Named in honor of the late Congressman Dante Fascell, the DANFAST Network is a public-private partnership between the Cities of Homestead & Florida City and KG Communications, LLC. DANFAST will provide a Comprehensive Community Infrastructure network for the residents, anchor institutions, colleges, and public safety agencies in these municipalities with advanced broadband access to the Internet and other high bandwidth services. The network will pass 21,628 households and 2,932 businesses in both cities. Direct service with both fiber & wireless access will be provided to a minimum of 49 anchor institutions, including a but not limited to, community college, a medical college, a regional hospital, a free clinic, 4 charter schools, a city library, all city public safety agencies, all municipal buildings, a US Air Reserve Base, Federal enforcement agencies, 9 community centers, 3 youth activities centers, 2 senior citizens centers, an adult skills center, 5 parks and 3 stadiums. Two Traffic Information Stations (TIS) will be installed for each municipality and will be connected to their respective studios via the fiber network. Wireless broadband Internet access (between 4-5Mb DS/2Mb US) will be provided to the approximately 2,600 households with children under 18 living under the poverty level. The network topology consists of three layers, single mode fiber, WIMAX (802.16) & WiFi (802.11n/g). An existing dark fiber optic ring owned by the City of Homestead will provide the foundation of the network. This project will significantly upgrade the ring architecture, making it counter-rotating for redundancy & providing very high speed multiplexing. 14 3-sector WIMAX base stations will be deployed throughout the service area. The BST’s will be connected to the fiber ring backbone. WiFi connectivity will be provided at each served location via small WIMAX/WiFi antennas & CPE, providing pedestrian as well as nomadic hot-spots. Additionally, all public safety automobiles will have this configuration, giving the police officer an instant WiFi hot-spot along a 200 foot diameter from his/her automobile. A Category-5 hurricane resistant, LEED certified data center, primarily powered by solar energy, will be constructed to house a carrier class VoIP Switch & Gateway, an IPTV Headend, a Signage Platform and the various Operational Support Systems needed to install and maintain the network. The Data Center will also provide hosting, backup, virtualization and peering services to all residents & businesses in the area on a open and neutral basis. Connectivity to ISP’s, and other telecommunications carriers outside the area will be through an OC-3 (expandable to 192) diverse ring terminating at the NAP of the Americas in downtown Miami. IPTV video services will be offered to residents of both cities. These services will consist of both standard & high definition channels. Members of the Homestead Air Reserve Base residing in the area will be offered a highly discounted monthly rate. The IPTV platform will also serve to provide distance learning applications developed in partnership with the various educational institutions served by the network. The access method for residential and small business IPTV services will be VDSL,
providing the capability of up to 12Mb concurrent Internet access. The Signage platform will provide each city with the capability of transmitting macro & micro-targeted informational messages to each anchor institution. KG Communications, LLC is licensed by the State of Florida as a Competitive Local Exchange Carrier. It also holds a license to provide video services in Palm Beach, Broward, Miami-Dade, and Monroe Counties. The managers of the company have over 100 years of telecommunications experience, working in Bell System companies (including Telcordia Technologies, formerly Bellcore), Nortel Networks, and Terremark. They have been responsible for installing and maintaining terrestrial and wireless networks both domestically and internationally. The overall infrastructure cost of the DANFAST network is $22,715,057. The residential subscriber forecast by Year 3 is approximately 3,750. Year 3 business forecast is 255. We estimate the number of jobs created or saved by this project to be 250 based on Council of Economic Advisors guide to jobs creation estimates.