Executive Summary

A. This project addresses each of BTOP’s statutory priorities. Our project will offer new or substantially upgraded service to 237 public safety, community colleges, higher education, health centers and libraries as community anchor institutions. Our project incorporates a public-private partnership with Cruzio, the fifth largest DSL provider in the nation, the City of Watsonville, overseeing government, health and social service organizations, and CENIC, which is responsible for California’s K-20 high speed network and will oversee the education and research institutions in our tri-county region. The City of Watsonville represents all the major stakeholders in our region who have been meeting over the past five years to plan and design high-speed networks for our region. Due to the unserved and rural environment to provide fiber connectivity and those associated costs, our project is capable of contributing the required 20 percent of the non-federal cost match including a nearly $5 million dollar grant from the California Public Utilities Commission in support of this project. The proposed project addresses each of the key points for a middle mile Comprehensive Community Infrastructure Project. As detailed in this application, our fiber loop hopes to serve 237 Community Anchor Organizations across the Central Coast, including 85 K-12 schools, 10 libraries, 62 healthcare providers, 48 public safety entities, 7 community colleges (5 of which are minority serving institutions) as well as 8 additional higher education facilities. Our public private partnership includes a dynamic, established local company. Cruzio has recently opened a new co-location facility, purchased an enterprise wireless company, Gatespeed Broadband as well as cleared encumbrance permits on a fiber deployment for their central office at 207 Church Street in downtown Santa Cruz. Cruzio is woman-owned and meets the federal criteria for being considered a 'disadvantaged small business.' Given the length of the present recession, a weighted unemployment rate of 16.98 across the counties of Monterey, San Benito and Santa Cruz and a sluggish credit and lending market, each of the areas detailed in this application have been identified as 'economically distressed' by the US Department of Transportation. Mean unemployment by county is strikingly high, with 15% in Santa Cruz County, 17% in Monterey County and 22% in San Benito County. Community colleges, specifically those that serve linguistically isolated and minority communities are hard coded into this fiber loop and CENIC, Corporation for Education Network Initiatives in California, is a co-applicant and co-developer of this fiber project. Seven nodes of this network are found on community college campuses, Monterey Peninsula College in Monterey and Fort Ord / Seaside, Harnell’s three campuses in Salinas, Alisal and King City, and Cabrillo college in Aptos and Watsonville are all included in the grid. As of Fall 2008, Hartnell College’s demographic reporting indicates that of their 10,000 students, 76% are minorities and 49% are female. Latinos comprise well over 52% of the total enrollment. More than 42% of the College’s
students are non-native English speakers and over 65% are the first in their family to attend college. Currently most IT needs for the campus are being served only by DSL connections. Public safety, disaster preparedness and contingency planning are also a central tenant of this fiber loop’s planning. We have 48 public safety anchors on our fiber loop. Cruzio and CENIC have socialized this schema for a publically controlled middle mile loop with enterprise companies, college campuses, municipalities, and public safety organizations and have received numerous statements of support and interest. Due to the unserved and rural environment to provide fiber connectivity and those associated costs, our project is capable of contributing 20% of the non-federal cost match including a nearly $5 million dollar grant from the California Public Utilities Commission in support of this project. Additional financing comes in the form of real estate commitments cash and in-kind contributions from our private partners and municipalities. B. We intend to connect the disparate telecommunications networks in our tri-county region (Monterey, San Benito and Santa Cruz counties), as well as fill critical gaps by constructing infrastructure to many un-served and underserved areas. Our geographically challenging and rural areas include our farmlands, the rugged Big Sur coast, and the coastal mountains that extend from Santa Cruz Mountains and the San Lorenzo Valley to southern Monterey County. C. According to UC Census data, this fiber project will bisect thee counties serving 464,000 people, 220,000 housing units (57,640 under-and un-served units) and 16,946 small businesses. D. Our fiber loop hopes to serve 237 Community Anchor Organizations across the Central Coast, including 85 K-12 schools, 10 libraries, 62 healthcare providers, 48 public safety entities, 7 community colleges (5 of which are minority serving institutions) as well as 8 additional higher education facilities. The 237 anchor organizations detailed in the application will join a significant number of extant research, academic and defense institutes already pushing large amounts of data out to a global audience including climate models, bathometry, weather data and the human genome. Additionally, this increase in bandwidth can serve economic development goals but helping to empower Silicon Valley companies to connect more closely with the Santa Cruz workforce through VPNs, SSH tunnels and VNC connections on corporate Ethernets. Other service providers, including CENIC, public safety and defense installations will join telecommunications companies and cable companies in the development of further applications for this project. F. Each of the members of the CCBC, as well as Cruzio and CENIC pledge to uphold the FCC's Internet Policy Statement (FCC 05'151, adopted August 5, 2005) and will operate the network, with four fundamental principals in mind; namely that we will preserve and promote the open and interconnected nature of the public Internet, that consumers are entitled to run applications and use services of their choice, consumers are entitled to connect their choice of legal devices that do not harm the network and consumers are entitled to competition among network providers, application, service and content providers. These provisions are limited by existing law and the needs of law enforcement vis-a-vis harmful content. G. Our middle mile project consists of 144 Strand Zero Water Fiber interconnecting local loops in Salinas and Santa Cruz as well as bisecting 18 nodes stocked with DWDM Digital ROADM equipment (i.e. Infinera DTN) for long haul. The loops joins the internet backbone at five geographically diverse locations to CENIC, Level III and DOD facilities. Our network will provide open access transport to any last mile project or incumbent or competitive exchange carrier (ILEC or CLEC). H. The City of Watsonville, the CCBC and CENIC, possess the necessary technical, environmental and regulatory expertise to ensure that this project will be delivered expediently. Our private partner, Cruzio, is a Competitive Local Exchange Carrier (CLEC) and has all necessary registration/authorization from state
and federal agencies to provide the services proposed. As a CLEC, Cruzio has the necessary authorization to obtain, pole attachment rights and has experience in securing encumbrance permits on buried fiber and pole attachment rights. CalTrans will also assist under its mandated Broadband Access Program. I. This project will entail direct costs of approximately more than $35 million dollars in construction and entitlement costs, with an annual refreshable cost of $350,000. J. After 12 months of entitlements and construction, this fiber network will be ready for customers and expects to sign up 9 community anchor organizations and 8 educational institutions in its first year of operation. After early testing and quality assurance this number arcs upward by 50% in the next two years, bringing along third party resellers rapidly. By the end of year six, 68 anchors and 64 schools should be lit up with all 240 anchors coming onboard in year eight. A detailed spreadsheet has been appended to this grant application. K. Using the Council of Economic Advisor's methodology, $22 million in construction costs generates 239.13 man-years of work. This comes paired with an expenditure of another $15 million in environmental and engineering work, the bulk of which is direct salary support. This adds another 163 man years. Vendor contracts will add additional man-years, as well as permanent positions that will be needed to manage, market and maintain this infrastructure and its NOC.