Broadband USA Applications Database

Applicant Name: City of Okmulgee, Oklahoma

Project Title: Okmulgee Community Wireless Network

Project Type: Last Mile Non-Remote

_______________________ Executive Summary ___________________

ITEM 8: EXECUTIVE SUMMARY Our application to include all maps incorporates confidential information. We will indicate which material is confidential by stating: “Confidential: exempt from disclosure pursuant to 5 U.S.C. § 552(b)(4)”

A. Opportunity the Proposed System Seeks to Address

The City of Okmulgee, OK proposes a last-mile infrastructure project to deploy a fixed wireless network. Our goal is to provide improved broadband access to the underserved areas in our rural community of 14,536 residents and 424 businesses. The current lack of available, high quality broadband internet service affects our citizens, our businesses, and the agencies that serve our community in a number of ways.

Many areas of the community do not have broadband internet access available. Where internet service is available, customers must pay high prices for low quality internet service. While this creates an added cost burden for local businesses and social service agencies, many households simply choose not to pay for internet service. As a result, fewer than 39% of the households in Okmulgee currently subscribe to broadband internet service. None of our three Industrial Parks currently has broadband internet available and there are no plans by current providers to provide service within the next three years. This is a severe impediment to attracting new businesses to Okmulgee. Industrial and business prospects view broadband access as a critical utility like electricity or telephone service, and the lack of access in our industrial areas hampers our efforts to increase employment and bolster our tax base. Community agencies lack the ability to provide the proactive outreach and information services that would help them serve the community more effectively. Healthcare providers are unable to deliver health education information in a uniform manner to citizens suffering from chronic but manageable illnesses such as diabetes and asthma. Schools are limited in their ability to prepare students to compete in the digital age, and to supplement classroom materials with electronic resources that can enrich and engage students and enhance communication with parents. Public safety personnel lack access to mapping and dispatch resources that would enable them to decrease emergency response times by as much as 50%.

A community-led effort is the optimal means to promote reliable and sustainable broadband services, promote job creation, and ensure widespread improvement in the experience of our residents, businesses, and service providers. Our Anchor Institutions, critical community facilities, and Public Safety Entities have expressed their support for this project, and have developed plans to improve their own services to residents based upon the enhanced broadband access available through this project. The plans for these new services are summarized in the Support Letters as part of the supporting documentation for Item #41. Another key to sustaining the use of this network is to introduce accessible and effective computer and internet training. Through an accompanying Sustainable Adoption Application, we seek funding to support collaboration with the National Education Foundation whose...
mission is to bridge the academic, digital and employment divides. We will gain access to a broad array of online training courses, and to trainers and counselors who will work with our librarians, educators and citizens to conduct end-user training across our entire community. This effort will support the personal and professional development of our citizens, deliver better qualified employees to our businesses and enhance the attractiveness of our region to new companies. B. General Description of the Proposed Service Area The proposed service area encompasses the entire City of Okmulgee. The total area covered is approximately 22 square miles and 726 contiguous census blocks. C. Number of Households and Businesses Passed The proposed network will pass 6,752 households and 424 businesses. Maps showing the proposed coverage area are included with this application. D. Number of Community Anchor Institutions Passed and/or Involved with the Project The project passes 48 institutions, of which 12 specifically expressed support for the project. We have broad support for this project from key leaders in our community including our Police and Fire Chiefs, Superintendent of Schools, Economic Development Director, Librarian, Hospital Administrator, County Health Department Administrator, President of Oklahoma State University Institute of Technology, President of the College of the Muscogee Nation, President of the Homeless Shelter, County Director of the Oklahoma Department of Human Services, President of the Chamber of Commerce, President of Main Street, Director of the Creek Council House Museum, Director of the Okmulgee Tourism Program, and President of Covington Aircraft. The involvement and support of these organizations will ensure broad and sustained usage of this wireless broadband network. Another critical participant is HDR Internet Services, a local internet service provider and a minority owned business, who has agreed to pay part of the ongoing cost of a fiber optic link to the Internet in order to expand service offerings and increase its potential customer base. E. Proposed Services and Applications for the Proposed Funded Service Areas and Users We will offer public internet access through a wireless broadband network with speeds in excess of 1 Mbps upstream and downstream to any user in the service area with a standard Wi-Fi device. Our proposed open wireless infrastructure allows users with any standard Wi-Fi device to access the network throughout the City. The various applications to use this network are described above and detailed further in the attached Support Letters. We forecast subscriber rates of 20% of the population in Year 1, 25% in Year 2 and 30% in Year 3 for this project. F. Approach to Addressing the Non-Discrimination and Interconnection Obligations The network allows interconnection and competitive wholesale access for many different users, including other service providers. From an economic development perspective, a city-owned wireless broadband network complements incumbent service providers. A number of mutually beneficial relationships are possible, including use of the proposed network by incumbent wireline operators who wish to complement current services by offering mobile wireless access or by cellular providers who would use wholesale bandwidth access from this network to offload their own 3G networks. We support network openness consistent with the FCC Internet Policy Statement, and will not favor any particular lawful content or applications over others. Our network management practices are transparent to the community and posted on public websites. G. Type of Broadband System that Will Be Deployed (Network Type and Technology Standard) This project uses wireless mesh broadband technology to provide the greatest broadband speed possible to the greatest population of users in the area. Specifically, we are proposing an open-standard based unlicensed Wi-Fi (802.11) wireless service utilizing Tropos Networks mesh broadband wireless technology. The architecture will also include other wireless technology, such as point-to-multipoint and point-to-point
radios and consumer wireless modems. A unique and innovative feature of this solution is the use of wooden poles with solar power for remote locations that do not have sufficient mounting assets and local power. H. Qualifications of the Applicant that Demonstrate the Ability to Implement and Operate a Broadband Infrastructure and/or be a Sustainable Broadband Services Provider The proposed project is sustainable on both a short-term and long-term basis. We have selected Honeywell to lead our 15 month project deployment effort. As a $38 billion diversified technology and manufacturing leader, Honeywell has the financial strength and project management expertise to ensure that our project will be a success. Honeywell will work closely with Tropos for project implementation, training, and service management. Okmulgee’s municipal employees will be involved in each phase of the project, and are qualified to maintain this system following deployment. Honeywell and Tropos will train our personnel on unique system requirements to ensure they can effectively maintain and administer the system. The IT Department will handle network administration. Public Works will dispatch for any physical repairs. The City will designate a person to handle the public access call center. Our Utility Billing Department has the personnel and software necessary to manage billing and maintain work orders. The Property Maintenance Department currently maintains sports field lighting, some street lighting, and traffic signals with an aerial truck so they will be able to install and maintain the wireless system. The Water and Sewer Department installs and maintains water and sewer lines and will be able to install and maintain any fiber optic cable for this project. We will selectively outsource functions to address areas where specific capabilities may not exist within the City departments. I. Overall Infrastructure Cost of the Broadband System The total project costs are $7,283,663. The City is providing 25% of the total project costs by applying operating savings derived from a performance contract with Honeywell, and use of City workers for a portion of the installation. K. Number of Jobs Estimated to be Created or Saved as Result of this Project In addition to the substantial economic and public service benefits for the rural communities to be served by this project, we expect this project to create a total of 48 direct jobs, including 20 jobs within the first three months after contract award.