that has provided reliable cable, phone, or broadband Internet service in the United States or its territories within the last three years;

- Define "unserved" and "underserved" areas as being a Census Tract in which at least 50% of the households do not have access to reliable broadband of 1.5 Mbps downstream and 128 Kbps upstream transmissions, and 5.0 Mbps and 500 Kbps, respectively;

- Do not place non-discrimination obligations on grants awarded which are more stringent than those outlined by the FCC in its 2005 Broadband Policy Statement;

- Impose any non-discrimination and network interconnection obligations only ***on the infrastructure being funded with grant funds***;

- In "underserved" areas, give priority to proposals that seek to invest in bringing high capacity "middle mile" infrastructure to an area over "last mile" infrastructure;

- In "unserved" areas, give equal weight to grant proposals that seek to invest in bringing both high capacity "middle mile" and "last mile" infrastructure to an area;

- Mandate that all applicants have available 20% of funds for a project, except that a smaller entity may be awarded a grant that is more than 80% of a project's cost based on certain criteria to assure adequate operational, technical, and financial experience;

- Streamline the application and grant process, and ensure that the applicant has the resources and expertise to operate the facilities for which funding is sought;

- Place grant application forms, instructions, pending applications, and award notices online;

- Avoid awarding redundant grants for overlapping service areas; and

- For smaller entities—existing video, broadband, or phone providers with 5,000 broadband subscribers or less—seeking grants below a threshold of $5 million, adopt and provide those applicants with a short-form application.

TABLE OF CONTENTS

I. Introduction

The American Cable Association ("ACA") submits these comments in response to the March 12, 2009 Joint Request for Information and Notice of Public Hearings issued by the United States Department of Commerce, National Telecommunications and Information Administration ("NTIA"), and the United States Department of Agriculture, Rural Utilities Service ("RUS").[1] The Joint Request seeks comment on issues relating to the distribution and administration of broadband stimulus funds appropriated by Congress in the American Recovery and Reinvestment Act of 2009.[2]

American Cable Association. Small markets and rural areas across the country receive video services from more than 900 small and medium-sized independent operators represented by the ACA. ACA member operators range from family run businesses serving a single town to multiple system operators with small systems in small markets. More than half of ACA's members serve fewer than 1,000 subscribers. Where economically feasible, these operators have also launched high speed data and phone service.

ACA's membership is comprised of cable, phone, and fiber-to-the-home operators and municipalities, many of whom deliver affordable basic and advanced services, such as high-definition television, next generation Internet access, and digital phone services to more than 7 million households and businesses, some of whom have no other means of receiving these vital services. Many other member operators would

[1] *American Recovery and Reinvestment Act of 2009 Broadband Initiatives*, Joint Request for Information and Notice of Public Meetings, 47 Fed. Reg. 10716 (Mar. 12, 2009) ("Joint Request").

[2] American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) ("Recovery Act").

launch such advance services in smaller towns and more rural areas if the services were economically feasible.

ACA is uniquely positioned to assist NTIA and RUS in ensuring that broadband stimulus funds are distributed and administered in an efficient and effective manner in an effort to provide all Americans with access to advanced telecommunications and information services. This is particularly true in the rural areas and smaller markets that ACA members already serve. ACA welcomes the opportunity to provide comments in response to the Joint Request.

II. Comments

A. Purposes of the Grant Program/Grant Apportionment.

NTIA seeks comment on whether the grant program should apportion funds to each purpose identified in the Recovery Act.[3] ACA urges both NTIA and RUS not to rely on bright-line apportionment of broadband stimulus funds, and stresses that no single purpose identified in the Recovery Act should be given a prioritized right to grant funds. Specifically, NTIA and RUS should apportion funds to both "unserved" and "underserved" areas, and not prioritize the allocation of grants and loans to one of these areas, as later defined in these comments, over the other.

B. Eligible Grant Recipients.

NTIA and RUS further seek comment on what standards should be applied to determine if a private sector entity is eligible for a grant under the Broadband Technology Opportunities Program ("BTOP").[4] NTIA and RUS should decide that it is in

[3] Joint Request at 10717.

