Executive Summary

Albany State University (ASU), a Historically Black Institution located in legislative district 162 and U.S. congressional district 002 in rural Southwest Georgia, is a comprehensive, coeducational liberal arts institution which offers undergraduate and graduate curricula. Albany State University is located in Albany, GA; the metropolitan service area includes Dougherty Baker, Calhoun, Lee, and Worth, Mitchell, Early and Terrell counties. ASU provides innovative instructional and professional programs through its four academic colleges (Sciences and Health Professions, Business, Education, and Arts and Humanities) and the Graduate School. The institution offers nearly 50 graduate and undergraduate degrees. The total 2008 Fall Semester enrollment for Albany State University was 4,032 of which 91% were African Americans and a majority was first-generation college students. ASU's teaching faculty consists of 231 full and part-time highly qualified yet diverse individuals. Faculty members are recruited from broad areas. ASU is an anchor institution for the southern region of Georgia and its economic development impact rate has proven to be more than 20% of the institution’s operational budget. ASU's Office of Information & Instructional Technology (ASU-OIIT) and the Center for Advanced Logistics Managements seeks funding to provide a comprehensive community infrastructure. The Albany State BRIDGE Development project will implement a carrier-grade backhaul infrastructure using WiMax to provide wireless mesh network access in targeted underserved population areas for educational service institutions in the Albany State University, Albany Technical College and Turner Job Corps center. Additionally, WiMax backhaul infrastructure points will be strategically located throughout the city of Albany to provide infrastructure for future expansion of city wide broadband access. The City of Albany is the primary service area served by this project. The land area covers 55 square miles with 1,385 persons per square mile. There are 28,620 households in the City of Albany and 5,235 businesses. Twenty two percent of the businesses are African American owned. The Albany State University BRIDGE project will provide affordable broadband infrastructure with the potential to serve to 46 community anchor institutions. The 2006 City of Albany Census estimate of the population is 75,335. The population is 65% African American. As of January 2010 the unemployment rate was 11.8%. The Albany MSA is classified as economically distressed. Albany State University's primary service area includes zip codes 31705 and 31701 which are sparsely populated, mainly rural areas. The median household income of $27,404 is significantly lower than the US average of $56,600. The population is primarily African-American (69%) with a median age of 28 in 31705 and 33 in 31701. Broadband access is not easily available except through cable television subscription. The least expensive price for residential broadband access in Albany, GA is $63/month. Online classes and other educational services and math and science tutoring applications will be provided on the network for the proposed funded service areas.
and users. ASU BRIDGE Develop project will ensure compliance with relevant governing network policies by having a Security Architect and network staff to actively maintain and monitor the network. The network administration staff will use various network security appliances and software. The type of broadband middle mile wireless network that will be deployed is WiMAX 802.16h at 3.65 GHz and WiMAX 802.16e at 2.5 GHz. The type of last mile wireless mesh network that will be deployed is 802.11 b/g/n. Staff of both ASU and Smart Wave Technologies is professionals highly qualified to facilitate the construction and implementation of broadband infrastructure for the community. ' EVERETTE FREEMAN, President of ASU has served as principal investigator of individual grants totaling more than 4 million dollars. He will provide visionary leadership for the Albany State University (ASU) Digital Broadband Resources to Improve Development, Growth, Education & Economy (BRIDGE) program and serves as an ambassador to the community. ' VIRGINIA STEWART is Vice President of Information and Instructional Technology at ASU and manages enterprise infrastructure, with overall responsibility for the management of IT, including strategic and technical planning, technology project governance, organizational management and development, and software development. Ms. Stewart has a Master's degree in Finance and Management Information Systems, and over 20 years business and IT experience, with 6 years dedicated to work at institutions of higher learning. ' Lonnie Wormley is the Data Architect at Albany State University. Mr. Wormley develops data strategies and data architecture recommendations at the enterprise level. As the Data Architect Mr. Wormley translates business requirements into data requirements that supports ASU present and future needs. In this role, as the Data Architect Mr. Wormley advises ASU executives and influences technical and data-related decisions from the vision phase through the development phase of the project. Mr. Wormley was a sales engineer for carrier grade wireless networks for Invictus Networks LLC. Mr. Wormley was a founding member of Personal Telco the community based wireless network in Portland Oregon. ' Al Brown Principal of Smart Wave Technologies. Mr. Brown, lead SmartWave’s growth, business strategy and position as an emerging market leader in providing innovative wireless networks and solutions. Mr. Al Brown provided consulting services to Municipalities and Wireless Service Providers to identify cost effective and environmentally efficient means to enhance public service and public safety. Client experience includes Microsoft, EarthLink, Google, Tucson, Pima County, Los Angeles, Austin, San Antonio, and San Jose. Wireless Technologies include WiMAX, Mesh, Point-to-Multipoint, and Point-to-Point in licensed and unlicensed frequencies. ' Mr. Walter ORELL is lead engineer of RTDN and ER-Link wireless networks in Tucson, AZ. This $3M and $1.6M million dollar networks are the first of its kind, utilizing 4.9GHz WiMAX for Transportation systems in the RTDN network, along with Mesh for the ER-Link network. The ER link provides video and data connectivity between paramedics en route the emergency room as well as cost saving communication capabilities for the city Department of Transportation. Mr. Orel led all engineering efforts from network design to implementation for both projects. ' Sylvia Mc Cormick is an entrepreneur with large corporate, small business, education and non-profit experience. She has considerable industry knowledge of energy utilities, construction, and education. She is an experienced business executive and consultant in Client Development. Mrs. McCormick has hands on expertise with strategic planning, market research, economic research, construction management and profit and loss responsibility. ' The Overall infrastructure cost of the broadband system is $10.2 million dollars ' The Overall expected subscriber projections for the project are more than 292, 000 for the 8-year pro-forma period ' The jobs estimated to be created or saved: Through funding the Albany State BRIDGE Develop
Project, there will be approximately 111 jobs as a result directly from the network deployment and operations within the ASU BRIDGE project.