

Broadband USA Applications Database

Applicant Name: Delaware Department of Technology and Information

Project Title: Delaware Schools and Public Anchor Institutions Connect

Project Type: Middle Mile

Executive Summary

The Delaware Schools and Public Anchor Institutions Connect project proposed in this grant application would close the broadband services deployment and adoption gap between the majority of the state's public schools and key anchor institutions that have access to this critical technology and those that do not. This project would:

- improve access to broadband service to the residents of the state's underserved areas,
- provide broadband education, access, equipment and support to schools, libraries, and other organizations and agencies, and
- facilitate greater use of broadband service by students, adult learners, low-income, unemployed, aged and otherwise vulnerable populations.

While Delaware Department of Technology and Information (DTI) cannot directly deliver broadband services to private residences or businesses, the state can be instrumental in encouraging broadband adoption and giving residents access to broadband services through public anchor institutions. Funds from this grant would extend the state network deeper into Delaware communities through institutions including public and charter schools, libraries, community centers, probation offices, state human services offices and other social service agencies making computers, internet, and video conferencing available to the public. DTI is well qualified to see this project through to successful completion. DTI implemented a project of similar size and scope in partnership with Verizon Communications in 2001. This project laid down the infrastructure necessary to bring broadband services to 200 of the state's 238 public education institutions within three years and cost \$14.9 million. About \$12 million of the \$14.9 million or 80.5 percent was donated by Verizon and the remaining \$2.9 million or 19.5 percent was paid for by the state. The DTI team responsible for implementing the initial rollout of broadband services in Delaware is largely the same team tasked with implementing the project outlined in this grant application. The Governor and Legislature of the State of Delaware support and back this project. DTI has committed to not only developing this project but also to providing ongoing maintenance related to the operation of the TLS components and access equipment requested in this grant application. DTI has the necessary trained staff to offer ongoing support to these anchor institutions once the infrastructure and equipment has been installed. The DTI proposes serving 36 schools (18 elementary and 18 charter schools) by installing network switches and broadband access equipment in these locations and providing 17 other key anchor institutions with video conferencing and other access equipment. This project will provide the equipment necessary to enable these public anchor institutions to subscribe with the broadband internet service provider (ISP) of their choice. Eight (8) of the public schools are in urban Kent and New Castle Counties. The remaining ten (10) public schools are in rural Sussex County. About half of the students in the targeted public elementary and charter schools are eligible for free and reduced lunches. According the Delaware Department of Education, dropout rates in Sussex County

exceed 30 percent annually. The rural location of the ten (10) Sussex County public schools and the relative poverty of the communities where they are located make broadband service out of reach for these residents. State charter schools also lack access because their funding does not cover the expense of installing broadband services and the cost to the state of retrofitting many of the buildings leased by these schools was prohibitive. The rural area targeted in this proposal is home to some of the state's most vulnerable citizens. Rural residents have been unable to connect to a broadband network because their homes are too distant from infrastructure laid down by commercial ISP carriers and the cost, which would have to be borne by the individual, too steep to permit them to do so. Without access to broadband services, these residents have little opportunity to take advantage of many of the State's educational and employment assistance offerings such as "Job Fit" a web-based program designed to help workers find employment or improve job-related skills. In all, this proposed project will have 53 public anchor institution "end users" or subscribers. By state law, DTI may not provide broadband services to non-state or entities that do not have an official affiliation with the state. This restriction limits the number and type of subscribers it can provide broadband for to public anchor institutions of one sort or another. In addition to the public and charter schools noted, this project would allow DTI to provide broadband services to 5 libraries, 6 Delaware Department of Children, Youth and Families offices, 2 correctional sites, 1 community center acting as satellite educational outlet, 1 school district, 1 community college and 1 adult educational facility. It is anticipated that this project will generate jobs. However the number of positions would be small and cannot be estimated at this time. The proposal would offer point-to-point broadband services at 10mbps, 100mbps, and 1000mbps, providing the infrastructure needed to allow targeted end users to connect to the State of Delaware's Transparent LAN Services (TLS) broadband network which in turn would allow end users to subscribe with the ISP of their choice. The infrastructure and equipment requested in this grant proposal meets the Institute of Electrical and Electronics Engineers (IEEE) standards. TLS is a fiber-based access, switching, and transport service. Specifically the infrastructure components and access equipment to be provided include: TLS circuits, TLS switching components, TLS high capacity, carrier-class, voice and video conferencing equipment, a suite of management tools to allow for efficient scheduling of equipment and other related items. TLS meets IEEE standard 802.3. The State of Delaware is not an ISP provider and no network interconnections will be created with this initiative. No grant funding will be paid to carriers to expand their coverage areas and therefore non-discrimination requirements do not apply. However, DTI will comply with all related non-discrimination and network interconnection obligations to the extent that they are relevant for this project and the State of Delaware's role in this project. This proposed BTOP grant project is estimated to cost \$7.4 million. DTI has requested \$6.14 million in grant funds. The remaining \$1.26 million is provided as matching funds. Of the matching funds, \$811,490 is cash from state appropriations and the remaining \$444,150 is in-kind contributions.