How to Fund Your Broadband Wireless Network

Wireless broadband has been growing steadily over the last few years, especially as the performance of wireless technologies has caught up with and surpassed traditional wired broadband infrastructure. One of the key enablers for this growth is the number of government grants available that can be utilized to fund wireless broadband initiatives. You may think that these grants are limited to certain types of organizations or that they are too hard to apply for and secure to be worth the time. Fortunately, that’s not true at all.

At Proxim, we have hundreds of customers that have secured grants of all kinds to either help fund their deployments or — in many cases — pay for the entire deployment altogether. As a result, we’ve compiled the following quick start guide to provide you with an overview of the options that are available to you today to help fund your wireless broadband network — as well as an overview of the many new federal grants that are now available as part of the American Recovery and Reinvestment Act stimulus package.

Proxim Makes it Easy with GSA Inclusion

Proxim has been awarded an IT professional services contract with the U.S. General Services Administration (GSA), making it that much easier for U.S. state and local governments to purchase Proxim’s wireless broadband products. Now any U.S. government agency can purchase any of the products in Proxim’s end-to-end wireless broadband portfolio using the GSA Schedule, thus assuring them the most favorably priced custom solutions. Additionally, agencies can easily search for and purchase Proxim’s solutions online using the GSA Advantage! Website by visiting: http://www.gsaadvantage.gov. For more information on how to become eligible to purchase products from the GSA schedule, contact Proxim at 1 800-229-1630.

The following is a quick resource guide with helpful links to the information you need to get started applying for grants that are available today.

EXISTING GRANTS & RESOURCES

1) USDA Funding for Rural Areas

The United States Department of Agriculture (USDA) is one of the key providers of funding for rural broadband projects. There are hundreds of grants available to enable projects ranging from SCADA applications, transportation initiatives, and broadband extension programs.

For a complete list of the existing USDA grants available, please visit http://www.ezec.gov/Fundseekers%20Guide%20to%20the%20Galaxy/Federal%20Funding%20List.htm.

Once you’ve identified the reference number for the grants that may be applicable, visit www.usda.gov for more information on the individual grants and how to apply.

For a list of 2009 USDA grant money available and to download the grant toolkits, please visit: http://www.usda.gov/rus/telecom/dlt/dlt.htm.

2) Rural Development Community Connect Program

Also offered through the USDA, the Rural Development Community Connect program is dedicated to providing funding to extend broadband services to areas that are currently not served. Today, more than 20 million Americans in rural areas still have no option for broadband connectivity, often due to the high cost of running fiber to these remote locations. Proxim’s broadband wireless technologies enable the cost effective delivery of high-performance broadband to these areas. And at a fraction of what traditional wired telecom networks would cost, these broadband wireless networks are often able to be completely funded by federal grants from the USDA. For one example of a rural community that took matters into their own hands and secured $7 million in funding from the USDA to bring wireless broadband to their town, please see http://ir.proxim.com/releasedetail.cfm?ReleaseID=359091.
To apply for a Rural Development Community Connect grant, you must first register in the Central Contractor Registration (CCR) site, which can be found here: http://www.ccr.gov/.

After registering at the CCR, you can then apply for a grant online at http://www.grants.gov/.

3) Community Programs and Facilities Grants
Community Programs and Facilities provide grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population. Grants are authorized on a graduated scale. Applicants located in small communities with low populations and low incomes will receive a higher percentage of grants.

Grants are available to public entities such as municipalities, counties, and special-purpose districts, as well as non-profit corporations and tribal governments. For more information on how to apply, please visit: http://www.rurdev.usda.gov/rhs/cf/cp.htm.

4) Homeland Security Grants
The Department of Homeland Security (DHS) is another major provider of funds for broadband wireless networks, as these networks are often key components for the delivery of critical security applications, such as wireless video surveillance. Regardless of the whether you’re trying to secure your city, your transportation infrastructure (like bridges, roads, public transportation, etc.), a government building, ports, borders and more – the Department of Homeland Security has a wide range of grants available.

To get started, please visit http://www.fema.gov/government/grant/hsgp/index.shtm to identify the grant that may be the best for your deployment. At the bottom of this page you will find links to the instructions and forms you need to apply for these grants.

