

## Broadband USA Applications Database

**Applicant Name:** Cook County Government

**Project Title:** Connecting Cook County

**Project Type:** Middle Mile

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### Executive Summary

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a. Opportunity the Proposed System Seeks to Address Cook County's Wide Area Broadband Network (CCB) currently supplies all government related connections through a hybrid, service-provider and county-owned network and services capability. The Bureau of Technology is seeking funding to construct and implement a county-owned fiber optic network connecting existing Sheriff's Department Radio Towers and all County owned buildings. Our current network provides connectivity to all county offices, employees and public safety personnel who serve within the 946 square mile area comprising Cook County. With a current population of 5.3 Million residents we are also a critical enabler of homeland security related support for the 127 Municipalities we serve. Cook County seeks to facilitate the establishment of an advanced infrastructure with proper systems and processes that enhance the capability of this government to continue to protect and serve the citizens of Cook County. Cook County also seeks to provide telecommunication services, particularly to our communities who cannot participate in the Global Digital Economy. Public Safety, Health Care Operations, Employee and Resident Services are increasingly dependent on our communication infrastructure. With the continuing and escalating threats enabled by the daily dependency on technology there is an increasing need to "harden" and secure our infrastructure. To accomplish this and provide these critical services to our residents we require capitol investment. Under the current financial structural deficit we cannot accomplish this alone. We require a substantial commitment for funding.

b. General Description of Proposed Funded Service Areas The proposed funded areas consist of the County areas outside of the City of Chicago. The County is working in collaboration with the City to insure the maximum amount of coverage as possible. A Letter of Support from the City of Chicago is attached in Supplemental Information 1. The County is submitting an Infrastructure, Public Computer Center and Sustainable Broadband Adoption applications.

c. Number of Households and Businesses Passed Suburban Cook County has a population of approximately 2.5 million and includes approximately 939,000 households and 94,000 businesses. The County has identified targeted low income areas which consist of 190,053 households.

d. Critical Anchor Institutions and Public Safety This Project is specifically focused on connecting the existing 22 Sheriff's Department Radio Towers, six Court Houses, six Highway Department facilities, three hospitals, five President's Office of Employment Training (P.O.E.T.) Training Centers, a Sheriff's Training facility and the County's main warehouse. These locations serve as anchor institutions in the community and provide vital County services.

e. Proposed Services and Applications for Users The project also presents an opportunity to expand network capacity and leverage the County's significant investment in its infrastructure to reach the economically depressed and disadvantaged neighborhoods within Cook County. Coupled with the implementation of an advanced

broadband wireless capability, this network would enable Internet access users to connect to the Internet within a potential range of 15-20 miles from specific access points. By using wireless last-mile technology, Cook County will be able to optimize the use of its existing tower infrastructure, terrestrial capacity and provide accessible wireless high-speed broadband services. Cook County has also been granted the Authority to provide facilities-based interexchange telecommunication services, resold local and interexchange telecommunication services and facilities-based local telecommunication services f. Non – Discrimination and Interconnection Obligations The Network will be totally open to all County departments including the P.O.E.T. Training facilities. For example, P.O.E.T. may want to extend services to local community organizations that provide similar services under the Workforce Investment Act grant. The County will require any selected Service Providers to insure compliance with Non-discrimination and Interconnection obligations. g. Network Design The County had proposed 140 mile fiber optic network providing dark fiber to the County facilities and high speed wireless to Highway Department and P.O.E.T facilities. The Configuration includes complete switching and routing equipment, bridges, firewall, wireless equipment and poles. h. County Qualifications Cook County has invested in and deployed significant in-building structural wiring and wireless networks and has the requisite organizational structure, skills and experience to successfully expand its existing infrastructure. Due to the size and scope of the project, the County will also utilize experienced outside professional firms to install the cable, equipments and assist with other requirements. The County maintains a list of qualified vendors who are available to assist the County with this important initiative. i. Overall Infrastructure Cost The overall Infrastructure Cost of the proposed Network is \$ 38,506,467. Major cost components include fiber optic construction, transport and network equipment. Details are presented in Attachment G. j. Overall Expected Subscriber Projections It is projected that all 22 County facilities will benefit from the additional broadband and speed provided by this project. It is anticipated that other County facilities will be added during subsequent phases. P.O.E.T.S may consider adding other local community organizations. Additionally, the Network will be actively marketed to other non-profit entities and business partners to promote economic development in suburban Cook County. k. Estimated Job Creation Project costs include \$ 21.5 Million related to engineering, construction and professional services. These services could be provided by local firms to create jobs and serve as an economic stimulus to the region, while providing much needed high speed communication capabilities. We estimate that this Project has the potential to directly create approximately 100 engineering, construction and professional services jobs, and indirectly a significant number of additional jobs related to the network and material components.