Okaloosa County is bisected north and south by Eglin Air Force Base (AFB). The northern portion of the county is rural and mostly underserved. The southern portion is mostly served but at a high communication cost. Due to the geography of the Eglin AFB bisection, northern Okaloosa County schools, community anchor institutions, non-profits and public safety agencies simply cannot access acceptable broadband technology and there is no affordable broadband access between north and south that bridges the Eglin AFB gap. Since our funding model for schools is based on enrollment, smaller north county rural schools simply cannot afford to teach a wide variety of subject matter. The solution is to enable these schools to access larger south county schools. The two main factors that prevent this access are availability and affordability. This lack of availability and affordability preclude these entities from connecting to each other and to the Internet to reach the underserved with the broadband access required for distance learning, online courses, and efficient government. With the current emphasis on Science, Technology, Engineering, and Math (STEM) all of our local schools require increased connectivity. However, County and School Board taxing authorities are faced with extreme budget shortfalls and layoffs and furloughs are real possibilities. This grant will be useful for several reasons, it will create direct implementation jobs and also enable government agencies and others to reduce communication costs resulting in real savings passed on to the tax payers. These savings will save jobs and spur the economy by mitigating the need for higher local taxes and fees. The Okaloosa Broadband Cooperative grant will bring cost effective broadband service to rural underserved areas in northern Okaloosa County. Schools, community anchor institutions and public safety agencies will now be able to afford high capacity robust access to the Internet and to similar institutions. This outreach program will extend the World Wide Web (WWW) to these rural communities bridging a 25+ mile gap to the nearest community Internet access point. The grant funding will provide opportunities for education, commerce, video teleconferencing to military personnel abroad and networking other vital public and private services. Broadband will also be provided to Elder Services promoting well being, jobs and expanding educational opportunities. In addition, public libraries will be connected with video conferencing capabilities giving them the ability to further extend the offer of lifelong learning to disadvantaged areas. This project leverages the existing Okaloosa County Fiber Optic Network (OCFN) which already connects many county departments and agencies. However, many Community Anchor Institutions and Critical Community Facilities are not connected to OCFN due to lack of funding and the shortage of robust middle mile infrastructure, particularly in the underserved North Okaloosa Service Area. This grant is specifically targeted to connect the remaining Community Anchor Institutions and Critical Community Facilities and provide dark fiber for incumbents to provide last mile services in those
areas designated as underserved. This middle mile grant will fully connect our North and South service areas. Service Area Anchor Institutions The proposed underserved 'North Okaloosa Service Area' in northern Okaloosa County contains approximately 326 square miles, 292 businesses and over 7800 inhabitants. The proposed served "South Okaloosa Service" in mostly southern Okaloosa County contains approximately 756 square miles, 10,664 businesses and over 162,620 inhabitants. There are fourteen partners in this grant application with Okaloosa County including: Okaloosa County School District Blackman Community Center City of Laurel Hill Baker Community Center Baker Block Museum Elder Services Okaloosa County Public Safety Florida Department of Agriculture (Division of Forestry) Okaloosa County Libraries Harbor Communications Callis Communications Twin Cities Hospital Fort Walton Beach Medical Center North Okaloosa Medical Center Non Discrimination Interconnection The fiber optic network constructed with these grant funds will be a shared resource open to interconnection to any entity desirous of the opportunity extended by this grant. Fiber connections will be made available in a clear and concise manner allowing for multiple uses by different entities. Services and Application The fiber network extensions to be constructed with these grant funds would never have been achievable if this grant was not available. The proposed middle mile fiber network to rural areas connects sixty eight (68) Community Anchor Institutions and Critical Community Facilities to include: forty eight (48) public school facilities, seven (7) public safety entities, four (4) underserved economically disadvantaged community center locations, six (6) libraries and three (3) hospitals and (1) Extension Services and other governmental. Public Safety entities will benefit through increased communication to emergency responders and critical facilities. Several rural Public Safety centers, including fire departments and sheriff department substations, will be networked with the remainder of the public safety facilities in Okaloosa County. These remote locations are vital to Public Safety as they are used as staging areas in the aftermath of hurricanes or other catastrophic events. The proposed fiber ring in the North Okaloosa Service Area will help provide the fault tolerance necessary to support mission critical applications. The Okaloosa County School Board (OCSB) will benefit by reducing and stabilizing their annual budget for communications and connectivity. These savings can be reallocated for teachers, technology, distance learning and other critical educational needs. This project will also lay an avenue of growth for future technologies as they develop. During the first year of operation alone at current costs, the OCSB will save over $400,000 and more in future years if they fully developed VOIP. The Okaloosa County Library Cooperative will be networked and outfitted with new video teleconferencing equipment. Opportunities for distance learning will then extend to underserved and unserved remote areas promoting education and lifelong learning. Qualifications Implementation Sustainability Okaloosa County has designed, developed, implemented and sustained a fiber optic system since 2001. This system has been sustainable in providing communications to county government at many levels over a widespread area. Okaloosa County has reduced communication costs each year since FY 07 from over $800,000.00 to FY 10 with projections to be under $400,00.00. Overall Infrastructure Cost The federal grant amount is $9,349,131.00. The cost will be allocated between new conduit and fiber, LAN connections, building modifications, computers, wireless and network hardware, as well as telecommunications hardware and software. Overall Subscribers As there will be no charge for the broadband service provided to Community Anchor Institutions and Critical Community Facilities there will be no associated subscription fees from users. Potentially, over 7,800 residences with the proposed underserved service area will have access to the system as well as over 30,000 students. Sixty
eight (68) Community Anchor Institutions and Critical Community Facilities will be connected using the proceeds of this grant. The new fiber project will interconnect to the existing Okaloosa County Fiber Network. Okaloosa County will provide a 30.5% match including dark fiber resources and equipment that will link rural areas to educational institutions and the WWW. With this expansion comes added cost and responsibilities for Okaloosa County. The Okaloosa County Board of County Commissioners (BCC) will have increased costs for extending its network to Community Anchor Institutions and Critical Community Facilities and underserved areas. As miles of fiber are added to the existing network, locating and maintenance costs will increase. These costs will be shared by OCSB for their portion of the expanded fiber network. Additionally, providing internet access to new locations will increase the cost to the BCC as well. As the BCC is already engaged in and will continue to be engaged in the procurement of internet bandwidth, we hereby commit and directly state in our letter of support to provide Internet bandwidth on a sustainable basis to meet or exceed 768 Kb downstream and 200 Kb upstream per location.