[4] *Id.* at 10717-18.

the public interest for eligible applicants to include any entity that has provided reliable cable, phone, or broadband Internet service in the United States or its territories within the last three years.

C. "Unserved" and "Underserved" Areas.

NTIA seeks comment on how to define "unserved" and "underserved" areas for purposes of the BTOP.[5] ACA urges NTIA to define an "unserved area" and an "underserved area" as follows:

> **"Unserved area."** A Census Tract in which at least 50% of the households do not have access to reliable broadband of 1.5 Mbps downstream and 128 Kbps upstream transmissions.
>
> **"Underserved area."** A Census Tract in which at least 50% of the households do not have access to reliable broadband of 5.0 Mbps downstream and 500 Kbps upstream transmissions.

Census Tracts are small, relatively permanent statistical subdivisions of a county that are designed to be homogeneous with respect to population characteristics, economic status and living conditions, and usually include between 2,500 and 8,000 persons.[6]

The Federal Communications Commission ("FCC") already requires facilities-based providers of broadband service to report the number of connections in each of the Census Tracts in which they operate.[7] As the FCC has noted, "[Census Tract]

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[5] *Id*. at 10719.

[6] *See generally Census Tracts and Block Numbering Areas*, United States Census Bureau, *available at* http://www.census.gov/geo/www/cen_tract.html.

[7] *See 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 Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, 9698, ¶ 14 (2008) ("We therefore require facilities-based providers of wired, terrestrial fixed wireless, and satellite broadband connections to report the number of connections that they have in service to households and businesses in each of the Census Tracts in which they operate.").

information will provide [the FCC] with a highly detailed and reliable account of broadband subscription and deployment nationwide, enabling [the FCC] to make more informed policy determinations and to support more effectively the efforts of states and others seeking to promote broadband services."[8] Using Census Tracts to determine whether an area is "unserved" or "underserved" will allow NTIA to target areas where grant funding is needed most in an efficient and effective manner.

For purposes of defining "unserved" and "underserved" areas, "reliable broadband" means broadband service that is consistent, readily available through existing technologies, and allows users to run applications and upload and download information through an Internet connection.

D. Non-discrimination and Network Interconnection Obligations.

NTIA also seeks comment on what non-discrimination and network interconnection obligations should be made contractual conditions of grants awarded under the BTOP.[9] As noted by NTIA, the Recovery Act stipulates that, at a minimum, such obligations should adhere to the principles contained in the FCC's 2005 broadband policy statement.[10]

Non-discrimination and Network Interconnection Obligations. ACA urges

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[8] *Id.*

[9] Joint Request at 10719.

[10] *Id.* at 10719; *In the Matters of Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services;* Computer III *Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of* Computer III *and ONA Safeguards and Requirements; Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, Policy Statement, 20 FCC Rcd 14986 (2005) ("2005 Broadband Policy Statement").

NTIA to not place non-discrimination obligations on grants awarded under the BTOP which are more stringent than those outlined by the FCC in its 2005 Broadband Policy Statement. NTIA should only require that grant recipients provide consumers with the ability to access any lawful content, applications, or services through the network, and allow consumers to attach any legal devices that do not harm the network.[11] Moreover, due to rapidly changing methods and technology, any non-discrimination and network interconnection obligations should continue to allow for the use of non-specific, reasonable network management practices and techniques.[12]

Additionally, any non-discrimination and network interconnection obligations should be imposed ***only on the infrastructure being funded with grant funds***, and should not affect or apply to other facilities owned or operated by a successful grant applicant, or those that connect to the funded infrastructure. Furthermore, successful grant applicants seeking to use grant funds for so-called "middle mile"[13] infrastructure should be obligated to provide access to the funded infrastructure to other entities at fair and reasonable prices, terms, and conditions.

E. Factors to Consider in Establishing Selection Criteria for Grant Awards.

NTIA and RUS seek comment on what factors they should consider in establishing selection criteria for awarding grants.[14] It is essential for NTIA and RUS to

[11] *See id.* at 14987-88, ¶ 4.

[12] *See id.* at 14988 n.15 ("Accordingly, we are not adopting rules in this policy statement. The principles we adopt are subject to reasonable network management.").

