The Lighthouse Network seeks to provide dedicated, wireless broadband services to 24 public school districts across the North and South Forks of Long Island, and out to the three smaller island communities of Fire Island, Fisher's Island, and Shelter Island. This network will be managed and provisioned by the Suffolk Regional Information Center at Eastern Suffolk BOCES, a non-profit municipal cooperative services provider, which already supports an extensive wired broadband network to public schools across Suffolk County, NY. The proposed network will be scalable into the local communities associated with the participant school districts in order to provide them a cost effective, dedicated broadband infrastructure through which to conduct all online learning, collaboration, data transmission, and emergency situation connectedness that overcomes the cost prohibitive issue associated with constructing a wired solution into their facilities. The Lighthouse Network will also interconnect their public libraries and other municipal and public safety agencies in their communities for the purposes of facilitating digital across all ages and areas of education, providing health and safety information through these institutions to the local, year round populations, and further facilitating public safety connections. It will also provide a reliable, dedicated communications infrastructure into these same communities through a network not solely dependent upon commercial internet provisioning, and provide workforce development accessibility to local residents through online resources, further facilitating digital literacy in these areas. An additional connection to the New York Institute of Technology as a higher education partner, is also planned to further enhance learning opportunities for K-12 and beyond, as well as establish a dedicated connection through NYIT to the New York College of Osteopathic Medicine, providing access to community health related information in multiple languages to all of the participant anchor institutions, and to all of the other institutions already connected through the existing Eastern Suffolk BOCES network. The communities being targeted have limited access to reliable, sustainable broadband at consistent speeds robust enough to support high quality distance learning and information interactions on a daily basis. The 24 school districts all exist in communities where agriculture, fishing, and service provisioning from the year round population to seasonal occupants are the mainstays of their local economy. The high land wealth of the seasonal residences and the land wealth of the agricultural enterprises further mask the true economic condition of the local residents and migrant populations in these areas. Services provided across this network include Internet and Internet2 provisioning into the school districts, dedicated access to hosted online applications provided by the BOCES to the schools for student management, special education student management, financial applications, global distance learning and online instructional/professional development opportunities for students and teachers all in support of digital literacy goals and
objectives. Services that could be provided to the adjacent local libraries would include Internet access, access to online workforce development and higher education opportunities for local residents, learning opportunities associated with digital literacy, access to multi-lingual consumer health related information. Additional services for all network subscribers include interconnection of all of the communities through a dedicated network not solely reliant upon the commercial internet and associated local for-profit provider, in the event of a man-made or naturally occurring situation where the schools, as the largest contiguous meeting places in the communities and designated crisis management centers for their local residents, can maintain critical communications during times of need. As participants in the network deploy exterior video surveillance systems, network connections can be further enabled with local law enforcement and public safety officials to help mitigate dangerous and/or predatory situations providing greater protection for the children and residents of the communities. Eastern Suffolk BOCES through the Suffolk Regional Information Center currently provides managed network services and ISP/Internet2 provisioning under our Class B Internet license to 11 of the 69 public school districts in Suffolk County and the 5 major BOCES instructional campuses on an extensive small to mid-level business enterprise architecture, with 24X7 monitoring systems, and in full compliance with CIPA and all other associated state and federal regulations. By virtue of the Class B License all subscribers are assigned dedicated IP address ranges within the network enabling the BOCES to always maintain highly competitive pricing from our primary Internet provider without causing any disruptions to each subscribers address schema. Internet service provisioning to the BOCES enabling our organization to function as an ISP to our subscribers is secured through a competitive bid process, in full compliance with NYS General Municipal Law. The current bid includes provisioning for up to 10Gbps of service on demand, providing more than sufficient bandwidth to support all existing subscribers and participants in the new Lighthouse Network configuration. The cost for providing this service is divided in an equitable manner across all participants. This model ensures that over time as participation increases the associated costs for the service provision will decrease. Eastern Suffolk BOCES has already demonstrated this to current network subscribers when participation fees were lowered in the 2009-10 school year due to increased service demand. The anticipated funds needed to construct the Lighthouse Network and interconnect it to the existing Suffolk RIC network is $8,776,351.00. Once the network is constructed, it is anticipated that all of the participant school districts identified in this application will join with further connections anticipated to be made with the local public libraries, community based organizations, and other local municipalities as interested. Within Eastern Suffolk BOCES the construction and implementation of the Lighthouse Network will provide 1-2 additional Network and Systems Programmer positions within the BOCES, and up to 5 indirect job position opportunities and up to 4 induced job opportunities. Additional positions may be created in a shared model across multiple school districts for the same type of support and can be provisioned through the BOCES. The procurement of all of the engineering services, deployment services, and hardware defined in the architecture of this network will be secured through competitive bid and is anticipated to generate additional employment opportunities within the local area as well.