



**Broadband Infrastructure Application
Submission to RUS (BIP) and NTIA (BTOP)**

Submitted Date: Easygrants ID: 195	
Funding Opportunity: Broadband Initiatives Program and Broadband Technology Opportunities Program	Applicant Organization: Plumas-Sierra Telecommunications
Task: Submit Application - Infrastructure Programs	Applicant Name: Mrs. Lori D Rice

Reasonableness of Project Budget
The project advances at least one of the statutory purposes for BTOP
Applicant has provided documentation that the project would not have been implemented during the grant period without federal grant assistance.
Applicant has provided a budget that is appropriate to the proposed technical solution and only includes eligible costs.

- Demonstration the Project Could not be Implemented But For Federal Grant Assistance**
Applicant is providing matching funds of at least 20 percent towards the total eligible project costs?
Yes

7-k. Cost Sharing/Matching Fund Explanation
n/a

C. Executive Summary

Executive Summary of Project for BIP and BTOP:

8. Infrastructure Projects Executive Summary
Plumas-Sierra Telecommunications, a subsidiary of Plumas-Sierra Rural Electrical Cooperative (a current RUS borrower), is seeking [redacted] in funding to bring next-generation, affordable, wireless broadband services to areas within northeastern California that have the highest unserved and underserved populations. Due to terrain challenges and low population density, current broadband Internet access methods are overpriced and under-delivered. But through WiMAX (Worldwide Interoperability for Microwave Access), we will be able to deliver affordable, reliable broadband service within the guidelines set forth within the NOFA of 67% completed within 24 months and a project completion goal of 36 months from funding. Plumas-Sierra and its affiliate, NorCal Broadband Access Consortium, are working together to leverage operational support, drawing from one another's expertise to reduce costs. The NorCal



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Broadband Access Consortium, in preparation of this grant application, received assistance from the Chico CSU Economic Development Center and the California Emerging Technology Fund staff to identify the unserved and underserved portions of Northern California.

Plumas-Sierra provides electrical service and telecommunications products to the residents in the target area, and were approached by these electric member-owners to bring reliable, sustainable broadband service to the region. When deployed, the system will enable residents, businesses, schools, healthcare providers and emergency responders to have a complete and affordable broadband solution.

We have already created community outreach programs such as "We Give Back," a program that returns revenues to the community and schools. Stimulus funds would ensure that Plumas-Sierra is able to continue these efforts and to support local entities with free broadband access, such as to fire and rescue stations in the region.

The proposed service areas cover Eastern Lassen County, [REDACTED]
[REDACTED]
[REDACTED] The county is approximately 40% forested terrain and 60% open valley and pasture land populated with farming and ranching families and businesses. It is 80% unserved by broadband and 20% underserved. Saturation of broadband in this region of California is absolutely necessary for future growth and economic development. Foresters, farmers, ranchers, independent business men and women, recreation, resorts, transportation, and resource management are only a few of the many services provided to California, and the Nation, in the Northern Sierras of California. Its contribution is a necessity and to ensure its continued growth and health, it is imperative that this region have access to broadband services. If not for the ARRA broadband stimulus funds these communities, households and businesses would not have the opportunity for quality broadband access. Plumas-Sierra's proposed network service area will pass [REDACTED] households and [REDACTED] businesses.

We are requesting that our proposed project area be given extra consideration as an area that meets the "remote" definition. The NOFA defines "remote" as an area more than 50 miles from a "non-rural" area. Plumas-Sierra's proposed project area is within 50 air miles of Reno, Nevada. Because this non-rural area is within a neighboring state and where no utilities or



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services cross the state border, we believe the proposed project area falls within the spirit of the NOFA and qualifies as "remote". The next closest non-rural city to our proposed coverage area, within the state of California is 79 miles away. Additionally the town of Susanville is identified on maps as "non-rural" with a population of over 20,000, however over 10,000 of the population resides in the State Correctional Facility as inmates which we believe is an exception to the definition and should not be considered as population related to households. We respectfully request the reviewers of this application consider taking into account the demographic and geographical facts related to this area and consider defining the proposed area as "remote".

