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better broadband

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Towerstream, Inc. Response to NTIA/RUS Broadband Request for Information (RFI)
Docket No: 0907141137-91375-05
Via electronic mail: broadbandrfi@ntia.gov

Attention: RFI Comments

The purpose of this letter is to file public comment to the agencies' joint request for information.

Towerstream (NASDAQ: TWER) is based in Middletown, RI. Towerstream delivers broadband wireless internet access to businesses in the largest U.S. urban markets and is recognized as a leader in the fixed wireless and WiMAX industries. TWER has more than a decade of experience providing Internet service across the United States. The Company presently provides service in nine markets including New York City, Boston, Los Angeles, Chicago, the San Francisco Bay area, Miami, Seattle, Dallas-Fort Worth, and the Providence-Newport, RI area where the Company is based. The Company opened its first market, Providence, in 2001, and has expanded steadily over nearly a decade.

Towerstream applied for BTOP infrastructure grants during Round One and this public comment aims to provide the federal government the benefit of TWER's experience with the first round application process and our experience building broadband networks.

Summary: The broadband needs of rural and urban areas are vastly different. Rural and remote areas often have limited or no access to broadband infrastructure. Many urban communities have pockets in which broadband service is lacking, or entirely unavailable, despite the presence of existing carriers in the marketplace. The development of a customized solution to reach the urban underserved will result in the most optimal use of federal funding. This approach will have the added benefit of maximizing the funding available for reaching the rural unserved and underserved populations.

Two important changes are needed in Round Two to ensure that the statutory purposes to (i) create jobs and (ii) stabilize state and local government budgets are fulfilled. These changes are:

- Definitions of "unserved" should reflect that urban small businesses and individuals are often unserved, despite the presence of an existing carrier, because only 2 % of businesses use cable for broadband (*FCC National Broadband Plan Workshop, Economic Issues in Competition, 10/9/09*);
- Applications that utilize state and local funding to provide the mandated matching contribution should be penalized in the scoring system used to rate applications. Publicly-sponsored applications are establishing current and future financial obligations, in addition to the match offered, that directly contradict the statutory purpose to stabilize state and local budgets.

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RFI Response:

I. **Application and Review Process** – We believe that the application process for Round One was diligent. The process associated with building a robust broadband network is complex and lengthy. It is incumbent upon public officials to spend taxpayer funds judiciously by requiring applicants to demonstrate they are capable of building broadband infrastructure.
   a. New entities need to be able to demonstrate appropriate expertise in building this infrastructure if they are applying for public funds. Historical financial statements are a vital component of determining whether an entity is capable of a project of this magnitude.
   b. Consortiums and public-private partnerships do not inherently provide better broadband infrastructure. Requiring more substantial representation of partnership for Round Two could have the effect of stymieing technological sophistication and competence for the sake of partnerships that have historically developed organically where competition exists. Further, publicly-sponsored applications are establishing future operational liabilities, in addition to the match offered, that directly contradict the statutory purpose of the act. Many consortiums are thus adding an additional layer of overhead to a project, or are starting an enterprise that is other than their core mission.
   c. Specification of Service Areas – the level of detail was appropriate for the first round. Ideally, these funds would be awarded when the federal broadband map is completed to ensure all applicants are competing with comparable information.

II. **Policy Issues Addressed in NOFA** – Towerstream's primary policy observation of the Round One NOFA and various public comments responding to it is that the underserved definitions established a structural bias against urban underserved communities. This view would put the NOFA at direct odds with the statutory purposes established by Congress in the Recovery Act to stimulate economic growth and job creation. Towerstream's experience from Brooklyn to Philadelphia to Los Angeles to Dallas is that pockets of urban communities are in as great of need of broadband as rural underserved communities are. The largest number of businesses and individuals reside in the urban areas, and therefore, represent the best opportunity to foster economic growth and job creation. Much of the focus of job creation has been on how many jobs will be directly created by the applicant. While this program will surely create direct jobs for recipients, the greatest job creation opportunity lies with small and medium-sized businesses that gain access in urban underserved areas.
   a. Funding Priorities – Round Two should remedy the perceived exclusion of urban underserved. Cost-effectiveness of wireless broadband for urban areas allows public dollars to go further, including reaching rural areas. Urban and rural underserved individuals should benefit from this program.

