Broadband USA

Broadband Non-Infrastructure Application
Submission to NTIA – Public Computer Centers

Submitted Date: 4/9/2010 11:03:06 AM	**Easygrants ID:** 6994
Funding Opportunity: Public Computer Centers	**Applicant Organization:** AUBURN UNIVERSITY
Task: Submit Application - Public Computer Centers	**Applicant Name:** Lester Eugene Taylor

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A. General Application Information

1. Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	066470972
CCR # (CAGE)	8H404
Legal Business Name	AUBURN UNIVERSITY
Point of Contact (POC)	MARTHA TAYLOR 3348444438 Ext. taylomm@auburn.edu
Alternate POC	ANTHONY VENTIMIGLIA 3348444438 Ext. ventiaf@auburn.edu
Electronic Business POC	MARTHA M. TAYLOR 3348444438 Ext. taylomm@auburn.edu
Alternate Electronic Business POC	MARCIE SMITH 3348445588 Ext. smithmc@auburn.edu

2. Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
Prefix	
First Name	Lester
Middle Name	Eugene
Last Name	Taylor

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Suffix	
Telephone Number	334-844-5956
Fax Number	
Email	taylol2@auburn.edu
Title	Associate Director

3. Additional Contact Information of Person to be Contacted on Matters Involving this Application:

Project Role	Name	Phone	Email
Secondary Point of Contact	Mr. Anthony F, Ventimiglia	3348445954	ventiaf@auburn.edu

4. Other Required Identification Numbers

Easygrants ID	6994
Funding Opportunity Number	500000
Catalog of Federal Domestic Assistance Number	**BTOP CFDA Number:** 11.557 **BTOP CFDA Title:** Broadband Technology Opportunities Program

5. Organization Classification

Type of Organization	Non-profit Institution
Is the organization a small business?	No
Does the organization meet the definition of a socially and economically disadvantaged small business concern?	No

6. Authorized Organizational Representative

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AOR	TAYLOR, MARTHA
Result	Applicant Authorized

7. Project Title and Project Description

Project Title: Equipment and Training for Rural Alabama Public Computer Centers

Project Description: The project will expand public computing centers and wireless access in Alabama's smallest public libraries, providing an initial needs-assessment and followup training customized to each library's unique needs. Where space and bandwidth are adequate, audio-visual conferencing facilities will also be installed.

8. Other Applications

Is this application being submitted in coordination with any other application being submitted during this round of funding?

➢ No

Easygrants ID	Project Title

If YES, please explain any synergies and/or dependencies between this project and any other applications.

9. Is the Applicant exempt from the Department of Commerce requirements regarding individual background screening in connection with any award resulting from this Application?

➢ Yes, Applicant is exempt because it is an accredited college or university

If the answer to the above question is "No," please identify each key individual associated with the Applicant who would be required to complete Form CD-346, "Applicant for Funding Assistance," in connection with any award resulting from this Application:

Name	Title	Employer

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B. Executive Summary, Project Purpose and Benefits

Essay Question

10.   Executive Summary of the proposed project:

Alabama has many small libraries, most in rural areas, that are able to provide very limited public computing capacity to the communities they serve. Because the household populations served by these small, rural public facilities are less likely to have home computers or broadband service, the need for additional public computing capacity and access to broadband is extraordinarily great in many rural communities.

To better understand and address this problem, Auburn University Outreach (AUO) developed a database of rural public libraries with seven (7) or fewer public computer terminals with Internet access. Online and telephone interviews were conducted with each library to ascertain needs for additional computers, current bandwidth and wireless capabilities, and information technology management practices.The libraries surveyed are located in 28 of Alabama's 67 counties, These libraries have an average population service area of 9,194 persons, an average annual budget of just $67,000,and an average staff size of 2 employees who earn an average annual salary of $19,288. On average, the libraries surveyed currently have 6 computers.

The results of this survey were compiled and analyzed by AUO in cooperation with the staff of the Alabama Public Library Service (APLS), the legislatively-designated statewide coordinating agency for Alabama's public libraries. The analysis informed several important conclusions: 1) some libraries would prefer that additional public computers are portable or notebook computers to allow flexibility in their placement and use within space-constrained library premises; 2) some libraries (approximately one-third of those surveyed) need wireless service to facilitate the expansion of their public computer center capacity within their current space limitations; 3) additional public computer capacity can be freed up by expanding library computing capacity in nearby schools; 4) some libraries have unused space that can be used for enhanced broadband services, like an audio-visual conferencing facility; and 6) a primary usage for the public computers in these libraries is workforce related, allowing users to search online for jobs, develop resumes and other career development materials, and applying for employment, training, or related assistance.

