Executive Summary

a. OPPORTUNITY THE PROPOSED SYSTEM ADDRESSES: The Southern Tier area of NY State has many positive attributes including an educated and skilled work force, hometown quality of life, access to most of the tangible resources desirable for economic development and creating jobs including land, buildings, electric power. The one missing component is an updated telecommunications system. The Tier Information and Enterprise Resources (TIER) proposes to adopt a comprehensive communities infrastructure approach to build a sustainable middle mile network neutral Open Access Dark Fiber Optic Backbone in the Southern Tier area of NY. This project complements and leverages the ION/DANC first round BTOP by extending the fiber infrastructure to over 685 anchor institutions, and 157 communities throughout a six county region. This application is largely supported by the 8 key partners who are providing a 33% match in funds, and in-kind material and labor. 38 organizations have provided their support for the project as evidenced by their letters of support. Strong support for this initiative has also come from Dr. Mayberry-Stewart the CIO of New York State and Mike Ridley the Director of the NY State Foundation for Science, Technology and Innovation (NYSTAR) through a matching funds commitment of 10%. The project will also generate 280 jobs. Consistent with the terms of the Recovery Act this project is not in an area that RUS has funded with Middle Mile awards made through BIP. This project meets all seven CCI Priorities as specified in the BTOP NOFA. The project will deploy a Middle Mile broadband infrastructure with a commitment to offer new or substantially upgraded service to community anchor institutions. A significant number of community anchor institutions have expressed a need for access or improved access to broadband services. The project has established public-private partnerships among government to include New York State, the STCRPDB, STCRPDB, all six counties served by the project, non-profits to include seven non-profits serving people with developmental disabilities, and for-profit entities to include Corning, Inc. with two roles as a partner, who will receive services, and also provide a matching share. The project will bolster growth in all six counties to include four of the counties which are economically distressed areas. We will serve two Community Colleges that have expressed a demand for access or improved access to broadband service. The project will serve public safety entities that have expressed a demand or indicated a need for access to include 44 public safety towers, 21 police stations, 55 fire stations, and 6 ambulance stations. TIER's projects will deploy Middle Mile broadband infrastructure that includes commitments or non-binding letters of intent from one or more Last Mile broadband service providers. We have developed partnerships which has generated a 33.6% match of the total eligible costs of the project. It is TIER's goal to provide fiber optic backbone infrastructure extensions off of the ION fiber into rural areas of the Southern Tier. b. PROPOSED FUNDED SERVICE AREA: The proposed funded service area for the fiber routes will be in the
Southern Tier of New York State and includes the counties of Broome, Chemung, Delaware, Otsego, Schuyler, and Steuben. The total square miles of the service area is 5,084 square miles, with a population of 541,281 and a population density of 106 persons/square mile, and there are no cities with greater than 50,000 residents. The service area consists of 157 towns and villages. c. HOUSEHOLDS AND BUSINESSES PASSED: We will pass approximately 212,886 households based on data from the US Census Bureau. The project will pass 2,674 businesses according to data from the NYS Dept of Commerce. d. COMMUNITY ANCHOR AND INSTITUTIONS PASSED: The project will provide opportunities for 685 community anchor institution locations that can be connected to the fiber backbone including to all 44 EMS 911 towers in the region, 3 Boards of Educational Services, 111 schools, 39 libraries, 49 medical and healthcare providers, 4 community college locations, 6 institutions of higher education, 224 community support organizations, and 112 municipality locations. e. PROPOSED SERVICES AND APPLICATIONS: The TIER seeks to be a wholesale provider of fiber optic capacity throughout the region. The business model is based on leasing dark fiber optic capacity to enterprise, carrier, and other entities who desire to manage and control their own telecommunications networks. The business model will focus on partnerships with service providers to use the fiber optic backbone to expand services into the more rural areas of the region. The proposed services will consist of dark fiber strand leasing and IRUs only. f. NON-DISCRIMINATION AND INTERCONNECT OBLIGATION: The TIER will allow any viable organization or service provider access to the infrastructure. The fiber optic backbone will allow for interconnection to existing fiber owned by others in the region. TIER has commitments from a number of service providers to use the infrastructure once it is put in place. TIER will make every effort to accommodate rural last mile service provider access in remote and unserved areas of the region. The backbone will provide an equal opportunity telecommunications foundation for service providers, including cost effective CLECs and WISPs service providers. g. TYPE OF BROADBAND SYSTEM: TIER will deploy a sustainable middle mile network neutral Open Access Dark Fiber Optic Backbone. The broadband system will consist of a dark fiber backbone, passive POPs, and splice points that will allow for the interconnection of other networks and last mile provider equipment. This infrastructure has been confirmed by the 911 departments and the service providers as the most desirable type of backbone infrastructure. This technically advanced, flexible and reliable Open Access telecommunications 'Carrier Class' backbone of approximately 610 miles will consist of single mode cabling as manufactured by Corning Glass Corporation. It is anticipated that cable sizes along the fiber optic backbone will range from 72 to 96 fibers and be sized to accommodate future growth. h. QUALIFICATIONS OF APPLICANT: Created by The STERPDB has a local development corporation to assist in the development of ED projects TIER will manage and provide oversight responsibilities. TIER an Economic Development not-for-profit which was formed and has operated in NYS since 1985. The design, construction and operations of the fiber backbone will be accomplished through the creation of Public Private Partnerships. Existing and future contracts with companies such as ECC Technologies, Syracuse Utilities, and Energy East; and others as needed will facilitate the development and support of this fiber backbone. Bid packages for the building of aerial sections of the fiber backbone can be released and awarded with 30 days of notification of funding. Some of the agreements with utility pole owners allowing temporary attachments are in place and will minimize Make Ready delays. Construction can begin immediately. Broadband service providers have stated that if the region can find a way to build the fiber, they will provide last mile broadband solutions over the fiber. Enterprise customers including the hospitals, k-12 school districts, colleges and
municipal organizations will use the fiber to expand their own industry specific applications to areas of
the region that need it the most. i. OVERALL COSTS: The overall cost of the fiber infrastructure will be
$24,570,437 with annual operations and maintenance costs of $1,295,234 in the third year. Value
engineering will be provided and costs tracked continuously to ensure adherence to budgets and
timelines. We are building the fiber optic backbone in the most efficient and economical manner
possible. It is our position to build, lease, and operate the fiber optic backbone in partnership with
existing utilities wherever possible. j. SUBSCRIBER PROJECTIONS: The levels of community support for
the project have been very encouraging. All levels of the community, including the Service providers,
have indicated a strong level of support and a willingness to participate in the Open Access Fiber Optic
Backbone. The project has 685 of anchors signed on and it will become sustainable in 3 years. k. JOBS
CREATED: This project will create 280 jobs. The number of jobs estimated to be created during the
construction of the fiber backbone is 262. Of the project jobs ECC Technologies is anticipated to have
approximately 18 people working on the initiative including after construction helpdesk and operations
and maintenance. Based on experiences from the Ontario County Fiber Backbone it is expected this
infrastructure will result in the attraction of 89 local jobs in the first 2 years.