HAWAIIAN TELCOM INC.

Hawaii County Community Broadband Upgrade

Comprehensive Community Infrastructure

CONFIDENTIAL Hawaiian Telcom, Inc., (HTI) with its parent company and affiliates (collectively 'HT') and partnering with Hawaii County, which encompasses the entire Hawaii Island, proposes to upgrade the broadband highway serving Hawaii Island. HT will construct a middle mile fiber segment along Hawaii Island's southeastern coast creating a network expandable to capacities in excess of 800Gbps and improving access points at 22 central office locations. HT also seeks to upgrade the County's telecommunications network to link its facilities to the new highway making it easier for residents to contact County offices. These upgrades will allow for the immediate improvement of 9 key County facilities with fiber connections. HT will also offer ISP, CLEC and wireless carrier customers access to the network via collocation or wholesale services. The highway will support future speeds of 10Gbps or more for these critical locations. Hawaii Island faces several geographic and financial obstacles in constructing broadband infrastructure. Volcanic activity, tsunamis, and other hazards make it very difficult for HT to build new facilities; hence putting more residents lives in danger without broadband access. An ongoing eruption of the Kilauea volcano has already destroyed HT's facilities in Kalapana. This grant will give HT the opportunity to upgrade the network and provide improved last mile services to 62,457 households, and 4,364 businesses with broadband traffic traversing the newly created fiber ring. 40 County Critical Community Facilities and 42 County Public Safety Entities, community colleges, educational institutions and other CCFs will benefit from improved broadband access. HT's proposal: (1) leverages HT's highly trained and experienced personnel who have engineered and maintained numerous similar-sized projects; and (2) upgrades HT's existing middle mile network to cost-effectively provide improved broadband services to CCFs. The project also addresses key socio-economic needs: (1) improved service to CCFs such as civil defense, police and fire entities; (2) improved broadband service for the general public; (3) rural economic development in impoverished areas; and (4) new job creation, including 19 direct FTEs from the project and the furthered economic development the project will promote. The Opportunity-Economic Weakness and Isolation. The Transportation Department classifies the County as 'economically distressed' based on an average per-capita income 80% below the national average. Hawaii Island is the largest of the state's eight main islands and continues to face hampered economic growth and job creation. According to January 2010 data from the Bureau of Labor Statistics, Hawaii County has a poverty rate of 13.3%, and an unemployment rate of 9.9%. The median household income is 22.9% below the state average, according to the 2008 U.S. Census Bureau. Broadband and Other Infrastructure Disadvantages. In some areas, only limited, spotty, broadband options with less than 2 Mbps downstream are available. In other areas, bandwidth is insufficient to support advanced broadband services, preventing effective broadband communication between County agencies and
citizens and hindering the County's ability to meet public safety obligations. Proposed Funded Service Area. The PFSA is the entire Hawaii Island with the exception of the Kohala area. Number of Households and Businesses. The project will benefit an estimated 62,457 households and 4,364 businesses. Number of Critical Community Facilities and Public Safety Entities Passed and/or Involved. The project will involve providing upgraded broadband services directly to 82 County CCFs (40) and PSEs (42). The project will also provide improved access to most anchor institutions, including the island's community colleges, with HT's existing last mile facilities. Services & Applications. Upon completion of the fiber and transport infrastructure, this project will provide the proposed beneficiaries: 1. High Speed Internet (HSI) service up to 11Mbps, 2. Enhanced IP Data Service (Virtual Private LAN) with speeds up to 1Gbps or more, 3. Routed Network Services (IP VPN service) with speeds up to 1Gbps or more, support for advanced applications such as voice/video over a single network infrastructure and scalable bandwidths, 4. Business All in One service which provides voice, data/video and Internet over a single broadband connection and 5. Managed Network Service (MNS) which allows HT to monitor a customer network. The backbone network will provide aggregation and backhaul transport services for wholesale entities such as wireless carriers. Broadband System. HT will leverage and expand its existing high speed network, resulting in a Multi-Protocol Label Switching (MPLS) cloud with 22 access points. HT will expand the total fiber network by 31 miles with capacities of 50Mbps to 10Gbps. HT will connect the County's CCFs to the network over existing HT facilities and construct fiber connections to 9 County facilities. HT will make middle mile improvements to 22 central offices to improve resiliency and bandwidth availability in the backbone. The cost effective design allows HT to scale the network with higher offerings in the future as bandwidth needs of communities continue to rise. Non-Discrimination and Interconnection Obligations. HT is committed to strict adherence to all applicable non-discrimination and interconnection requirements for the life of all funded deployments. HT will comply with the FCC's Internet Policy Statement and maintain a fully open non-discriminatory Internet access network. HT will offer interconnection where technically feasible on a wholesale basis at reasonable rates and terms. Type of Broadband System HT will build a resilient, high speed, Dense Wave Division Multiplexing based optical transport network using reconfigurable optical add/drop multiplexing digital wrapper technology to extend the reach of Internet Protocol (IP)/MPLS capabilities further into rural communities. HT will use aggregation devices for the last mile connections resulting in a network with 22 access points throughout the Island and integrated into HT's statewide and international MPLS network. The network will consist of 300 miles of existing fiber and 27 miles of additional fiber built under this project. Capacity in the core network will start at 440Gbps with growth potential of over 800Gbps. Access capacities will have at least 25 Mbps for copper locations and up to 10 Gbps for fiber locations. Applicant’s Qualifications. HT is a full-service telecommunications provider and incumbent local exchange carrier for the State of Hawaii, serving the telecommunications needs of Hawaii for over 125 years. HT provides a wide spectrum of products and services such as local telephone service including voice and data transport and network access, high-speed Internet, long distance service, customer premise equipment, data solutions, managed services and wireless communications. HT operates the state's most advanced carrier class network which includes a 7/24/365 Network Operations Center that monitors networks and takes preemptive action to ensure reliable service. HTI is the funding entity and will be responsible for constructing the infrastructure improvements while Hawaiian Telcom Service Company, Inc. will be responsible for the marketing and sales of broadband
services. The County played a major role in defining the priorities and parameters of this project. HT filed a voluntary petition for relief, on December 1, 2008, under Chapter 11 of the U.S. Bankruptcy Code. The court then confirmed HT’s Plan of Reorganization (Plan) by written order. HT is obtaining regulatory approvals of the Hawaii Public Utilities Commission (HPUC) and FCC as the remaining conditions for the Plan to become effective. The Plan restructures HT’s capital structure by cancelling over $800 million of debt and issuing new common stock to HT’s secured creditors. The Plan includes a transfer of control to new owners but HT’s operations, assets, and management will remain substantially unchanged. Emergence from bankruptcy will not affect HT’s grant obligations, and HT will remain obligated to fulfill all terms and obligations of any stimulus grant. As a reorganized entity with reduced debt obligations, HT will be financially stronger and fully capable of executing and sustaining the proposed project. Co-Applicants. No co-applicants exist for the project. Cost. The cost of the proposed broadband infrastructure project is $6,200,386. HT seeks grant funding for 70% of the project costs or $4,339,494. HT will fund 30% or $1,860,892, with company cash. Subscribers. HT estimates it will have 2,093 new subscribers by the end of 2018. Number of Jobs. The project will save or create estimated job-years of 19 direct jobs, 46 indirect jobs and 37 induced jobs.