[13] "Middle mile" facilities provide relatively fast, large-capacity connections between the Internet backbone and an Internet Service Provider's "last mile" facility or facilities. The "middle mile" is discussed more fully in Section II(E).

[14] Joint Request at 10718, 10720.

prioritize grant awards for projects that take into account that "underserved" and "unserved" areas, as defined in Section II(C), are significantly different with respect to whether any broadband service is available to households in the area, and the capabilities of the infrastructure that has already been invested in these areas.

"Underserved" areas. In "underserved" areas, NTIA and RUS should give priority to proposals that seek to invest in bringing high capacity "middle mile" infrastructure to an area over those proposals that seek to provide "last mile" infrastructure. Internet access includes "middle mile" and "last mile" facilities. The "last mile" facilities are those which run from the subscriber's location to the operator's headend, central office, mobile telephone switching office or other traffic collection site in the community ("community point-of-presence"). From the operator's community point-of-presence the traffic must travel out from the community by "middle mile" facilities to the nearest point-of-presence on the Internet, which is normally located in a major urban center.

There has already been sufficient investment in "last mile" infrastructure in many areas, and no federal funding is needed to provide additional "last mile" infrastructure in "underserved" areas. The problem with delivery of high-speed broadband capability to rural America does not lie primarily in the lack of "last mile" facilities. Those "last mile" facilities already exist. As noted by Stephen R. Effros, the problem is "due to a lack of economically viable ways of connecting existing 'last mile' facilities with the Internet; the high-speed, broadband connectivity between rural broadband cable and telephone plants and the Network Access Points (NAPs) they must connect to, which are almost

exclusively located in major urban centers."[15] Also, while in some areas there may be "middle mile" connections available, the price and available capacity prevents the offering of higher speeds necessary for advanced applications and services.

In selecting among competitive grant proposals in "underserved" areas, NTIA and RUS should therefore give priority to grant proposals for high-capacity "middle mile" infrastructure investments. These "middle mile" investments are the most cost effective way to: (1) increase the affordability of, and subscribership to, service to the greatest population of users in the area; (2) provide the greatest broadband speeds possible to the greatest population of users in the area; and (3) enhance services for health care delivery, education, or children, to the greatest population of users in the area. Moreover, NTIA and RUS should not ignore or give lower priority to areas in which "middle mile" infrastructure exists, even high capacity fiber, but where it is not available to other entities at fair and reasonable prices, terms, and conditions.

As noted above, many entities have sufficiently funded "last mile" projects on their own, but are unable to provide faster broadband speeds because they lack access to high capacity "middle mile" facilities. Awarding grants for "middle mile" projects would enable those entities to construct or interconnect with "middle mile" facilities in order to take advantage of their existing "last mile" infrastructure and offer faster broadband speeds at affordable prices.

"Unserved" areas. In "unserved" areas, NTIA and RUS should give equal weight to grant proposals that seek to invest in bringing both high capacity "middle mile"

[15] Stephen R. Effros, *An Alternative Approach to Broadband funding for Accomplishing the Broadest Distribution of High Speed Broadband in Rural America*, at 1. Mr. Effros' paper is attached hereto as *Exhibit 1*.

infrastructure and “last mile” infrastructure to the area. Unlike “underserved” areas, entities in “unserved” areas have generally not invested sufficient funds in “last mile” infrastructure, presumably because such investment cannot be economically justified. As a result, there is a need for federal funding to economically justify both “last mile” and “middle mile” investments in areas that are deemed to be “unserved.”

As noted above, high capacity “middle mile” infrastructure investment is essential to providing faster broadband speeds. By constructing or interconnecting to appropriate high capacity “middle-mile” facilities, entities can offer faster broadband speeds. Likewise, “last mile” infrastructure investment in “unserved” areas will provide reliable broadband to many households in rural and smaller markets for the first time. For example, “last mile” projects such as digital headend upgrades would allow cable operators to transition to all-digital systems, using much of their existing plant. By doing so, the cable operator would be able to reclaim and reallocate valuable bandwidth on the plant, which it could then use to offer broadband for the first time, or faster broadband speeds than what is currently offered.

