We are pleased to present Utah Anchors: A Community Broadband Project for the NTIA BTOP CCI Program on behalf of the Utah Education Network (UEN), a state non-profit K-20 network consortium of public and higher education. In February 2010, UEN received a $13.5 million award from NTIA for our Round 1 BTOP infrastructure application serving over 130 community anchor sites. Building on that successful application, this project will provide critical broadband Ethernet services to an additional 140 community anchor locations, including elementary and charter schools, public libraries, and Head Start programs, health care providers, community and applied technical colleges, and Utah's two major research Universities. Fiber infrastructure built by this project can also be shared and used by unserved and underserved residents, businesses, hospitals, public safety organizations, and other community stakeholders. Utah Anchors Project will provide broadband services and training to low-income and minority populations at fifty-five (55) Utah Head Start programs, including five (5) on the Ute Indian Reservation in Fort Duchesne (Northeastern Utah). Additionally, the demand for public Internet usage has grown substantially in Utah's public libraries, which have inadequate bandwidth to meet the demand. In December 2009, The Bill and Melinda Gates Foundation awarded UEN and the Utah State Libraries (USL) a BTOP CCI Matching Challenge Grant in the amount of $660,000 to support this important project for Utah libraries, only one of 15 states to receive such an honor. UEN and two major Utah Universities have worked together to develop a comprehensive BTOP middle mile project with private carriers to build fiber rings in downtown Salt Lake City (to the new University of Utah off-data campus Center) and north to Logan (home of Utah State University). These fiber ring projects establish public/private partnerships that enable connecting 12 major community anchor sites, incumbent telecom and long-haul telecommunications providers, and national education and research networks such as Internet 2 and National Lambda Rail (NLR). The proposed University of Utah/UEN Salt Lake MetroRing will connect the main University campus to its new off-campus data center in downtown Salt Lake City, support research networking and connect key community anchors including Salt Lake City Main Library, Salt Lake Community College, and the Salt Palace (a major county government convention center). The ring will connect and make accessible to all participants to essentially all the major commercial telecom vendors operating in the region. The Salt Lake City Library will receive significant benefits from the Salt Lake Metro Ring. This facility provides Internet services to over 200,000 patrons annually and Internet service demands continue to grow at a steady pace. UEN has worked closely with many partners both the public and private sector in planning this BTOP grant project. As documented in our letters of support from our private telcom partners, they are committed to utilize middle mile infrastructure to benefit communities in the last mile. UEN's request for this BTOP grant is a
continuation of a critical project that UEN began two years ago in building out broadband Ethernet connections to elementary, charter schools and public libraries. UEN has a strong track record of successful broadband implementation in both middle mile and last mile projects combined with successful management of the E-rate program for schools and libraries. UEN now receives over $11 million annually in E-rate support on eligible Internet and Telecommunication services. The efforts of UEN to connect elementary and charter schools, public libraries and Head Start centers is the final step in a nine year broadband-building effort. In 2001, with support from Legislature and the Governor, UEN began working on a strategic vision and plan to extend broadband capacity to upgrade the state's WAN backbone infrastructure and circuits into colleges and Universities, school district offices, many public libraries, high schools and middle schools from T-1 or less network capacity to Gigabit (1000MB) fiber-based Ethernet connections. UEN and our telecommunications partners have successfully implemented broadband Ethernet connections at all universities and colleges, 300+ secondary schools (high schools and middle schools) and all school district offices. UEN also upgraded its core central backbone with redundant rings last summer to 10GBps and aggregate Internet capacity to 10GB to ensure future capacity for this project. Utah's public schools, colleges, universities and libraries depend on the UEN network to perform their missions each day. UEN is the Internet and WAN provider for the state connecting every public school and institution through the UEN WAN; UEN manages a statewide IP video conferencing system for education and training with over 600 interactive school classrooms; hosts enterprise-level software applications for our public and higher education partners; offers instructional programming through KUEN, a 24/7 television station; supports a growing range of rich educational resources at UEN's Web site, www.uen.org; and supports the technology professional development needs of Utah teachers. Project Summary 1. Opportunity the proposed system seeks to address. UEN intends to work with our telecom partners to: - Extend fiber-based 10GB to 9 Universities and Community Colleges - Extend fiber-based 1000MB Broadband to 3 Elementaries, 1 Library, 1 Charter and 7 Higher Education/Community College Campuses - Extend fiber-based 100MB Broadband to 24 Elementaries, 23 Libraries, 14 Charters 23 Head Start Programs, and 3 Community College Campuses - Extend broadband 10MB/20MB Ethernet to 31 Head Start Centers 2. A general description of the proposed funded service areas (location, number of communities, etc.) Rural and urban areas of Utah, both unserved and underserved 72 Cities, 139 community anchor locations plus two major commercial Points-of-Presence 3. Number of households and businesses passed. 20,110 Households (see list by city in supplemental information) 19 Businesses in unserved proposed areas 51 Businesses in underserved proposed areas 781 Businesses in served areas 4. Number of community anchor institutions, public safety entities, and critical community organizations passed and/or involved with project (e.g., health care, education, libraries, etc.). 139 Community Anchor Sites; Estimated 300 + public safety entities 5. Proposed services and applications for the proposed funded service areas and users. Combined with our Broadband Adoption proposal, UEN will target certain underserved and vulnerable populations by providing training and education. Equal access to educational resources is a major priority of this project. Preschoolers and families who receive services at head start centers, adults retooling to keep and find jobs in rural and urban communities, and those seeking jobs in new industries will have equal access to rich online content, outreach, support, and training through local libraries and training provided. 6. Approach to addressing the non-discrimination and interconnection obligations Please refer to detailed response in the Technology Type Section. 7. Type of broadband system that will be deployed
(network type and technology standard). - Fiber-optic 1000MB Gigabit Ethernet and 10GB Ethernet - Fiber-optic 100MB Metro Ethernet - Fast 10MB and 20MB DSL over Copper 8. Qualifications of the applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband services provider. The Utah Education Network (UEN) has for over 30 years provided critical distance learning and educational opportunities for learners of all ages in Utah. UEN manages critical telecommunications, Internet, and educational systems to deliver applications and interactive services to and from schools, colleges, universities and leading national and international education materials providers to students, teachers, faculty, and parents each day. 9. Overall infrastructure cost of the broadband system. The overall infrastructure cost of the projects in this application is projected to be $16,857,656. This is based on a competitive RFP bid and precise engineering studies. This includes outside plant construction fiber and conduit installation, aggregation equipment, facility entrance conduit and fiber installation and on-site construction where required. 10. Overall expected subscriber projections for the project: 447,200. This is based on actual school enrollments, faculty and staff, and populations served in libraries and head start centers. 11. Jobs Created: 208 total