The University of South Florida Polytechnic (USFP) is pleased to submit this proposal to the U.S. Department of Commerce, National Telecommunications and Information Administration for the Middle Mile Comprehensive Community Infrastructure (CCI) Project. The primary focus of this project is the 300,000 households and 55,000 mainly small businesses of four Florida Counties. USFP, located in Lakeland, Florida, has chosen to apply for this funding with the end goal being the establishment of a high speed, interconnected network for an intra-campus and inter-campus network that will also serve the rural, unserved areas as well as interconnect with the Polk County Sheriff’s department. The result will be to give USFP access to educational applications and research nationwide and to provide training, community services and employment opportunities to the economically hard hit counties of Desoto, Hardee, Highlands and Polk in Central Florida. USFP has a long history of providing educational classes and other programming to colleges, hospitals, public safety groups, K-12 and many vulnerable demographic segments. The USFP Network will be implemented utilizing DWDM and MPLS technologies. This technology has become the standard for long-haul telecommunications, metropolitan area, and access networks using hybrid architectures of fiber and coaxial media. Through the utilization of this technology, existing fiber access can be utilized without upgrade and integration of new fiber routes becomes much easier to manage. This proposed fiber network will deliver high-speed access, statewide on a shared 10 Gigabit Ethernet or 1 Gigabit Ethernet higher-performance circuits. This 15-site network will give USFP the ability to promote next generation educational opportunities and meet the emerging needs of USFP student and teacher bodies, and enable a culture of cooperation among the anchor sites and beyond. It will expand the reach into new markets; improving the ability and quality of online course offerings; integrated library services; multi-site business management services and increased interactive components of the overall higher educational system through collaborative efforts among colleges and universities. Enhanced broadband will provide USFP with the ability to create many new application solutions for our educational system, including on-demand remote learning, sharing of courses, decreased administrative costs through shared costs and increased course availability for students. The ability to promote business and economic development partnerships with area businesses and the ability to attract additional businesses to the area as a result of high speed broadband connectivity offerings is something these counties need desperately. The four county area is one very much in need of opportunity: 'Average unemployment over 11.5%, higher than the national average of 10%;' 'All four counties carry the Health and Human Services designation of Medically Underserved Areas (MUA);' 'All four counties have the Health and Human Services designation of Medical Underservice (MU) due to significant populations of low income/Medicaid eligible populations;' The
percentage of those attaining a high school education is below the Florida average of 79%;¹ The percentage of those attaining a bachelor's degree is significantly below the Florida average of 22% - ranging from a low of 8.4% to a high of 14.9%;¹ The median household income across Desoto, Hardee, Highlands, and Polk counties averages a minimum of $10,000 below the national average;¹ The U.S. highest end of the current foreclosure rate is considered to be 1 in 700¹ the foreclosure rates in the four foundation counties are: 1 in 166 (Polk); 1 in 321 (Hardee); 1 in 316 (Highlands) and 1 in 297 (Desoto). The USFP application will be unique and particularly well suited to fulfill the goals of the NTIA as the economy and the well-being of the residents in this four county area is vitally important to the future of Florida. Lakeland is situated between Tampa and Orlando -- the 15th largest economy in the world. Growth in this area has exceeded the national average every year for the past 20 years. Furthermore, having a high speed broadband network, perfectly compliments the Obama Administration's recent announcement of $1.25B in funding for a Tampa-Orlando high-speed rail and fits within the HUD mission to create advanced and transformative 21st century cities. These two initiatives will turn Central Florida and Tampa Bay into a single region which will be able to attract more employers and more talent to this area. Nondiscrimination and Interconnection Obligations The USFP project is consistent with the NOFA's nondiscrimination and network interconnection obligations. We are fully committed to exceeding the minimum requirements for interconnection and nondiscrimination established in section V.C.2.b. of the Federal Government's NOFA. USF will also employ a full time person to ensure that this project and the use of funds are completely transparent, the public has access to our efforts through a website and our existing non-discrimination and employment policies are followed. There will also be a 24-hour contact line through which law enforcement agencies can contact USFP for the removal of illegal content. Network Type and Technology Standard Qualifications of the Applicant Organizational Readiness The applicant, USFP, is ready to deploy the network facilities upon award. USFP has established vendor relations, including a team of experienced telecommunications executives, financial managers and engineers proficient in all facets of business development, program management, network design, network integration, deployment, implementation, provisioning, and customer care. Waldron and Associates will have responsibility for the overall program management of the project. Inspired-Technologies will plan, implement, manage and operate the new network by overseeing the build-out and onsite management of the network. Telcordia Technologies, Inc. will partner with Inspired-Technologies for technical project management and to provide end-to-end oversight on the technical deployment. Overall Infrastructure Cost Subscriber Projections Job Creation Estimates Direct Job-Years: 489 Indirect Job-Years: 400 Induced Job-Years: 10,600 The Council of Economic Advisors (CEA) methodology is most appropriate for estimating one-time job creation for construction projects. For this project, we use it to estimate the direct jobs created for the construction, installation and network management of this $45 million broadband network at 489. For induced jobs we have to account for the impact of having the broadband network in place. Currently, USFP has approximately 4,229 students enrolled. Through distance learning, educational broadcasting, and more effective teaching resource utilization that are possible with this network, USFP can increase the class sizes by a minimum of 5%, or 211 students, or 53 students per year. Over a 40 year career span, a single incremental class will create 2,120 job-years. The first five years alone of this project will have a cumulative effect of inducing 10,600 job-years. Increased enrollment also creates the need for more educators and, with average class sizes of 22 students, another 10 instructors will be needed and an
incremental 400 job-years indirectly created over a 40 year period. In total, we estimate 11,489 job-years to be created, with 489 being directly created to build, install, and maintain the network, 400 indirect job-years created for additional instructor positions, and 10,600 induced as a result of increasing the pool of college graduates. Conclusion USFP broadband Middle Mile proposal gives long needed access to community and individual opportunity. Award to USFP paves the way for over 300,000 households and 55,000 small businesses to achieve economic and educational parity in their home state.