“Middle mile” and “last mile” projects are therefore vitally important to providing broadband service to “unserved” areas. Permitting broadband grant and loan funds to be spent on both “middle mile” and “last mile” projects in these areas will have a profound impact on broadband deployment in sparsely populated and geographically challenged communities where current economics make providing high-speed Internet nearly impossible.

Long-term feasibility of a project. Before awarding scarce stimulus funds to projects, NTIA and RUS should also judge the long-term feasibility of an investment by

taking into account the following three factors. First, NTIA and RUS should consider the applicant's operational, technical, and financial expertise. Such an analysis should focus on: (1) the length of time that the applicant has operated in the region where the grant funds are to be directed; (2) the experience of the applicant's management team and personnel; and/or (3) whether the applicant has been operating for at least three years.

Second, NTIA and RUS should consider an applicant's ability to make use of their own existing networks and resources in the area where the requested funding is to be directed. Finally, NTIA and RUS should consider the sustainability/economic viability of the ***project being funded*** after receiving stimulus grants or loans. In other words, an entity which has received funds to build or upgrade facilities must not rely on other sources of government funding or assistance, such as the Universal Service Fund, to operate the facilities.

F. Financial Contributions from Applicants.

NTIA further seeks comment as to what an applicant should show to establish "financial need" necessary to receive more than 80% of a project's total cost in grant funds, as well as what showing would be necessary to demonstrate that the proposal would not have been implemented without Federal assistance.[16]

NTIA should mandate that all applicants have available 20% of funds for a project, except that NTIA may grant more than 80% of a project's costs if an applicant is a smaller entity.[17] For purposes of this problem, the NTIA and RUS should consider a

[16] Joint Request at 10718-19.

smaller entity to be an existing video, broadband, or phone provider with 5,000 broadband subscribers or less. To receive more than 80% of a project's costs, the smaller entity must satisfy the following prerequisites.

First, an officer of the smaller entity must certify under penalty of perjury that the smaller entity cannot commit 20% of the project's cost to the project, and provide the most recent audited or unaudited financial statements validating the certification. Second, the smaller entity must have operational, technical, and financial experience based on an analysis of: (1) the length of time that the smaller entity has operated in the region where the funds are to be directed; (2) the experience of the smaller entity's management team and personnel; and/or (3) whether the smaller entity has been operating for at least three years. An officer of the smaller entity must also certify under penalty of perjury that the smaller entity has the resources and expertise to independently operate any infrastructure constructed as part of any grant. Lastly, the smaller entity must demonstrate, and an officer of the smaller entity must certify under penalty of perjury, that the project would not have been implemented without Federal assistance.

G. Grant Mechanics.

NTIA and RUS further seek comment as to the mechanisms that they should use, in addition to traditional grant and loan programs, for distributing stimulus funds.[18] In considering the granting of stimulus funds, and to best effectuate the purposes of the Recovery Act, grant mechanisms should be streamlined with the minimum amount of paperwork necessary to assure that a project meets the requirements for the grant, and

[18] *Id.* at 10718.

ensure that the applicant has the resources and expertise to operate the facilities for which funding is sought.

Additionally, NTIA and RUS should also place grant application forms, instructions, pending applications, and award notices online. NTIA and RUS should also avoid awarding redundant grants for overlapping service areas. For smaller entities—existing video, broadband, or phone providers with 5,000 broadband subscribers or less—seeking grants below a threshold of $5 million, NTIA should also adopt and provide those applicants with a short-form application. Smaller entities have less financial and administrative resources to devote toward complicated applications, and a streamlined process and short-form application would ensure that the application process is fair to all interested parties, regardless of size.

Furthermore, NTIA and RUS should ensure that the grant and loan selection process is open and transparent, which will allow the public to comment on whether the stimulus funds are distributed where they are most needed and guard against government waste.

H. Role of the States in Awarding Broadband Stimulus Funds; Timely Completion of Projects; and Coordination Between NTIA and RUS.

