Broadband USA Applications Database

Applicant Name: Elauwit Community Enhancement Foundation LLC

Project Title: The Elauwit Foundation Rural Last Mile Project

Project Type: Last Mile Remote

_____**Executive Summary**_____

The business of being a citizen is increasingly conducted online. Dial-up Internet access is now considered ubiquitous. According to the Pew Internet & American Life Project, 69% of American adults have used the Internet as means of dealing with the current hard economic times. They have gone online to search for employment, housing, bargains, training and education, financial advice and to track government benefits. ("The Internet and the Recession" by Lee Rainie and Aaron Smith, July 15, 2009) As of April 2009, 63% of American households claimed broadband adoption. Yet, only 35% of Americans households with annual incomes of $20,000 or less enjoyed the benefits of life online, according to Pew. ("Home Broadband Adoption 2009" by John Horrigan, June 17, 2009) This Digital Divide is real and vast, though in the case of many communities it can be measured in terms of city blocks. Housing Authority populations confront several obstacles to broadband adoption. Personal Technology Questionnaire respondents cited lack of computer ownership, prohibitive subscription costs and lack of computer literacy as reasons for reticence concerning the Internet. Survey results also indicate that these groups perceive a much lower value in the Internet than other communities. Elauwit Community Enhancement Foundation, LLC is a nonprofit formed to leverage its expertise in implementing cost-effective broadband solutions to vulnerable populations in Housing Authorities and other community anchor institutions. These institutions represent a unique opportunity to effect rapid and sustainable change. Thirty-three percent of Housing Authority residents live in buildings with 300 units or more. Only 12% of residents live in buildings of 50 units or less. These individuals live in centralized, densely populated and pre-existing communities. They are high in lack-of-use predictors and face overlapping needs, but their concentrations also provide a perfect opportunity to efficiently usher the underserved into the information age Elauwit boasts significant experience in the acquisition of funding and the implementation of broadband architecture. We have previously applied for and implemented approximately $100 million in grant awards for 50 non-profit entities. Elauwit is one of the few providers experienced in deploying a wireless architecture for Housing Authorities, having deployed a WiFi broadband mesh network as recently as August 2009, for the Columbia, SC Housing Authority. Project management is in place today, able to implement BTOP grant awards utilizing local vendors for equipment installation. Elauwit is seeking $151,948,822 total BTOP and BIP funds, $74,185,353 of which will be used to provide WiFi broadband mesh networks for the underserved residents of Housing Authority affiliates. Of that amount, $22,235,121 is requested in this BIP application and supplants the same requested amount from the BTOP Last Mile application. Our integrated approach seeks to reach an estimated 117,010 potential subscribers across 93 Housing Authority affiliates, community anchor institutions and public safety agencies. Of those served, 44 Housing Authorities representing 21,325

people are in rural areas. By adopting this consortium strategy, Elauwit will be able to negotiate superior purchasing arrangements, eliminate significant on-site management costs and concentrate accountability in a single, private entity. Elauwit estimates that 1,844 jobs will be created or saved in Year One, 1,737 of them for high-wage engineers. Three hundred and sixty-three positions will continue and are sustainable in Year Two, 148 of which are engineering positions while 215 computer instructors will find employment. Of the 1,844 jobs created in Year One, 374 are created from the funds requested in the BIP application. Elauwit intends to diminish adoption barriers through the introduction of long-term, sustainable broadband WiFi access. We have agreements with BelAir Networks and Cisco Systems to design and implement the installation of wireless broadband mesh networks engineered for outdoor and indoor use. Mesh protocols automatically determine the best route through the network and can dynamically reconfigure the network if a link becomes unusable. Elauwit plans to utilize local area network products based on IEEE 802.11 standards. But, as experience and research have shown, broadband access does not equal broadband adoption. At a June 17 symposium hosted by the Internet Innovation Alliance at the Washington Newseum, a panel discussion reached the consensus that, not only should the Department of Housing and Urban Development include broadband installation in all public housing renovations, but that broadband access should be accompanied by educational programs stressing the relevancy of the Internet to individuals' lives. Embracing that conclusion, Elauwit will establish and staff Public Computer Centers, open to all Housing Authority residents. These centers will create 2,709 new workstations and serve 127,009 residents across 49,267 households, acting as both access points to the Internet as well as venues for educational opportunities. Funding for this program was requested in the BTOP Public Computers application. Elauwit, in conjunction with Housing Authorities, has developed several programs designed to promote sustainable broadband adoption. These strategies complement the infrastructural development and establishment of Public Computer Centers and are tailored to the characteristics of individual Housing Authorities. Each Housing Authority or community will have its own Web portal. More than a homepage, the portal will feature a dashboard layout, easing navigation to relevant community resources, such as public safety agencies, job listings and health care services. Elauwit's proposal has provided for the inclusion of a Laptop Administration Pilot Program (LAPP) in 10% of household units per Housing Authority. Residents in these communities will have the opportunity to enroll in additional course offerings, working toward a proficiency certification. Upon completion of the core curriculum and certification, residents will be supplied with their own laptop computer. The LAPP process is designed to increase the general profile of computing within the community, to highlight its usefulness when integrated into one's lifestyle and to create a core group of high-level adopters within the area. (Please see Elauwit's complementary BTOP Last Mile, Public Computer Center and Sustainable Broadband Adoption grant applications for further details.) Elauwit's proposal also addresses the complementary issue of public safety within the community, giving Housing Authorities the option of requesting Broadband-integrated security cameras. Over the Internet, police and other first responders will be able to view the camera feeds in real-time or call up past recordings, giving them a hefty advantage currently unavailable. Each aspect of the program will be evaluated on a quarterly basis. We will monitor several key performance metrics intended to gauge broadband subscribership, frequency of use per resident, bandwidth consumption, computer ownership, as well as measure changes to perceived value and adjustments in personal spending priorities. Elauwit has incorporated three years of free broadband access and maintenance into our

BTOP Sustainable Broadband Adoption proposal. Bandwidth, maintenance and staffing costs beyond the three-year period will be maintained through a combination of savings to existing internal Housing Authority telecommunications budgets, Web portal advertising revenue and the eventual subscription contributions of individual community members. After the initial three-year period, Elauwit will provide subscription Internet service to the community at approximately 33% of the cost compared to national providers. Due to the bolstering of access, education and perceived value, we believe that adoption rates within these communities will correspond to existing national figures as will the desire to invest in the services.