

## Broadband USA Applications Database

**Applicant Name:** Geneseo Communications, Inc.

**Project Title:** Rural Illinois Community Connect

**Project Type:** Last Mile Non-Remote

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### Executive Summary

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Geneseo Communications, Inc. ("GCI") has named this project "Rural Illinois Community Connect." This is a broadband deployment project to provide service to residents in 31,701 census blocks located within 16 northwestern Illinois counties ("Proposed Funded Service Area"). GCI's Proposed Funded Service Area covers the entire population or census blocks of these 16 counties excluding two non rural areas, Galesburg and Freeport, Illinois. The proposed system provides an opportunity for 100% of the population in the Proposed Funded Service Area to access the broadband network, including some unserved areas. The Proposed Funded Service Area has 480,740 residents; 31,701 census blocks; 205,214 households; 13,346 businesses; and 829 community anchor institutions, including 249 public safety agencies, 15 critical care organizations, 296 schools, 106 libraries, and 163 governmental entities within 9,759 square miles. The services offered will be 802.16(e) WiMax at a minimum speed of 3Mbps downstream and 1.5Mbps upstream to a maximum of 8Mbps downstream and 4Mbps upstream. Equipment speeds can be improved and expanded with upgradeable equipment and/or the purchase of different spectrum as customer demand increases. WiMax equipped towers will connect by microwave technology to one of ten fiber connected tower locations. From the ten tower locations, broadband service will be transported to the existing GCI backbone network. GCI is requesting funds to provide last mile WiMax equipment, including tower construction, and to expand its fiber optic network to new proposed tower sites in order to service customers. The backbone network is already in place to transport broadband service to the Internet. This network is operating at 1 Gigabit Ethernet and may be easily expanded to 10 Gigabit or more. The backbone network is connected to the Internet directly in downtown Chicago, Illinois. The network design will be developed so that any network provider that has the technical knowledge and expertise may connect equipment and offer comparable service by entering into an interconnection agreement. These agreements will be on a non-discriminatory basis. Obligations will be governed under the terms of the interconnection agreement. GCI currently has five such agreements with competitors and will make all pieces of the network available to operators on a network element basis. GCI will provide a most favored nation agreement and publish each agreement on its website. GCI's history dates back 105 years beginning as a basic telephone company. Among its many accomplishments, GCI was the first to provide enhanced 911 services in the state of Illinois, one of the first to offer high speed Digital Subscriber Line ("DSL") service, and most recently, deployed a rural 802.16(e) WiMax system in Geneseo, Illinois. GCI has operated a terrestrial based Digital Subscriber Line ("DSL") network since 1998, starting out with a 1MG proprietary service and progressing into today's 24 Mbps non-proprietary service. GCI's DSL network spans over 420 square miles and has been constantly upgraded since its introduction in 1998. GCI exceeded the Illinois Commerce Commission's mandated

80% coverage requirement many years before it was required and now maintains over 98% coverage. GCI routinely expands its network when requested by its customers. GCI's state-of-the-art, redundant fiber optic backbone ring stretching from Des Moines, Iowa to Chicago, Illinois is ideally positioned to provide carrier grade service to the Proposed Funded Service Area. GCI's core electronics are situated in a centralized location in a fire resistant, solid concrete building with a back-up generator and back-up batteries. As an incumbent local exchange carrier, GCI's landline telephone service quality standard is 99.9999% uptime. This is the same standard against which GCI will develop the new network. GCI's Chairman of the Board has over 25 years experience in the telecommunications industry. The remaining 6 members of the Board of Directors are community-minded business leaders with over 185 combined years of rural business experience. GCI's President & CEO is Scott Rubins, a 22 year telecommunications industry veteran. GCI's other project leaders will be Bill Parr, Vice President of Network Operations with 25 years in the telecommunications industry, and Rick Trueblood, Vice President of Business Development with 35 years of various business experiences, including sales, customer service, human resources and finance. GCI performs its own customer service function. GCI has its own billing software company, its own information technology department that supports email, SPAM and virus protection services, along with training, installation and repair capabilities. The company's 84 staff members are well trained and well paid with a full array of company benefits including medical, dental, eye care, and retirement. GCI employees average 13 years of service and the turnover rate is less than 3% per year. The overall infrastructure cost of the project will be \$31.4M. If accepted by the Broadband Technology Opportunities Program, GCI proposes to place a minimum of \$6.28M cash as the required 20% match. GCI also proposes to put an additional \$1.2M in working capital to operate the business prior to start-up for a total contribution of \$7.48M. With GCI's mixture of current infrastructure and new infrastructure to be funded both by GCI and the American Recovery and Reinvestment Act ("ARRA"), GCI believes its solutions to bring broadband to unserved and underserved customers is a very cost effective proposal. GCI has already invested over tens of millions of dollars in infrastructure and back office support that is functioning and performing to the high standards required by the Federal Communications Commission and Illinois Commerce Commission for a local exchange carrier. GCI recently purchased towers and spectrum to provide backhaul microwave support across the state of Illinois and plans on utilizing these assets for the project. GCI has deployed the technology proposed and is utilizing it within its own service area. GCI's overall subscriber penetration for the project is expected to be 4% by end of Year 5 with a growth by 1%-1.5% points per year beginning in Year 2. It is expected that the open network design will also bring another 4%-5% growth through various interconnection agreements. Factoring these two numbers, Year 5 penetration rates could be 10%. Although GCI believes this to be a very low and conservative number, it assumes that further competition will be introduced into the market or incumbent providers will increase their efforts to provide improved service. GCI also believes that some customers may find little to no value in broadband, others may already have a lower quality service and are content with such service, and still others may exclusively utilize broadband at their place of business. Further, growth in cellular technology will provide sufficient low level broadband for casual users. All these factors must be taken into consideration when deciding penetration rates. GCI could easily see rates as high as 30%-35% should no other competitor wish to upgrade their service, but will not count on this high rate in order to make its business case cash flow positive. GCI's current penetration rate for its DSL service, in its current service area, is much higher than the 4% projected. It

should be noted that even basic landline telephone service took over 25 years to reach 90% penetration for single line and that broadband technology is only ten years old. Reaching high penetration rates will take at least another decade to accomplish. GCI estimates that the project over a five year period will create or help retain 100 jobs. This number is based upon ten new direct staff members being hired or being redirected by end of Year 2 growing to 30 by Year 5, 30 construction jobs during the three year construction phase, 30 new contractor jobs for vendor support, marketing, accounting and back office after five years and ten new outside sales jobs for distribution and sales of service. GCI's five year projection includes adding one additional tower each year after the initial three year construction period, reinvesting cash from the business in order to meet capital improvement requirements, and continuing to leverage the grant money. GCI's original business plan to deploy WiMax in the Illinois and Iowa Quad Cities (non-rural by definition) has been influenced by the ARRA. GCI stands ready to move forward and serve rural northwestern Illinois with this modified business plan if funds are granted.