

Broadband USA Applications Database

Applicant Name: City of Richmond

Project Title: Richmond Broadband Accessibility Project

Project Type: Last Mile

Executive Summary

The central goal of the Richmond Broadband Accessibility Project (RBAP) is to provide high-speed broadband access to low-income families and small family businesses in underserved neighborhoods of Richmond, California, and to the community anchor institutions that serve these communities. The project seeks to bridge the digital divide for families in these neighborhoods that are characterized by extremely high levels of poverty, unemployment, violent crime and school failure. The RBAP will achieve this goal by helping residents gain better access to human services, health care and job opportunities; strengthening residents' involvement in their children's education through the use of technology; and by stimulating economic development and job growth through bringing technology resources to small businesses. The target population for the project is a community of approximately 27,000 people and 8,400 households in central and southeast Richmond, including an area known as the Iron Triangle. The communities include census tracts 3760, 3770, 3790 and 3820. The demographic mix of these neighborhoods, which has changed significantly since the 2000 census, includes a population that is approximately 60% Hispanic, 35% African American, and 5% Southeast Asian. The majority of immigrant families in the community are English language learners. The neighborhoods include families characterized by extremely high levels of poverty, unemployment, and educational failure. Unemployment, which stood at 17.1% as of June 2009 for the City of Richmond as a whole, is significantly higher in these neighborhoods. Schools in the area regularly score at the lowest achievement levels in the state. There are high rates of crime and violence, along with gang activity. Almost one-third of the single-family homes have mortgages that are distressed, with many in foreclosure. Through a broad partnership that includes Building Blocks for Kids (BBK), a collaborative of 27 agencies serving the target community; the Richmond Police and Fire Departments; the Port of Richmond; City libraries and community centers; and Contra Costa County; the RBAP will create a high-speed fiber and wireless mesh network that will make no-cost broadband wireless coverage accessible to all of the 8,400 households in the target community. The proposed coverage area also includes a total of 817 businesses and 70 community anchor institutions, including schools, community centers, medical facilities, churches, and police and fire stations. In addition to the residences, businesses and community anchor institutions that will be served by the project, the fiber network will also link directly to two important public safety assets operated by the Richmond Police Department. These include a recently installed CCTV system covering the target community with security cameras (and currently served by a wireless network), and a gunfire detection system designed to help police locate and apprehend criminals involved in gun violence. The partnership with Building Blocks for Kids (BBK) will play a key role in the RBAP. Leveraging a recent grant of \$500,000 from the California Emerging Technology Fund for a

project called the Emerging Technology Plan for Family Inclusion (ETPFI), BBK will provide outreach, refurbished personal computers, digital technology training, and technical and social support to a total of 1,000 families in the target community. These resources will offer the chance for the most economically deprived families in the community to participate in the RBAP, and will help to increase the adoption and retention rate for broadband users in the program. The wireless broadband network provided to the public will be nondiscriminatory, and the public's applications will not be subject to network management. The City will also avoid throttling traffic on the network. Instead, users will be provided with a predetermined speed when they are online. The City also will not employ a content filtering system for the public. Public users will be responsible for their own filtering of website and other content. The City of Richmond will follow the five principles of non-discrimination in providing the subsidized networks. The primary goal will be to deliver unfiltered and open Internet access to the public. The staff of the City of Richmond Information Technology and Engineering Departments are well-qualified to implement and operate the proposed broadband infrastructure. The Engineering Department has experience installing conduit and pull boxes in a variety of locations, as well as supervising contracted work of this type. In addition to their previous experience with a variety of network systems, in the past year, the Information Technology department designed and implemented an enterprise wireless network for the newly renovated Civic Center campus, and played an important role in the installation of Phase One of the City of Richmond Police Department CCTV surveillance system. The wireless network provides service to the City Hall and adjacent public buildings and open space. The project was designed by the Information Technology Department to be scalable in order to allow for expansion to other City facilities in the Civic Center area in the future. The system gives City staff secure wireless network access to all of the shared resources on the City's network. The City also provides secure guest access, which follows the non-discrimination and network connection obligations described in the NOFA. The CCTV project involved the installation of 34 video cameras in areas impacted by crime in the central neighborhoods of Richmond. Completed in the fall of 2008, the project included installation of a digital IP-based CCTV system running on a secured wireless network for law enforcement purposes. The Richmond Police Department is able to use the system to collect data remotely as a tool in identifying criminal activity and apprehending the perpetrators. With a federal request of \$6,698,832 and an applicant match of \$2,000,000, the total infrastructure cost of the proposed project is \$8,698,832. This includes the cost of full wireless broadband coverage for the four census tracts included in the service area; fiber broadband connections to a number of public safety and community anchor institutions, including police and fire stations, public libraries, and community centers; and fiber connections to the CCTV security camera and gunshot detection systems of the Richmond PD. The City will pay for all operating costs of the system once it is operational. Because the RBAP will be providing free wireless broadband service to residents of the target community, users of the network will not be required to take part in a formal subscription process. However, based upon the experience of other communities in providing free wireless service, the anticipated participation rate will be between 40 and 60 percent. Using 50 percent as the expected rate of usage, we would estimate the total number of users of the system at approximately 4,200 households, out of 8,400 in the target neighborhoods. The RBAP will promote economic recovery in the target community through the ETPFI, whose strategy includes the goal of bringing broadband access, personal computers, and training to a total of 50 owners of small family businesses during the period of the grant. Other successful business

owners, identified through the Richmond Chamber of Commerce, will mentor these small business owners in the use of broadband technology. Their learning will enable them to employ the Internet to expand their customer base, do research to identify the lowest cost suppliers, gain skills in accounting and other areas through online learning, and access other tools for increasing the profitability of their businesses. It is estimated that providing this opportunity for small business owners will enable them to create up to four new jobs as a result of access to expanded business opportunities through broadband technology.