

## Broadband USA Applications Database

**Applicant Name:** Executive Office of the Commonwealth of Pennsylvania (Office of Administration)

**Project Title:** Pennsylvania Education Network - Sustainable Broadband Adoption

**Project Type:** Sustainable Adoption

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### Executive Summary

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The Pennsylvania Department of Education (PDE) is pleased to submit this BTOP Sustainable Broadband Adoption grant application in support of its Pennsylvania Education Network (PEN) project.

a) A statement of the problem or need your project addresses with regard to improving broadband service adoption rates.

The problem that this application aims to address is twofold: 1) Pennsylvania's educational professionals (teachers, administrators and technical staff) are not adequately trained in the effective use of broadband for learning; and 2) educational consumers and stakeholders (students, parents, board members and taxpayers) fail to consistently recognize value that broadband can have in cost-effective education. As a result, 100 Mbps or Gigabit broadband adoption rates are stuck at 85% with few schools using technology to its potential or advocating for more.

b) Your overall approach to addressing the need, and [for Sustainable Adoption projects] how your approach is innovative.

This BTOP Sustainability grant application aims to solve this problem with a three-part approach. PDE will: 1) create a comprehensive professional development program for educational professionals; 2) execute a sophisticated outreach and education campaign targeting educational consumers and stakeholders; and 3) provide a project management component to tie it all together and execute real projects.

This effort is modeled after the success of Pennsylvania's Intermediate Units (IUs) in implementing effective broadband adoption and sustainability programs with PDE approval and oversight. Pennsylvania has 29 IUs that provide services to schools on a regional basis and act as liaisons between PDE and the districts.

Part one (professional development) is based on the program called VLINC (Virtually Linking Instruction and Curriculum), which is led by the Northeastern Educational Intermediate Unit near Scranton. It creates a professional development program that trains teachers in online pedagogy and "graduates" them from the program after they build an actual course. Our professional development program would offer training in broadband by using broadband and contain three components: Online Pedagogy

(teachers, professors, librarians and pre-K), Technology Leadership (administrators), Networking Fundamentals (technical support staff), and Project Development (learning object/course creation).

Part two (outreach and education) is modeled after the successful outreach and education efforts employed by the IUs to improve broadband usage in schools. For two years, the IUs conducted a sophisticated, organized outreach and education campaign to educational consumers and stakeholders aimed at building support for new technology initiatives and expanding broadband adoption in the educational community. As a result of their efforts, more than 450 school districts agreed to cooperate and create PAIUnet, which creates Pennsylvania's first collaborative K-12 network for schools. PDE wants to re-create such an approach and extend the efforts outside the K-12 community.

Part three (project management) is based on based the Capitol Area Online Learning Association (CAOLA), which integrates traditional brick-and-mortar schools in the Harrisburg area with online learning. It has a robust back office system to manage students, learning objects, courses, registrations, interventions, assessments, and reporting. Once training is underway and outreach and education is in process, this component of our application will help launch actual projects at the regional level which will help sustain broadband networks and improve the adoption rates in unserved and underserved areas and among vulnerable populations.

c) Area(s) to be served; population of the target area(s), including demographic information; and [for Public Computer Centers] the estimated number of potential users of your public computer center(s) or [for Sustainable Adoption projects] the estimated number of potential broadband subscribers your project will reach.

We will training 1,500 educational professionals in 500 sites from among the 514 primary and 819 alternate sites named in this application (total of 1,360). By implementing new programs and technology into 58 unserved and/or underserved areas, there will be a direct impact on 1,600,000 Pennsylvania residents and total impact on the 12.5M residents of Pennsylvania.

d) Qualifications of the applicant that demonstrate the ability to implement the project and achieve its intended results.

PDE has an outstanding track-record in implementing complex programs related to educational technology. Our two flagship programs are E-Fund for broadband deployment and Classrooms for the Future for end-user equipment and professional development. Both are set to expire within two years and won't be continued in the current budget environment without federal help. The foundation is set with newly created job roles (Classrooms for the Future Coaches) and communications venues. PDE has provided the direction, guidelines, and mentoring for both programs with sustainability in mind. Sustainability is attainable if project objectives are articulated, project members are provided training

and resources, and outcomes are measured and reported. PDE employs this methodology to all projects and will continue with this rigor in future endeavors.

e) Jobs to be saved or created.

It is anticipated that 56 new full time equivalent (trainers and trainees) will be utilized during the implementation and maintenance of this project. Specifically, \$10 million @\$100/hr will be spent in order to deliver 1,800 hours of annual work.

f) Overall cost of the proposed project. \$12.5 BTOP. Match