5) The Infrastructure Protection Program (IPP)
The DHS’ Infrastructure Protection Program (IPP) is designed to strengthen the Nation’s ability to protect critical infrastructure facilities and systems. IPP is comprised of five separate grant programs: the Transit Security Grant Program (TSGP), the Port Security Grant Program (PSGP), the Intercity Bus Security Grant Program (IBSGP), the Trucking Security Program (TSP), and the Buffer Zone Protection Program (BZPP). Funding under these grant programs will total roughly $445 million for state, local and private industry infrastructure protection initiatives. Together, these grants fund a range of preparedness activities, including strengthening infrastructure against explosive attacks, preparedness, planning, equipment purchase, training, exercises, and security management and administration costs. IPP programs support objectives outlined in the interim National Preparedness Goal and related national preparedness doctrine, such as the National Incident Management System, the National Response Plan, and the National Infrastructure Protection Plan. For more information, please visit http://www.ojp.usdoj.gov/odp/grants_ipp2007.htm

- Transit Security Grant Program (TSGP)
The TSGP provides grant funding to the nation’s key high-threat urban areas to enhance security measures for their critical transit infrastructure including bus, rail and ferry systems. This year, the TSGP will also provide funding to Amtrak for continued security enhancements for their intercity rail operations between key high-risk urban areas throughout the United States. For more information, please visit http://www.ojp.usdoj.gov/odp/docs/fy07_tsgp_guidance.pdf.

- Port Security Grant Program (PSGP)
The PSGP provides grant funding to port areas for the protection of critical port infrastructure from terrorism. PSGP funds are primarily intended to assist ports in enhancing risk management capabilities, enhanced domain awareness, capabilities to prevent, detect, respond to, and recover from attacks involving improvised explosive devices (IEDs) and other non-conventional weapons, as well as training and exercises. For more information, please visit http://www.ojp.usdoj.gov/odp/docs/fy07_psgp_guidance.pdf.
• **Intercity Bus Security Grant Program (IBSGP)**
The IBSGP provides funding to create a sustainable program for the protection of intercity bus systems and the traveling public from terrorism. The FY07 IBSGP seeks to assist owners and operators of fixed-route intercity and charter bus services in obtaining the resources required to support security measures such as enhanced planning, facility security upgrades, and vehicle and driver protection. For more information, please visit http://www.ojp.usdoj.gov/odp/docs/fy07_ibsgp_guidance.pdf

• **Buffer Zone Protection Program (BZPP)**
BZPP provides grant funding to build security and risk-management capabilities at the State and local level to secure pre-designated Tier I and Tier II critical infrastructure sites, including chemical facilities, financial institutions, nuclear and electric power plants, dams, stadiums, and other high-risk/high-consequence facilities. For more information, please visit http://www.ojp.usdoj.gov/odp/docs/fy07_bzpp_guidance.pdf.

6) **The Grant Seeker's Guide to the Galaxy**
Regardless of which grants you pursue, we would recommend you start at a simple site called “The Grant Seeker’s Guide to the Galaxy”. This site has a ton of links and resources to not only help you find the grants that are right for you and your organization, but it also includes links to many presentations and tutorials on how to write the best, most effective grant proposal possible to ensure that you can secure the funding you need. To get started, visit http://www.ezec.gov/Fundseekers%20Guide%20to%20the%20Galaxy/TheGrantSeeker.htm.

**UPCOMING FUNDING OPPORTUNITIES**
The American Recovery and Reinvestment Act was signed into law on February 17, and contains a wide variety of provisions that could help you fund your broadband wireless network.

The final stimulus package includes $7.2 billion for the extension of broadband services to the nearly 20 million Americans that do not have access to broadband services today. While $1 billion of that is clearly earmarked for wireless broadband services, you can apply for and secure significant portions of the remaining $6.2 billion allocated for general “broadband” as well.

You see, with wireless broadband technology being able to provide equal (and in many cases greater) throughout as wired technologies for a fraction of the cost of purchasing and trenching for fiber (with a cost at least 10x lower), wireless is a far more fiscally responsible option for deploying broadband services to remote areas than wired technology. And when it comes to doling out stimulus money – especially in this economic climate – the ability to show how utilizing wireless can cost-effectively reach many more people than wired technology will help differentiate your proposals.

