

Broadband USA Applications Database

Applicant Name: City of Windom

Project Title: Southwest Minnesota Broadband Group (SWMBG)

Project Type: Last Mile Non-Remote

Executive Summary

The Southwest Minnesota Broadband Group (SWMBG) is a consortium of eight communities (Jackson, Lakefield, Windom, Round Lake, Bingham Lake, Brewster, Wilder, Heron Lake and Okabena) that will leverage the initial success of the Windomnet network, a fiber-to-the-premise network serving the community of Windom, Minnesota. By leveraging the expertise and initial capital expenditures of the Windomnet network, SWMBG will be able to provide high-speed internet, voice and cable television services to the communities in the SWMBG network without some of the initial capital outlays (voice switch, ISP infrastructure and cable television headend) required for a new project. The cities of SWMBG have a long history of building their own technology solutions to help their communities to keep pace with their more urban counterparts. In the 1970's the cities of Windom, Jackson and Lakefield each built their own cable television networks to serve residents when the private sector would not invest. With no willing private entities, the City of Round Lake built its own wireless network to serve the community and surrounding cities and rural areas. This same spirit of self-reliance drives the SWMBG network to build its own fiber-to-the-premise network. This model is replicable across the United States and provides another option for broadband services to rural communities. SWMBG is comprised of the cities including over 3,300 residences, 292 businesses and 50 anchor institutions across the network. The total population of the area is 7,337 persons. All anchor institutions require the bandwidth that a fiber-to-the-premise network will bring. The business community craves a high-speed internet network that will permit global competition. SWMBG will provide high-speed internet, voice and cable television to the participating communities. Provision of three services will generate enough revenue to make the project sustainable and competitive in the marketplace. The fiber network will also be open to other providers for provision of wireless services, dark fiber services and competitive services to SWMBG. This network will meet all of the non-discrimination and interconnection obligations of the NOFA. SWMBG will allow all users to have access to all lawful internet content of their choice, post all of its network management policies on its website, provide "settlement free" peering agreements and create interconnection at both a physical and electronic layer. The network will consist of a 125 mile fiber ring connecting all the participating communities to the Windomnet network. The ring will be 96 strands with a 1 Gigabit transport network that is easily upgradeable to 10 Gigabits. The distribution network will be a standards-based Gigabit Passive Optical Network (GPON) delivering 2.4 Gigabits downstream and 1.2 Gigabits upstream shared across thirty-two subscribers. The fiber ring will also pass an additional 250 extremely rural subscribers who will have their first access to high-speed internet services. This network has the capacity to bring competitively priced services not only to residential subscribers but also to business and community anchor institutions. They will finally have the connectivity required to remain

competitive in the global marketplace. Partnership with Windomnet and existing community expertise will permit SWMBG to start quickly. Professional services for the project will be provided by U-reka Broadband Ventures, which has much experience in advising service providers, municipalities and private businesses on fiber connectivity and operations. The experience that Windom, Jackson, Lakefield and Round Lake bring in technology ventures (cable television and wireless internet) produces a strong advisory team to the initiative. Each participating city will also have one representative on the SWMBG board of directors. Windomnet's provision of the backbone high-speed internet, voice and cable television services allows SWMBG to leverage that capacity and deliver services faster to the network than if it had to build its own backbone infrastructure. All vendors have been chosen for OSP materials and electronics equipment which will allow the network to be "shovel-ready" when the application is approved. The five-year success of Windomnet proves that these networks can be built and remain competitive. The existing customer base of the Jackson and Lakefield cable systems will be migrated to the new network adding to the sustainability of the venture. The overall five year capital cost for the network will be \$12.8 million dollars. This correlates to a passed cost of \$2,631 per passing and a served cost of \$4,201 per subscriber. The 125 mile fiber route adds \$642 of cost to each subscriber making the economics not as attractive as a more condensed build. Due to this issue SWMBG has applied for both BIP and BTOP dollars. This served cost is based on the network will serve over 3,600 subscribers with a combination of high-speed internet, voice and cable television services over a five year period. This high subscriber take rate is based on Jackson and Lakefield serving as the incumbent cable television operators. This should add over 80% of their cities passings to the subscriber numbers given that these passings are already cable television subscribers. This network will both create and maintain jobs in the region where SWMBG operates. To operate the network, eight permanent customer service and technician jobs will be created to handle day-to-day operations. The operation will also rely on the infrastructure services provided by member communities saving approximately four jobs from elimination. To construct the network, it is estimated forty persons will be required to build the network and turn up subscribers at a rate to meet cash flow projections. In addition SWMBG believes that in partnership with the Blandin Foundation sustainable adoption dollars and local economic development groups, that this network will make the region much more saleable for business retention and attraction efforts. SWMBG meets many of the BTOP requirements for funding and creates a new model of smaller municipalities collaborating to leverage capital costs making true broadband services a reality in their communities. This network will not only create jobs but also build provide a foundation for opportunities for community anchor institutions and businesses to build and implement applications that will increase the quality of life as well as improve health, education and public safety services across the region.