Executive Summary

a) Statement of the Problem: For healthcare providers to effectively participate in technology-enabled healthcare, a reliable, cost effective and well-supported broadband infrastructure must be in place that addresses the need for infrastructure management and technical support, as well as financial sustainability and versatility. Rural and low-income urban communities in particular need a centralized broadband service provider to coordinate and deliver training, monitor implementation, facilitate network security and privacy, and handle other operational details, all at as low a cost as possible.

Sustainable broadband adoption depends on: a robust broadband infrastructure; content that delivers knowledge and best practices in healthcare delivery; a workforce trained to use broadband; eHealth applications such as electronic health records, telemedicine, e-prescribing, and health information exchange; and an innovative, sustainable, collaborative business plan which incorporate eHealth into the “best practice” of health care and creates clear value.

b) Overall Approach: Health-related technology applications (eHealth) delivered over broadband are critical to the economic stability and well-being of a community. The California Telehealth Network (CTN) was created in 2007 to create the broadband infrastructure required to meet this need. CTN’s main goal is to use broadband to link rural health care sites to the state’s leading urban health care providers. Construction of CTN is slated to begin in Fall 2009 and will deploy broadband services to 863 community anchor institutions throughout California beginning early 2010. The CTN therefore is “shovel ready”.

CTN is applying for NTIA broadband infrastructure funding to expand this initial network to a total of 2,000 sites. CTN’s vision is to provide managed, sustainable broadband access to thousands of community anchor institutions that provide health and social services. These institutions - connected together through a high speed broadband network to academic health centers, data centers, universities, community colleges, application service providers and insurers - will form the basis for a statewide, technology-enabled health care system.
CTN’s proposed approach addresses the historic barriers to broadband adoption: inadequate access to telehealth equipment, training and mentoring; and prohibitive project start-up costs. This approach is both innovative and sustainable beyond federal funding for several reasons: 1) The CTN represents an aggregation of demand for broadband with features required in eHealth applications leading to a purchasing advantage, thus decreasing the individual site’s eventual sustaining monthly cost; 2) The CTN will monitor opportunities and assist its members in identifying and applying for ongoing State and Federal broadband subsidy programs, thus further reducing the on-going cost of adoption; 3) CTN will serve as an “honest broker” for its members to attract both donated and commercial services to be provided over the network such as application service providers (ASPs) that host electronic health records, and/or provide scheduling and billing services. These vendors will pay a share of costs for the network, which will eventually offset the costs to its members.

In addition, the training programs, site coordinator stipends, and eHealth equipment acquisition outlined in this proposal will be critically important to these communities as they make the transition to a technology-enabled system of health care. This transition will result in the creation of hundreds of new high tech jobs within the health care sector, improving the economies and health of these communities, and creating opportunities for new businesses throughout the state.

c) Areas to be Served: The service area is the state of California. With 37 million residents representing 12% of the total U.S. population, California is the most populous state in the U.S and the most racially and ethnically diverse. Hispanics will become the majority population in the state by 2040. California has the second-largest Asian population of any state and is home to the largest number of Native Americans in the country. More than 200 languages are spoken here, creating numerous challenges for assuring effective delivery of health care services and growing demands for interpretive and translational services.

The potential number of health-related community anchor institutions in California is 15,000, consisting of physician offices, community clinics, hospitals, skilled nursing facilities and other types of community health providers.

d) Applicant Qualifications: The University of California (UC) system is the Lead Agency for the California Telehealth Network, which is currently funded with a $22.1 million award from the Federal Communication Commission’s (FCC) Rural Health Care Pilot Project (RHCPP) and a matching $3.6 million grant from the California Emerging Technology Fund (CETF). UC has a record of success in the development and management of telemedicine and eHealth programs, as well as significant expertise available at its five medical center campuses, and throughout its 10-campus system.
e) Job Creation: This proposal will directly create a total of 226 jobs in the following categories: 200 eHealth site coordinators, 8 eHealth educators and facilitators, and 18 CTN technical services, operations and management staff. In addition, because of the expanded use of broadband in each of the participating sites, we anticipate that each health care facility will create or retain at least one new full or part-time position to support broadband adoption, resulting in a potential 2,000 additional new jobs created as a result of this proposal.

f) Overall Cost: The overall cost is $18,391,250; $13,791,250 is requested through NTIA BTOP; $4.6 million (25% of project cost) has been committed by outside sources.