The funding opportunities do not end with the obvious “broadband” provisions in the stimulus, however. There are a great deal of infrastructure, state and local government, and energy provisions where wireless broadband can be used as part of the solution.

**Overview of Funding**
- National Telecommunications and Information Administration (NTIA) -- $4.7 billion
- Rural Utilities Service (RUS) -- $2.5 billion
- Health Information Technology -- $1.5 billion
- Electricity Delivery and Energy Reliability -- $4.5 billion
- Department of Labor -- $250 million
1) The NTIA's Broadband Technology Opportunities (BTO) Program

The NTIA will be establishing a national broadband service development and expansion program to help drive the development of broadband services nationwide. The funding for the BTO breaks down into the following categories:

- $3.75 billion for NTIA grants
- $350 million for broadband inventory map
- $250 million for programs to encourage adoption of broadband services
- $200 million for expanding computer center capacity
- $140 million for administration costs and FCC
- $10 million for monitoring and auditing

The NTIA grants will be made available soon, and will be available until September 30, 2010. In order to utilize the funds, all funded broadband deployment projects must be completed within two years of receiving the grant. To track the progress of the NTIA BTO grant program, please visit http://www.ntia.doc.gov.

Once these grants are made available, priority will be given to broadband projects that:

- Provide broadband access in rural areas with no existing broadband options
- Improve broadband access in under-served areas
- Provide broadband education, awareness, training, access, equipment, and support
- Improve access for public safety agencies
- Stimulate demand for broadband and spur economic growth and job creation

Regarding the use of these funds, the NTIA BTO grants will be made available to:

- Acquire equipment, instrumentation, hardware and software, digital network technology, and infrastructure for broadband services
- Construct and deploy broadband service related infrastructure
- Ensure access to broadband service by community anchor institutions
- Facilitate access of broadband services to vulnerable populations for educational and employment opportunities
- Construct and deploy broadband facilities that improve public safety broadband communications services

NTIA grants will be awarded on a technologically neutral basis, so there will be no minimum data speeds for the broadband projects it supports. The intent is for as many entities as possible to be eligible for these grants, including:

- Wireless carriers
- Wireline carriers
- Backhaul providers
- Satellite carriers
- Public-private partnerships

Regarding the application process, it is very important to explain in detail how the funds will be used to carry out your broadband purposes. This is where proposing the use of Proxim’s wireless broadband equipment – which costs a fraction of wired technologies – is a good tactic to show that you are being as fiscally responsible as possible with the buildout of your network. You must also show that without the grant you are applying for, the project would not be able to be implemented. Next, you must demonstrate your organization’s capability to perform the project, whether via your own capabilities of through a partner you plan to contract with. And finally, you must disclose other funding sources and provide assurance that all funds will be used and accounted for in an appropriate manner.

To track the status of the availability of NTIA grants, please visit http://www.ntia.doc.gov.
2) Rural Utilities Service (RUS)
Electricity, telephone, water and waste disposal services have been taken for granted in American cities since at least the 1920's. But if you lived in a rural area only 60 years ago, chances are you went without these necessities of modern life and high standard of living they make possible.

Modern utilities came to rural America through some of the most successful government initiatives in American history, carried out through the United States Department of Agriculture (USDA) working with rural cooperatives, nonprofit associations, public bodies, and for-profit utilities. Today, USDA Rural Development Utilities Programs carries on this tradition helping rural utilities expand and keep their technology up to date, helping establish new and vital services such as distance learning and telemedicine.

The public-private partnership which is forged between Rural Development Utilities Programs and these industries results in billions of dollars in rural infrastructure development and creates thousands of jobs for the American economy. As part of the American Recovery and Reinvestment Act, the RUS has now received an additional $2.5 billion in additional funding for broadband loans, loan guarantees, and grants. This triples the total 2008 RUS funding. Funds are available immediately, and will be available until September 30, 2010.

Projects receiving RUS funding cannot get funding from the NTIA, discussed in the section above. Funding is available in any area of the U.S., but at least 75% must go to rural areas without sufficient access to high speed broadband.

