Peninsula Fiber Networks, LLC (PFN) is a partnership of two companies: Baraga Telephone Company (BTC) and Hiawatha Communications Inc. (HCI). HCI is the holding company for Hiawatha Telephone, Ontonagon County Telephone, Midway Telephone and Chippewa County Telephone. These companies created PFN in 2004 to leverage their expertise and assets by creating a middle mile network that is reliable, cost efficient, and reaches beyond the individual companies' historical service areas. PFN now seeks to extend PFN's service offerings to an additional area that currently have little or no access to affordable broadband. This area is familiar to PFN. PFN's market contacts have shown a demonstrated demand for reliable and affordable broadband services to businesses, households and Anchor Institutions. PFN and its partners are well-established broadband service providers in Michigan's Upper Peninsula. Each has built and currently operates extensive broadband infrastructure. PFN currently provides sustainable broadband service, as demonstrated in its historical financial statements. Further, in the Pro Forma provided with this grant request, PFN shows that with the NTIA grant for Critical Community Infrastructure, PFN will be able to provide sustainable broadband services to its proposed funded service area. Combining PFN's current operations with its operation in the proposed funded service area will produce a strong organization that will provide broadband services to Michigan's Upper Peninsula for the foreseeable future. The Proposed Funded Service Area is Big Bay Michigan (Census Tract 14 of Marquette County Michigan, Group 3). Big Bay is located at the end of a paved road (Marquette County Rd. 530) about 30 miles northwest of Marquette, Michigan. Big Bay is a struggling community that has been required to bus their senior high students about an hour away. This is an economically disadvantaged area. Per capita income in Big Bay is 84% of Michigan's, which is 93% of the US'. The unemployment rate for the Marquette County is over 11%, with labor force information indicating a higher rate in Big Bay. PFN wants to counter this economic data with a network expansion that will add to the economic viability of existing businesses and encourage new sources of employment by providing reliable/affordable broadband to Big Bay. PFN's network expansion will enhance the effectiveness of the Anchor Institutions by providing these entities a direct fiber connection to PFN's network and access to the Internet and other critical services at rates that reflect cost savings from BTOP grants. This BTOP middle mile project will make broadband obtainable to 411 additional households. Projections show that PFN's broadband products will serve 197 of these households over the period of study. Similarly, the additional businesses that can obtain broadband under this project are 16 with approximately 15 served by PFN's broadband products over the period of study. There is no cable TV provider and the local telephone company does not offer DSL in this area. Some of this area can get wireless broadband, generally at less than the advertised speeds and typically far below the 768
KBps minimum defined by the NOFA. A significant number cannot access a wireless tower. The charges are significantly higher than those considered affordable in urban areas. The Anchor Institutions rural areas are without reliable/affordable broadband access. Local information indicates the proposed route will pass 5 Anchor Institutions. The proposed facilities will provide broadband backbone services offered at speeds up to 1 GB/sec, with plans to deploy 10 GB/sec and additional wavelengths. PFN's offerings include point-to-point broadband connections; wholesale Internet bandwidth to ISPs, Anchor Institutions; and individual broadband access to businesses. PFN will offer broadband directly to Anchor Institutions. All of PFN's network constructed with the BTOP grant funds will be capable of delivering 100 meg to all end-points in PFN's network. The services offered will mirror PFN's current rates and terms for broadband. PFN will continue to offer term and volume discounts. PFN will provide Anchor Institutions services at rates discounted 25% below the affordable rates offered to residential and business subscribers. To the extent PFN builds loops and spurs to Anchor Institutions with BTOP funding, PFN will pass the BTOP funding savings to these entities. Without PFN passing on these savings, we expect that many will find critical broadband services beyond their budget. PFN's network adheres to the FCC's Internet Policy Statement. It is the policy of PFN not to favor any lawful Internet application and/or content over any another. PFN provides wholesale broadband to multiple last mile providers and ISPs. PFN's network has multi-homed connections to the public Internet backbone. Any new network infrastructure, built with BTOP grant funding, will expand and improve PFN's existing open network. Through PFN's offerings, customers can choose public Internet access or managed point-to-point connections. PFN's existing broadband fiber network is based on optical-fiber transport technologies including DWDM equipment with latest releases capable of transporting SONET and Ethernet/IP. This application is based on the continuation and extension of this forward-looking next-generation optical broadband Ethernet/SONET network solution into the BTOP-funded area. PFN will use standards-based technology allowing for competitive bidding from several qualified vendors. BTC was the first ISP in the U.P. offering dial-up service in 1995 and DSL service in 2001. Currently, BTC serves 2,243 broadband households including 135 fiber-to-the-home subscribers. BTC services most of Baraga County and parts of Houghton and Iron Counties. HCI's operating companies began providing Internet Services about 1997 and now provide broadband to over 2,600 households in nine counties. PFN currently provides service to seven other broadband providers that directly provide broadband to an estimated 15,000 customers. PFN was formed in 2004 and today manages one of the largest fiber-optic networks in the U.P. PFN has constructed approximately 350 miles of fiber and can currently access a network of nearly 800 miles. PFN uses the experience and personnel of its partners' operating companies to help serve its customers. As the need for personnel increases due to expansion of the network, PFN or one of its partners will add personnel to maintain the reliability of the network and the quality of service our customers expect. The application shows PFN is a financially stable entity with a proven business model. PFN plans to carry out the same model and principles with all future endeavors. PFN is requesting BTOP grant monies of $1,963,672 to build 52 miles of fiber-optic cable. These funded assets will complete the planned ring architecture that will ensure the reliability customers expect and extend affordable broadband to additional areas of the U.P. PFN has currently invested $6 M in plant (mostly middle mile) and has access to another $6 M of its partners' plant. It is PFN's plan to leverage this investment with BTOP-grant funded plant to bring affordable and reliable broadband to the U.P. through an integrated system. PFN is capable of ensuring completion within the three-year requirement. PFN's original
network construction of nearly 200 miles of similar fiber came in on time and on budget. PFN's parent companies completed construction projects of similar size (some RUS) and have addressed the challenges of obtaining rights-of-way, managing contractors, and staying on budget. PFN also has experience in managing a broadband network. With the completed ring architecture, this equipment will significantly increase network reliability. PFN has proven its ability to sell services that support its operations. PFN has received interest from Anchor Institutions and last mile providers that want to purchase broadband from PFN. PFN estimates that the requested BTOP Grant funds will allow it to provide broadband access directly or through a third party to an additional 4 Anchor Institutions, 197 additional households, and 15 additional businesses during the period of study. Without the requested BTOP funds, PFN does not believe these facilities to be economically viable due to distances between communities, sparse population, and current economic conditions in the U.P. It is essential that every business have access to reliable high-speed broadband. Without such access, it is unlikely a business will thrive. PFN will hire people from the local area. Further, PFN estimates its broadband offering will create or save 4 jobs at Anchor Institutions and ISP purchasing services from PFN. Finally, PFN estimates the grant will create 27 jobs.