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Broadband access also provides the greatest opportunity for job creation in these urban areas because of the density of the population base in these still underserved communities. It is incumbent that broadband access be provided to the underserved in urban populations, in addition to rural underserved, to achieve the statutory purposes of the Recovery Act.

i. Middle-mile "Comprehensive Community" Projects – The goal should be to provide new coverage to the greatest number of people. Anchor institutions should be among those with new access. However, they are not inherently better providers of broadband and the federal government should not target these institutions as facilitators of broadband as it is not their core mission. In fact, Comprehensive Community projects have not enjoyed success in this country with citizens often left without broadband despite the best efforts of local leaders. This program should prioritize its core purpose of providing infrastructure funding based on proven models of reaching consumers and businesses once the infrastructure is in place.

ii. Economic Development – Broadband deployment would benefit from being linked to other complementary actions, such as workforce training; however, this should not be a prerequisite. Entrepreneurs need access to affordable broadband. Scarce broadband infrastructure dollars should not be diverted from this core purpose when the infrastructure need is so great.

iii. Targeted Populations -- Broadband infrastructure should be targeted to areas where low-income populations exits. However, this can be achieved through a sustainable model – charging market rates to certain businesses enables the delivery of service to public housing and other anchor institutions on a discounted basis. This will mitigate the unintended consequence of creating future operational liabilities for state and local governments, contrary to the statutory purpose of alleviating their budget challenges.

b. Program Definitions – The "underserved" definition for Round One was technology neutral in classifying an area as served. However, it is recognized that different broadband solutions reach end-users at varying rates of penetration. For example, only about two percent of business lines are provided by cable (*FCC National Broadband Plan Workshop, Economic Issues in Competition, 10/9/09*). This means for areas in which cable is the only broadband access – which is likely to include many urban areas – there is, in effect, no broadband access for small businesses. Businesses in these urban areas are actually unserved and any new definition established for BTOP funding needs to account for this disparity.

i. According to the Small Business Administration, small businesses have accounted for 60-80% of all net new jobs created over the last decade. It is expected that job recovery from the current recession

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will be driven by hiring by small and medium sized businesses. For the program to fulfill its statutory purpose of creating jobs, it must support technologies that support small businesses in urban areas.

ii. Speed – The minimum speed requirements for Round One were established with the best of intentions. However, a modern economy requires a higher standard. "Symmetrical" high speed broadband is critical because bandwidth intensive applications of today such as video, voice, telemedicine, WebMD, workforce training, professional development, working from home, etc., require parity of upload and download speeds. For example, high definition (HD) video teleconferencing requires 8 Mb of throughput upload and downloads speeds. With non-symmetrical offerings such as typical cable, or DSL, HD video conferencing would not be impossible due to the small upload speeds. At a minimum, Round Two should establish faster speed requirements for NTIA awards.

c. Public Notice of Service Area – Applicants must have access to the data used to challenge their applications. Because applicants are required to submit their own data until we have the predictability of uniform standards provided for in a national broadband map, they must be able to see any data used to refute their assertions. Further, RUS/NTIA should take into account penetration rates of subsets within a defined census blocks (e.g., businesses, or anchor institutions) to determine if the carrier claiming existing service is actually meeting the needs of the community.

d. Cost effectiveness – Cost effectiveness should be one of the primary weighted factors in Round Two for determining funding awards. The overwhelming response to the BIP/BTOP broadband program indicates that there remains a significant need for broadband in this country. Therefore, it is vital that the federal government fund the most cost-effective projects available to allow federal, state and local dollars to go further. This means that the technology chosen will influence the cost in certain geographical locations. There are proven wireless technologies for urban areas that are a fraction of the cost of fiber. Scarce resources can be stretched further so that fiber solutions are utilized where the terrain and distance require the most costly solution.

i. State and local government – Further, state and local budgets should be considered in evaluation of the cost effectiveness of an application. Private match should be weighted more heavily in favor of applicants than those using state and local government matches. Awarding funds to any project that includes state and local government funding as part of its application, or require ongoing operational support, directly contradicts the statutory purpose to stabilize state and local government budgets.

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e. Other – Because Towerstream made application in 15 different states, we had an opportunity to see how the various states handled the requirement for each governor to provide input to NTIA. These ranged from the written request for submission of information, like California, to informal face to face meetings to informal telephone conference and to email exchanges but requiring no information.

We believe that the best method was demonstrated by Arizona who held a public meeting before an advisory panel made up of representative of numerous impacted state agencies. This informal "hearing" which allowed for interested applicants to make 10-15 min presentations was an excellent way for the reviewers to gain additional insight into the applicants and their proposed projects. This open process gave applicants an opportunity to present their project to the public which creates opportunities to see if partnerships could be formed. The Arizona process concluded with a second public meeting where the committee announced its recommendations and then groups were given an opportunity to speak to the committee who reserved the right to reconsider its recommendations to the governor.

Thank you for you kind attention to this submission. If I can be of further assistance to you, please do not hesitate to contact me via telephone at 866-848-5848, x222, or via e-mail at Jeff@towerstream.com.

Sincerely,

Jeff Thompson
President and CEO