Broadband USA Applications Database

**Applicant Name:** CONNECTED COMMUNITY INFRASTRUCTURES, LLC  
**Project Title:** Northeast Florida Broadband Initiative-Middle Mile Network  
**Project Type:** Comprehensive Community Infrastructure

_______________________ Executive Summary _______________________

Connected Community Infrastructures, LLC ('CCI') was created to bring widespread, low cost, high speed broadband services directly to key anchor institutions in northeast Florida and to establish a backbone network that will facilitate the provision of these services to the entire northeast Florida region and beyond. The total project cost is $22,802,432 with a requested grant amount of $14,618,597 and a matching contribution amount of $8,183,835. CCI's proposed network is a shovel ready project that will establish Jacksonville, FL (consolidated with Duval County) and the surrounding northeast Florida region as a major digital transport hub, through deployment of a hybrid long haul/short haul fiber and wireless Middle Mile high bandwidth, low cost, carrier neutral network. This new and sustainable open access infrastructure will be immediately utilized to enrich and empower a variety of community education, public safety and health institutions across the region. The proposed CCI network will also provide connectivity to and extend the reach of the vital and strategic North Florida Broadband Authority ('NFBA') and Florida LambdaRail ('FLR') networks. Funding and construction of CCI's proposed network presents the very real opportunity to leverage Jacksonville's strategic geographical location and demographics (as a major metropolitan area with a significant sea port, military, medical, educational and financial services presence), and transform this area of the nation into an vibrant technology center, with the attendant job creation and economic stimulus effects that are the core of the Broadband Technology Opportunities Program ('BTOP'). The long haul portion of this Middle Mile network will extend from Jacksonville, FL south to Miami, FL and north to Atlanta, GA. This portion of the network will provide a broadband backbone that will traverse numerous counties along its path and provide the opportunity to serve large numbers of communities along its route. The short haul portion of the proposed network has the capacity to service all of Jacksonville, FL, the nation's largest land mass city, along with the surrounding counties in northeast Florida. CCI is owned by and composed of a number of key organizations that together will be able to implement and operate the proposed network on a fully functional and sustainable basis. The three primary operating partners comprising CCI are: Joytel Wireless, Inc. ('Joytel'); Sun-Tel USA, Inc. ('Sun-Tel'); and Creative Community Solutions, LLC ('CCS'). Joytel is a telecommunications provider that has been in operation for six years. Joytel operates a carrier neutral data center that houses critical data and telecommunications infrastructure for a wide range of major carriers and businesses in the region. Joytel also currently provides wireless broadband services to businesses and anchor institutions in Duval County. Sun-Tel is a telecom provider that has been in operation in Florida and Kentucky for the past eleven years, with a focus on providing dial tone services to thousands of low income residential customers as an AT&T reseller in connection with the Universal Service Fund' ('USF') Lifeline/Link-up programs. CCS is a management and consulting firm that has been
in operation for three years, serving as a liaison between business and local government on key issues affecting communities in the region. The CEO's of these three organizations will comprise the top management of CCI. In addition to this core team, CCI will draw upon the abilities, knowledge, experience and expertise of its other partners, which include the principal of a twenty-year old national communications tower construction firm, a builder/developer with financial/management responsibility for major construction projects including construction of the Portals (which houses the FCC Headquarters building in Washington, D.C.). Finally, CCI will have the benefit of the enormous experience and resources of its other key supporting entities to help ensure project viability: Future Works, a thirty year fiber optic construction firm, Cisco Systems, the City of Jacksonville/Duval County, the City of Fernandina/Nassau County, Baptist Healthcare, Shands Medical, Edward Waters College and others, to assist in ensuring the solid and successful implementation and operation of its planned broadband network. These diverse, experienced, and talented organizations share a common vision, and have come together in a unique combination to pool their various skills and experience and implement a state of the art, world class network that will supply high speed, low cost broadband services to this region of the nation for years to come. This united effort will succeed in creating a truly valuable and sustainable resource for all concerned, while spurring the economic growth, new jobs, and technological innovation intended by the BTOP. Importantly, the proposed CCI network is designed to interconnect on a secure and diverse basis with the planned NFBA network, and to enable that network to improve its broadband reach, speed, pricing and diversity, by utilizing CCI’s network to directly connect to the northeast Florida region and to the enormous range of carrier/service resources present at the 56 Marietta Data Center in Atlanta and NAP of the Americas in Miami. The CCI project is also supported by and developed in coordination with the innovative, cutting edge Cisco Systems' Smart + Connected Cities initiative. This technology partnership represents a unique opportunity to deploy a state of the art broadband network that will serve as a model for the nation and the world, by making the widespread deployment of telepresence for distance learning and virtual classrooms, telemedicine, virtual libraries, telejustice, smart grid, and other advanced and truly beneficial technologies a near term reality in this region. The proposed CCI network been designed to deliver from 10 Meg to 10 Gig transport services to the largest number of anchor institutions in the region at the lowest possible cost and will be able to support the transport of the entire range of advanced broadband services available today and envisioned for unified voice, data and video services in the future. Given the enormous bandwidth that will be made available by the planned CCI network, the only limits to the available services will be the imagination and innovation of the anchor institutions and connecting carriers. CCI will operate its network as a wholesale provider, following an approach of open network architecture and network neutrality as the basis for offering service. As currently designed, the network will use a hybrid fiber/wireless microwave network ring configuration. The technology standard to be utilized throughout the long haul fiber optic network is DWDM technology, while the metro fiber network will be a more cost effective Fiber Optic CWDM ring topology, coupled with 11 and 18 Mhz wireless microwave backhaul architecture to extend network reach and add route diversity/redundancy. CCI estimates that the building and deployment of its planned network will create 217 jobs years during this process.