Role of the States in Awarding Broadband Stimulus Funds. NTIA also seeks comment on how it should coordinate with States in awarding broadband stimulus grants under BTOP.[19] NTIA and RUS should consult with States in awarding grant funds. However, NTIA and RUS, not the States, should ultimately determine the priority of funding projects based on how each project advances the stated purposes of the

[19] *Id.* at 10717.

Recovery Act and BTOP.

Timely Completion of Projects. NTIA also seeks comment on how to implement BTOP efficiently and expeditiously so that grant awards are made by the end of fiscal year 2010, as well as how applicants should show that projects can be completed within two years.[20] NTIA should require applicants to certify under penalty of perjury that projects will be completed within two years, and submit a project timeline toward that goal.

Coordination Between NTIA and RUS. RUS further seeks comment on what ways NTIA and RUS could best align their Recovery Act broadband activities to make the most efficient and effective use of stimulus funds.[21] RUS should adopt the recommendations on project priorities and grant mechanics detailed in these comments. Moreover, the programs should work in tandem so that no particular entity has an advantage in receiving any of the $7.2 billion in grant and loan funds (*e.g.*, just because an entity is a preferred applicant under the RUS program).

III. Conclusion.

In order to accomplish the ultimate goal of widespread broadband deployment, NTIA and RUS must ensure that the broadband stimulus funds appropriated by Congress in the Recovery Act are effectively and efficiently distributed. ACA welcomes the opportunity to provide comments in response to the Joint Request, and urges NTIA and RUS to adopt the proposals outlined by ACA in these comments.

[20] *Id.* at 10719.

[21] *Id.* at 10720.

Respectfully submitted,

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EXHIBIT 1

Providing Broadband to "Underserved" Areas:
The Need for Investing in "Middle Mile" Infrastructure

The lack of high-speed broadband in "underserved areas" is due to a lack of economically viable ways of connecting existing "last mile" facilities with the Internet; the high-speed, broadband connectivity between rural broadband cable and telephone plants and the Network Access Points (NAPs) they must connect to, which are almost exclusively located in major urban centers.

The following suggests that there is an alternative focus to the discussion about delivering high-speed broadband service to "underserved areas" that is not getting sufficient attention, and that the alternative of dealing with the "middle mile" issues are as important as focusing on the "last mile."

Premise One: **Broadband capability already exists in many parts of rural America.**

A cable plant has immense broadband capability, but it is just a question of assigning capacity to different applications. Whether the cable plant is a 450, 550, 750, 860 Mhz plant or higher, all of them have inherent broadband capacity and capability that far exceeds, for instance, what the South Koreans are delivering to the home in Internet connectivity. This is borne out by the recent development of DOCSIS 3.0 capability, where cable is enabled to provide 50Mb, 100Mb or even higher speed connections. It should be noted that even the basic DOCSIS 1.0 capability is 27Mb/s—far higher than the international norm. Of course that speed is then divided by the number of simultaneous users and we get into all the debates about how many people should be on a "node" and when the operator should split the nodes to increase speeds again once usage goes up.

But this discussion seems to miss the fundamental point; the operator already has, or can create without a major infrastructure rebuild, the basic bandwidth to split those nodes. It is not a question of whether the infrastructure is there to do it (even, potentially at the cost of reassigning some video offerings from the system, or engaging in other bandwidth recovery techniques, which will be discussed later), rather it is a question of the cost and demand. Additionally, it's necessary to re-calibrate, to some degree, the way we think of these issues as they apply to "underserved areas." While we may be talking about "splitting a node" to maintain

adequate “high-speed” access in an urban area by going from a 500-home node to a 250-home node, in small markets and rural areas we are talking about some communities—particularly the “underserved” and “unserved” communities—where the entire subscriber population is 50, 100, or 150 households. The *bandwidth* capability is there; the *service* is not.

Premise Two: **Delivery of “High-Speed” broadband *service* in “underserved areas” is dependent on reasonable “middle mile” costs.**

As an example, I encountered a situation where a broadband cable plant is already in place in a very small town. The operator already competes with, among others, the local telco offering DSL and two satellite competitors. The operator is still very successful and retains a plurality of the subscribers in town: 50. The operator is fully capable of going to DOCSIS 3.0, but there is no economic reason to do so because there is no economically viable way of connecting the town to the NAP hundreds of miles away. In essence, putting in DOCSIS 3.0 would empower every home with a “fire hose” capability, but the cost of just using a very limited “straw” from the town to the NAP is already so expensive that internet availability is constrained.