The project plan includes broadband access, education, awareness, training and equipment at 31 anchor institutions located throughout the service area, including administrative offices, courthouse, law enforcement, 3 community centers, 6 first responder locations for fire and rescue and 15 schools (all levels) in the service area. This includes the Eastern Lassen County Medical Facilities, National Forest Service, California Department of Forestry, Susanville Indian Reservation, Sierra Army Depot and Federal and State prisons.

We will offer last-mile broadband access through WiMAX technology.

We will comply with the principles of the FCC Internet Policy (FCC 05-151). Customers will be entitled to access lawful Internet content of their choice, and Plumas-Sierra will not favor any lawful Internet applications and content over others. Furthermore, customers will be allowed to run applications and services of their choice, subject to the needs of law enforcement and reasonable network management, and connect their choice of legal devices that do not harm the network.

Where feasible from a spectrum perspective, Plumas-Sierra will offer a wholesale program to resellers to connect to the Plumas-Sierra network and provide service to customers. In the event towers are built with grant funding, we also will make affordable access available to other operators who wish to bring wireless broadband services to the area.

We will display our network management policies in a prominent location on our Web page and will provide notice to customers of changes to these policies. Customers will connect to the public Internet directly, and we will not operate a private closed network. Finally, where it is



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technically feasible without exceeding current or reasonably anticipated capacity limitations, Plumas-Sierra will offer interconnection on reasonable rates and terms to be negotiated with requesting parties.

WiMAX is an established international standard for wireless telecommunications that operates on licensed frequencies of radio spectrum to deliver high-bandwidth data services using all-Internet Protocol (IP) architecture. WiMAX delivers the high speeds of cable and Digital Subscriber Line (DSL) landline broadband, only wirelessly, without the high deployment costs.

While a Wi-Fi hotspot can provide wireless connectivity to a small area, a WiMAX network can blanket an entire service area with high-speed, wireless Internet connectivity at very low costs relative to wireline services. No other technology offers such a full set of differentiated voice, data, and premium video services in a variety of wireless fashions—fixed, portable and mobile.

WiMAX technology uses licensed spectrum, which translates into a reliable, sustainable, high-quality wireless broadband service. In addition, wireless broadband solutions can be readily upgraded to include mobility or additional system capacity, enhancing performance of the system without the need to dig up streets and upset the environment.

Plumas-Sierra Telecommunications is a subsidiary of Plumas-Sierra Rural Electrical Cooperative a member-owned electric distribution utility, founded in 1937, providing electrical power and related services to over 7,500 member/owners in Plumas, Lassen, and Sierra counties in California and portions of Washoe County in Nevada. Our Telecommunications division was established in 1987. We are a reputable entity, recognized in the community as an excellent employer providing great middle-class union jobs, with years of experience in designing, constructing and delivering telecommunication services and providing customer care.

We currently serve 16,200 customers in four related telecommunication business lines. We have the physical space, management team, middle-class union positions comprised of customer service representatives, technical staff, billing staff, and phone system to handle growth.

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The overall infrastructure cost of the WiMAX system will be [redacted] or [redacted] per household/business passed. With grant funding, we anticipate generating positive EBITDA/cash flow in year three, thereby ensuring project sustainability without additional government support.

We project that deployment will attract [redacted] subscribers over the initial five-year period of 2010 and 2014.

Plumas-Sierra is anticipating approximately [redacted] jobs saved as a result of a successful grant. These [redacted] employees are currently employed by Plumas-Sierra and are at risk of layoff due to a contract conclusion. [redacted]

[redacted] Should Plumas-Sierra's grant application be successful, these employees will be retained to fill the positions required to manage a broadband ISP. In addition to jobs retained Plumas-Sierra anticipates the creation of [redacted] new positions related to accounting and administration and a minimum of [redacted] jobs related to project construction. There is potential for additional new jobs created based upon successful customer growth. Plumas-Sierra employs Union members of the IBEW 1245 and has the full support of the IBEW in their endeavor to apply for grant funding and to retain and create positions for the region.

Project Purpose (BTOP Applicants Only Next Three Questions)

9. BTOP Statutory Purpose:
