Broadband USA Applications Database

Applicant Name: WILCO ELECTRONIC SYSTEMS INC

Project Title: Philadelphia Freedom Rings: A Comprehensive Community Infrastructure Proposal

Project Type: Comprehensive Community Infrastructure

_______________________ Executive Summary _________________________

The Philadelphia Freedom Rings CCI Proposal is a public/private community collaborative to implement and manage the deployment of a middle mile fiber network. In partnership with universities, for-profit entities, non-profit entities, community organizations, and key community anchor institutions, the network will offer affordable, enhanced broadband access and adoption services to the City of Philadelphia's underserved public housing authority residents, local community organizations, and critical anchor institutions located within economically distressed areas. Statement of Need: Philadelphia has become a tale of two cities. On one hand, Philadelphia is home to some of the best educational, medical, and business institutions in the world. These institutions are exploring new uses for technology, incubating emerging industries, and developing new uses of cutting edge healthcare sciences and delivery. However, the lack of affordable broadband access and broadband adoption services for low-income residents and communities, has contributed to a well documented disparity, and a large uneducated and jobless population that has tremendously impeded Philadelphia's overall social and economic progress, severely lessened widespread access to enhanced healthcare delivery for low-income populations, and has greatly hindered safety concerns and quality of life. Philadelphia, like many urban centers, is challenged by high poverty rates and dependence on public subsidies. Currently there are approximately 81,000 residents who reside within public housing communities. In addition, according to the 2000 U.S. Census, nearly 25% of individuals and more than 33% of children in Philadelphia live in households making less than $15,000. In the most economically distressed neighborhoods targeted by this project, 38.6% of individuals and 41% of children live below the poverty level. Additional studies have shown that 52.5% of households in economically distressed sections of the city report that they choose not to adopt to subscribe to Internet in the home compared with 41% of residents, who do not subscribe to Internet, in the City as a whole. In a City of 1.5 million people, nearly half of Philadelphia residents cannot afford broadband Internet access in their own homes or lack stable housing with which to have a place to access the Internet. Opportunity The Proposed System Seeks To Address: The Freedom Rings CCI proposal plans to address these issues by offering affordable high speed access exceeding current market offerings along with a complementary and robust sustainable broadband adoption and equipment program. In an historic Philadelphia community coalition, Wilco Electronic Systems, Inc., a minority-owned telecommunications provider, in collaboration with the Freedom Rings Advisory Council and CCI supporters, such as the Philadelphia Housing Authority, Drexel University, Temple University, Community College of Philadelphia, Greater Philadelphia Urban Affairs Coalition, Tenant Support Services, Inc., and Spectrum Health Services, will deploy a community network that will be offered to and utilized by vulnerable populations and community anchor institutions to form
a bridge connecting the underserved with the information and resources that they currently lack. The build out will upgrade and be designed to additionally improve public safety capabilities and community college campus networks. General Description of Proposed Funded Service Area: The Proposed funded service areas combine a unique underserved mix of PHA residential sites, community computer sites, affordable housing developments, community group organizations, and key community anchor institutions all located in economically distressed areas. Specifically, the Freedom Rings Network will deploy direct fiber access to PHA residential community sites, allowing approximately 14,000 targeted households to be served. The Freedom Rings proposes to connect approximately 157 community anchor institutions made up of community college campuses, PHA residential sites, public safety entities, community health facilities that specialize in serving the low-income, and community computer sites, community organizations, police precincts, fire houses, and wireless aggregation facilities, subject to applicable competitive procurement requirements. Number of Households and Businesses Passed: The Freedom Rings CCI will pass approximately 14,000 targeted available households and approximately 10,000 businesses within the 120 mile radius of the proposed funded service area. Number of Community Anchor Institutions: Approximately 157 community anchor institutions will be passed and/or involved in the Freedom Rings project. The system has been designed to be easily upgraded with additional electronic equipment and the adding of more fiber stands to scale to the needs of residents, computer sites, and key community anchor institutions. Proposed Services and Applications for Proposed Funded Service Areas: The Freedom Rings CCI proposal has established relationships with a number of commercial partners to offer an array of services to subscribers. In partnership with a dark fiber optic provider, Freedom Rings will have twelve (12) strands of fiber that encompasses nearly 120 miles of redundant pathways within Philadelphia. The strands of fiber will have the ability to transmit over more than a hundred gigabits of data with less restrictions than present existing copper. Approach to Addressing Non-Discrimination and Interconnection Obligations: The Freedom Rings will offer access to its network, where technically feasible, at reasonable rates and terms to be negotiated with all requesting parties. This access will include both the ability for vulnerable populations and community anchor institutions to connect to the Internet and all service providers to interconnect to the network. Wilco will manage and transmit signal on a neutral basis for all Internet traffic along its transmission facilities. Lastly, in the role as a competitive access transport carrier, Wilco will not favor any lawful Internet applications or content over others. Type of Broadband System That Will Be Deployed: Wilco is proposing deployment of the latest generation of "fiber deep" optoelectronics systems, which provides a major increase in the capacity of traditional networks, facilitating the delivery of new interactive advanced services. This technology enables networks to provide reliable high bandwidth broadband for all types of interactive video, data, and voice services. The fiber optoelectronic technology will allow the Freedom the ability to drive fiber deep into the network thus making better use of and economically increasing bandwidth capacity. Qualifications Of the Applicant: In collaboration with Freedom Rings partners and its advisory council, the Freedom Rings management team constitutes a diversified mix of professional and educational backgrounds and past work experiences needed to implement, manage, and operate a project of this size and scope. Backgrounds and skill sets that will ensure success of this project include regional vice presidents of financial and network operations, attorneys, executive MBA's, senior technical network managers and engineers, field service technicians, customer service representatives, and a minority owned business with over 30 plus years of experience in the cable and
telecommunications industry. Due to existing engineered fiber in place, Freedom Rings will partner with the fiber provider to deploy and manage the network. Local contractors will be utilized to wire and upgrade the building infrastructures. The Freedom Rings collective will partner with local and established service providers to implement and deploy broadband services that will connect the middle mile backhaul and will be offered and made available to targeted residential and institutional customers. Overall Infrastructure Costs: Total Recovery Act funding request is $31,637,782, Total Matching Funds contributed is $14,213,826, and the Total Project Cost is $45,851,608. Overall Expected Subscriber Projections: We project approximately 9200 new underserved broadband subscribers, 157 Community Anchor subscribers. Number of Jobs Estimated to be Created or Saved: The project will create/save 344 total jobs.