Priorities for RUS funding include:
- Projects that will deliver a choice to end users of more than one service provider in under-served areas
- Projects that provide service to the highest proportion of rural residents without access to broadband in un-served areas
- Projects that will be fully funded by these grants
- Projects that can be fully completed with the amount of the grant
- Projects all research has been done so that they can commence immediately upon approval

The RUS Community Connect Grant Program
The RUS Community Connect Grant Program provides broadband service on a community-oriented connectivity basis to the most rural and economically challenged communities. The Community Connect Grant Program provides loans for the cost of construction, improvement, and acquisition of facilities and equipment for broadband services in eligible rural communities. Unlike the NTIA grants, there is a required broadband transmission speed of 200 kbps down/up. However, there are no network neutrality requirements.

Eligible organizations for the RUS Community Connect Grant Program include, incorporated organizations, Indian tribe or tribal organizations, state or local unit of government, cooperatives, private corporations, and limited liability companies. Ineligible organizations include individuals, partnerships, and any entity that serves more than 2% of telephone subscriber lines in the U.S.

Additional eligibility requirements for the Community Connect Grant Program include:
- Serve rural areas throughout which broadband transmission services does not currently exist
- Serve one and only one Community recognized in the latest Bureau of Census or Rand McNally Atlas
- Provide a Community Center with at least 10 Computer Access Points free of charge to users for at least 2 years
- Deploy basic broadband transmission service free of charge for at least 2 years to critical community facilities
- Offer Basic Broadband transmission service to residential and business customers
- Demonstrate at least 15% matching contributions (e.g., cash, in-kind contributions)
Regarding the use of these funds, the RUS funds will be made available for:

- Construction, acquisition or leasing of facilities needed to offer broadband service to residential & business customers
- Improvement, expansion, construction or acquisition of a Community Center, but the cost cannot exceed 5% of requested amount or $100,000
- End-user equipment needed to carry out project
- Operating Expenses incurred to provide broadband to Community Center for first 2 years of operation and to provide training, but the cost cannot exceed $250,000
- Purchase of land, buildings, or building construction needed to carry out the project

The application deadline for the RUS Community Connect Grant Program is March 28, 2009. Minimum and maximum funding amounts are currently $50,000 and $1 million respectively for 2009.

The criteria that will be used to rank and award grants are as follows:

- Rurality, which is the overall population of the community being served
- Rural area, which is any area not located within the boundaries of any incorporated or unincorporated city, village or borough having a population in excess of 20,000
- Economic need, based on the median household income of the community as a percentage of state average
- Community-oriented connectivity benefits, including local community involvement in the planning and implementation

To view all of the available grants and to apply, please visit: http://www.rurdev.usda.gov/rd/nofas/index.html

3) Distance Learning and Telemedicine Programs

The USDA is now accepting applications for grants through the Distance Learning and Telemedicine (DLT) Grant Program to provide access to education, training and healthcare resources in rural areas. Funding for the program is subject to Congressional appropriations.

In 2008, USDA Rural Development provided grants totaling $28.2 million under the program to 105 recipients in 41 states.

Complete applications must be received by March 24. For further details about eligibility rules and application procedures, see the December 24, 2008, Federal Register, page 79041. Materials including an application guide and full details about the program can also be obtained at www.usda.gov/rus/telecom/dlt/dlt.htm or by calling the DLT program at 202-720-0413.

USDA Rural Development’s mission is to increase economic opportunity and improve the quality of life for rural residents. Rural Development has invested nearly $111 billion since 2001 for equity and technical assistance to finance and foster growth in homeownership, business development, and critical community and technology infrastructure. More than 2 million jobs have been created or saved through these investments. Further information on rural programs is available at a local USDA Rural Development office or by visiting USDA’s web site at http://www.rurdev.usda.gov.

ABOUT PROXIM WIRELESS

Proxim Wireless Corporation (NASDAQ: PRXM) is a leading provider of end-to-end broadband wireless systems that deliver the quadruple play of data, voice, video and mobility to all organizations today. We are 100 percent focused on wireless technology, and that focus enables us to provide a complete portfolio of WLAN, Wi-Fi mesh, WiMAX (point-to-multipoint), and point-to-point technologies.