Broadband USA Applications Database

Applicant Name: CONCORD, CITY OF

Project Title: Concord Community Broadband Project

Project Type: Comprehensive Community Infrastructure

_______________________ Executive Summary_______________________

The central goal of the Concord Community Broadband Project is to provide high-speed, middle-mile access to key community anchor institutions, to improve City and public safety services to the 124,000 residents of the City of Concord, and to leverage that middle-mile infrastructure to provide broadband service across the City. Broadband provides an opportunity ' in particular a middle mile solution to key community anchor institutions in the City 'to spark economic and employment activity at a time when the City's budget precludes execution of a project of this scale. By leveraging federal funding through the BTOP program, this project creates jobs and puts a City-owned and operated broadband infrastructure in place that will serve the population for many years ' enabling a broad range of communication capabilities that don't currently exist. The target population for the project is a community of approximately 124,000 people, more than 46,000 households, and 6,800 businesses in the City of Concord, California. The project aims to provide access to broadband service to four vulnerable population groups within the service area ' senior citizens (representing 11% of the population), developmentally disabled residents (approximately 20%), a large Hispanic community (approximately 29%) that is economically depressed, and economically distressed residents (the City's overall unemployment rate is approaching 12%, and 45% of the households have per capita income less than 80% of the national average). The project seeks to bridge the digital divide for families in economically distressed neighborhoods that are characterized by high levels and unemployment, and low income levels. The service area includes more than 150 community anchor institutions, ranging from a library and hospital, to more than 50 K-12 schools, nearly 100 public safety entities, and non-profit organizations focused on serving the vulnerable populations in the City. These community anchor institutions form the core of the push for this project. Since the network resulting from this project will be owned and operated by the City, the focus will not be on generating revenue, but will be on leveraging the value of broadband to improve services provided by the City for the benefit of all residents. Other community organizations, such as the Michael Chavez Center, will be able to improve the services it provides to low income minority residents in economically depressed areas of the City. The availability of high-speed Internet access will enable the center, along with other anchor institutions to provide more robust support services for residents who would otherwise not have access to broadband. As a result of the global recession many County and State safety net services are being forced to eliminate staff. This results in many services such as healthcare benefit access, children's services, and other safety net services only supporting the Internet to apply for critical services. The proposed City-wide broad band network will allow minority, developmentally challenged, senior, and other vulnerable populations to preserve access to critical life saving services they would otherwise not
be able to access. The broadband infrastructure deployed by this project will provide a reliable, secure
and highly available broadband communications network for the city’s police department, all first
responders, all City field personnel, and the general public. Directly supporting the BTOP statutory
requirements, this project will provide broadband access for public safety users in Concord and will
enable use of a variety of new public safety applications to improve services within the City. The
opportunity addressed by this project is compelling, resolves a known and critical weakness with the
existing communication infrastructure during disaster response, sets a benchmark for public safety
broadband applications across the region and country, and the project itself provides employment and
economic stimulus for the region. The middle mile network deployed by this project will be terrestrial
fixed wireless with links between 20Mbps and 1Gbps between 34 points across the service areas. These
middle mile connection points will be a combination of eight new monopole towers and 26 existing
structures and facilities controlled or owned by the City. This will make maximum use of existing
resources, minimize cost, and increase the availability of the network. The last mile network deployed
will employ terrestrial fixed wireless technology to provide coverage for the entire service area for
mobile users. 720 tri-band mesh radio access points will be installed on City owned light poles, traffic
signal poles, City buildings etc.), with an overlay of gateway radios providing connectivity to 3
Broadband Aggregation Points (BAPs). The BAPs will use the wireless middle mile connectivity and the
existing City Institutional Network (I-Net) for direct access to the public Internet. The total cost for this
project is $7.6M. The City will provide 20% cash matching funds for the project, resulting in a grant
amount of $6.1M. The project will deploy 30 miles of middle mile infrastructure for an allocated cost of
$3.7M and will then immediately leverage this infrastructure to provide last mile broadband service
across the city for an allocated cost of $3.8M. These costs are supported by a detailed budget and
quotations from equipment vendors and construction contractors. All construction contracts and
equipment purchases will use the Public Bid process to ensure all qualified bidders in the region have an
equal opportunity to compete for the business and to ensure the best value is obtained. A detailed
breakdown of these costs is provided and they have been compared to other similar projects to ensure
reasonableness. With a per mile cost of $125,000 for middle mile network and a per household cost of
$81 for last mile broadband availability, the project makes efficient use of both federal funds and
matching funds provided by the City. The City of Concord Information Technology Department is well-
qualified to implement and operate the proposed broadband infrastructure. With prior experience
planning and deploying wireless networks in the City, the department has resources with the technical
knowledge required to ensure the network is properly built and operated. The City also has experience
supervising contracted work of this type, and has a proven track record of successfully working with
vendors to execute similar projects. Since the network will be owned and operated by the City, all non-
discrimination and interconnection obligations associated with the BTOP will be satisfied. The network
will provide direct access to the public Internet without restricting or favoring particular content. The
City is willing to offer interconnection to other parties within the capacity limitations and negotiated
terms of such an interconnection agreement. The City will post the network management policies on its
website and will communicate changes to the policies. The Concord Community Broadband Project will
create approximately 70 jobs in the City of Concord, which has an unemployment rate of nearly 12%, far
in excess of the national average. Based on the job estimation approach suggested by the NTIA, this
project will create 26 direct job years, 26 indirect job years, and will induce 30 jobs. This is directly in-line
with the BTOP objectives, and the intent of the Recovery Act. Once operational, this broadband network will also create job opportunities related to the design and development of applications to leverage the availability of broadband services across the City. In summary, the Concord Community Broadband Project is a showcase project for granting ARRA funds to provide broadband service in accordance with the statutory objectives of the BTOP. The project will be deployed by a seasoned team with real-world experience deploying broadband networks, and applies wireless technology in a cost-effective approach to maximize coverage and broadband availability across the proposed service area. The current economic crisis forces the City of Concord eliminate any budget for the full expense of a capital project of this nature. However, the project is shovel-ready, and creates multiple local jobs as contractors and radio vendors have already been identified and will begin work immediately upon grant funding and completing the public bid process. The network will be owned, operated, and maintained by the City, ensuring long-term viability and availability of affordable, ubiquitous broadband service for public safety users and the entire City of Concord community.