

## Broadband USA Applications Database

**Applicant Name:** COUNTY EXECUTIVES TELECOMMUNICATIONS INITIATIVE

**Project Title:** County Executives Telecommunication Network (CETN) formerly the County Executives Television Network

**Project Type:** Comprehensive Community Infrastructure

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### Executive Summary

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For many years, county executives sought to create a broadband communications network capable of surviving both man-made and natural disasters while also meeting the growing needs of county employees and residents for training, information and service delivery. The County Executives Association (CEA) seeks BTOP funding for a County Executives Telecommunications Network (CETN) to create a nationwide middle-mile satellite delivered broadband network. When disaster strikes, terrestrial networks often fail and agencies and jurisdictions need to communicate without network interruption. The 3,089 counties across the country need only look to the lessons learned from September 2001 and Hurricane Katrina in August 2005. CETN proposes to address two profound needs of an estimated 2,100 county governments and the citizens they serve ' access to a resilient and redundant broadband network which can survive a disaster for emergency communications and the adoption of broadband technologies and e-learning to bring down costs of emergency exercises, training, and health education. CETN would create a nationwide middle-mile broadband satellite infrastructure for use during emergencies but also for daily use for county employees and residents' training needs. Counties continue to search for solutions to providing public safety communications. According to the Department of Transportation, 68% of all counties are economically distressed. As budgets decline, training needs for county employees continue to grow. U.S. Census Bureau data shows county governments receive just 3% of their overall revenue from the federal government. A 2009 Survey by the National Association of Counties reveals that 56% of counties started their fiscal years with up to a \$10 million projected shortfall; 47% of county shortfalls increased after the start of their fiscal year. As a result, 60% delayed purchases and repairs; 59% froze pay; 49% froze hiring and 44% raided reserve funds. CETN can help citizens find jobs and acquire skills. The FCC's National Broadband Plan shows that many employers are exclusively posting jobs online, preventing citizens without access from seeking these opportunities. With limited travel budgets, e-Learning is essential to meet the training needs of county governments and anchor institutions. For counties, saving money equates to saving jobs. . Approximately half of all counties are located in underserved or unserved areas of the country. The ability to use distance learning tools to train employees in the public safety, health care, and community colleges is limited by available bandwidth. CETN enables training at a scale not available through traditional instructor led programs. The effectiveness of distance learning courses is well documented providing a return on investment of 4:1 to 7:1 over instructor led training. CETN will enable additional applications like video conferencing, policy training, and compliance training to develop. These collaborative opportunities would not be possible without broadband connectivity or BTOP

support. . Police Chiefs report that this training helps retain police officers and empowers officers in various law enforcement disciplines. CETN is currently available as a web portal to each of CEA's 700+ member counties. CETN's contractor, CiNet, delivers training today to hundreds of county institutions from police and fire departments to community colleges. Description of the proposed funded service areas The project proposes to develop and implement a middle mile broadband network connecting at least 2,100 of the 3089 counties nationwide. This includes counties that have already invested in broadband and those that are under-served or unserved. Proposed services and applications CETN's IP network will provide the e-Learning and workplace training solutions needed with a library of multimedia materials delivered through a customizable edge content delivery platform. It will comply with industry and government mandates, and facilitate individual career advancement. CETN's eLearning platform will offer on-demand and continuing education solutions, accredited programs, and reporting tools on courses delivered. In addition, CETN will create content and continuing education courses specified by the counties. Once CETN is operational, a host of uses and applications will offer counties a solution for secure communications, enhancing inter-agency and cross-jurisdictional communication. CETN will make exercises and training and job development less expensive, removing time and location barriers. Community colleges are also an integral part of the eco-system, often operating under county support and supervision. These colleges provide opportunities to recruit and train employees, and CETN expects these colleges to be beneficiaries of the new network. When community colleges link to the CETN satellite network, access to e-Learning opportunities will open up. Online courses will compliment in-class instruction. . Community colleges lag in connectivity but have dramatically grown in enrollment as students seek more affordable education. First responders (police, fire EMS and healthcare) are mandated to maintain continuing education as a requirement for their professional licenses. What first responders lack is quality multimedia training content that can only be delivered through broadband for the mandatory training that does not require skills competency demonstrations (e.g. CPR, firearms)' However, no emergency communication or information-sharing network exists that allows employees to take advantage of such services. CETN addresses this gap. The communication and gap was evident during Hurricane Rita in 2005 when satellite communications were used by Mayor Robert Eckles to manage the evacuation of Houston. Type of broadband system CETN is an Internet Protocol (IP) data infrastructure that leverages existing terrestrial communications via satellite infrastructure. The functional components of CETN will include content delivery, store and forward capability, video conferencing, VoIP and a satellite based IP network. CETN's National Operations Center (NOC) will manage and support the data infrastructure. The day-to-day functionality at the county point of presence will vary from bi-directional (two way data exchange) to receive only (one way data exchange). In emergencies, routine functions will be dynamically altered to enable bi-directional data exchanges. Every site, when activated, will have internet access, VoIP connectivity, and emergency communications features. Counties will become a local 'hub' for the IP data infrastructure. The IP is flexible enough to allow the localized hub to be a 'regional center' for several counties or a single point of presence. Satellite service delivery is unique in telecommunications. As a system, it is first, last and middle mile all wrapped together. As such, it will deliver last mile connectivity to unserved and underserved areas. By connecting to the counties, CETN provides the middle mile broadband capability. Qualifications of the Applicant County Executives of America (CEA) is a not for profit entity representing the chief elected county government executives and is the applicant seeking funding for

the CETN project. CEA has also partnered with other stakeholder associations including: other County Associations; National Sheriffs Association and International Association of Emergency Medical Service Chiefs. CETN's for profit partners include Critical Information Network, IntelSat, KenCast and iDirect, all providers of broadband communications nationwide. The project builds on successfully delivering training video via satellite or terrestrial broadband to 1,200 county sites nation-wide. CETN will utilize proven methodologies and their contractor's experience in the deployment of the satellite broadband middle mile network... CETN will manage the centralized outreach, site reviews, installations and testing using a program management office. County Executives have worked on CETN for years, the CEA Board having passed a 2007 resolution endorsing the need. This shovel ready project will create jobs and cannot proceed but for stimulus funding. County Executives are responsible for the operations, management, and use of most of the anchor institutions described in the BTOP program. Overall infrastructure cost CEA requests \$53,715,757 (\$25,579 per county) and will offer a \$23,022,300 in kind match (\$10,963 per county). Job Creation This project will create 23 direct jobs, 330 indirect jobs, and 2142 induced jobs.