Again, the broadband capacity in town is already there. But to attach real numbers to this dilemma, the quoted cost from the Telco in that community—the only one with connectivity capability to the NAP—for a single T-1 line (1.544Mb/s), which is not really adequate for any true high-speed delivery to 50 subscribers, was $1371 per month. The cost of connectivity alone—the “middle mile” cost per subscriber in that community—was $27.42! There is no economically viable way for a “last mile” cable operator to offer high-speed internet service when the “middle mile” cost incurred is so high that it makes the subscriber offering totally unattractive. There is no reason for the operator to do “line extensions” to even more rural “unserved” customers if those customers cannot afford the service.

I am not in a position to derive aggregate numbers on this scenario, and I agree that the example just given may be an extreme one, but when discussing “underserved areas” and the policy and stimulus focus on extending broadband *service* to those areas, we are indeed talking about small population areas and very high prices. I was given a recent estimate that while connectivity costs within a high-density urban area are now running under $1.00 per subscriber, in small markets and rural areas those

same connectivity costs are ***seven to eight times higher***. Those costs go exponentially up from there in the smallest and most rural communities.

Premise Three: **Solving the "middle mile" connectivity cost issue will lead to significant, broad-based improvement in high-speed broadband availability in "underserved areas."**

If, as I suggest, there is broadband infrastructure in place in "underserved areas" that is capable of delivering high-speed broadband internet access, then eliminating the primary economic and infrastructure barrier to delivering that service will result in a significant increase in such offerings. There is no inherent reason a local cable operator, who already has bandwidth available for such service, would not offer the service if the barrier to entry to NAP connectivity is ameliorated.

There may be some situations where the operator would need to free up bandwidth or reclaim some currently used bandwidth for other purposes in order to make the service available, but there is no current incentive to do so given the insurmountable connectivity barrier. Reclamation could take the form of redesigning the broadcast offerings on the cable system, or accelerating a transition to digital distribution, particularly by moving from MPEG 2 to MPEG 4 compression. That step by itself could double the useable bandwidth. Economic stimulus funds could appropriately be used to accomplish that.

However, the notion that entire new systems, particularly FTTH or IP-based systems, need to be built to accomplish the goal of expanding broadband high-speed access in "underserved areas" is misplaced. In this instance the telcos are already providing DSL service of increasing speed and efficiency. The introduction of competition can best be accomplished by solving the "middle mile" problem.

In this scenario, both "underserved" and "unserved" rural and small market residents gain. The underserved constituency gets the opportunity for access to far higher-speed broadband delivery. Eliminating the economic barrier faced by the cable operator of "middle mile" connectivity allows the operator to structure an attractive broadband offering that is economically viable, and which allows the operator to justify the cost (which might also fall under stimulus purview) of line extensions to those areas and to residents that are truly "unserved."

CONCLUSION

The lack of high-speed broadband in "underserved areas" exists due to a lack of economically viable ways of connecting existing "last mile" facilities with Network Access Points (NAPs). Thus, resolving the "middle mile" issue in "underserved areas" would induce more competition in the "last mile," while not unfairly favoring any of the "last mile" providers. It could also significantly increase the availability of true high-speed broadband access.

Not resolving the "middle mile" issue fails to adequately deal with the objective of delivering high-speed broadband services to those in "underserved areas." I have yet to encounter any significant policy argument against resolving the "middle mile" issue, and it could be structured in a very economically efficient way that would foster competition and not put the government in the position of favoring any of the service competitors in "underserved areas."

**Stephen R. Effros is President of Effros Communications, a telecommunications consulting firm specializing in strategic development and communications. He was an Attorney-Advisor at the Cable Television Bureau of the FCC for five years (1971-1976) during the formative stages of the development of federal rules on cable television. He was President of the Cable Telecommunications Association (CATA) for 23 years.*