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In response to these findings, and in addition to generally expanding the public computer capacity of each facility with the purchase of 1,007 total additional workstations, we are proposing: 1) purchase of wireless routers; 2) installation of audiovisual conferencing centers at a limited number of libraries, facilities that can be used for workforce training, distance learning, and telemedicine and pharmaceutical consultation offered by Auburn University's Harrison School of Pharmacy and School of Nursing; and 3) inclusion of funding for selected school library computing centers in adjacent school districts, thereby shifting some demand for public library computer time (principally by students) to school-based computer centers.

A key objective of this proposed project is to provide each library an initial on-site and in-depth consultation with wireless engineers from Auburn University and Tuskegee University to assess current broadband equipment and facilities, and then to evaluate options for improving public computer center capacity through this project. This initial evaluation will include an economic assessment of current broadband access service options available to each library. Sometimes a service provider or level of service chosen years ago is not the most economical or serviceable option today. The initial consultation will also evaluate the equipment needs for each library and determine the appropriateness of each facility for establishment of an audio-visual conference facility.

In order to ensure that the equipment and facilities provided by this project are sustainable and compatible with existing and future planned architecture of computing for Alabama's public libraries, the technical support staff of APLS will be asked to evaluate and approve all equipment, specifications and plans offered to libraries under this project. The technical support staff of APLS will also participate in the planning of library staff training.

To ensure that each library's technology plan reflects the current state-of-the-art in library sciences, the staff of Auburn University's Libraries and Office Office of Information Technology (OIT) will be asked to review and make recommendations for adherence to professional practices and standards.

Auburn University, through its Wireless Engineering Research and Education Center (WEREC), has previously demonstrated its organizational and technical readiness to undertake this project through the successful installation of wireless computer facilities and equipment in the public library and schools of rural Uniontown, Alabama. That experience also created recognition of the critical importance of training small library and school personnel—most of whom lack full-time, close-by technical support staff—in the use and maintenance of wireless broadband computing centers. Auburn University intends to provide training that will help library staff become more effective troubleshooters of broadband computing facilities, allowing them to solve more minor problems before having to call in technical support from APLS or other providers.

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Through this project, Auburn University intends to contribute to the goal of increased employment in a variety of ways: 1) by enhancing smaller libraries' public computing facilities in a manner that makes more computers more accessible to job seekers; 2) by providing faster and better computer broadband computing access, libraries will give users access to a wider array of online training and workforce development content; 3) the hiring of wireless engineers and student interns from Auburn University and Tuskegee University to consult with libraries, install, and train library staff will create new jobs; and 4) the widespread use of student interns to assist wireless engineers will help these students build resumes and career credentials that include real-world experiences that will increase their prospects for employment.

The total cost for this proposed project is $5.8 million. Auburn University is providing most of the required matching funds, $713 thousand, while the library recipients themselves will provide in-kind contribution of $449 thousand for matching purposes.

11.   Project purpose:

Auburn University Outreach (AUO) and its partner organizations have developed the objectives for this project to closely parallel several of BTOP's core statutory purposes:

1. Provide access to broadband service to consumers residing in unserved areas of the country; Many of Alabama's small libraries and the households and communities they serve are in proximity to unserved areas of the state as delineated by the official mapping project undertaken by Connecting Alabama, the state's designated broadband agency. By increasing the size and services of public computer centers in the participating libraries, many householders in rural areas will realize improved public access to broadband services.

2. Provide improved access to broadband service to consumers residing in underserved areas of the country;

Many of Alabama's small libraries and the households and communities they serve are located within underserved areas of the state, as delineated by the official mapping project undertaken by Connecting Alabama, the state's designated broadband agency. By increasing the size and services of public computer centers in the participating libraries, many householders in rural areas will realize improved public access to broadband services.

3. Provide broadband education, awareness, training, access, equipment, and support to schools, libraries . . ., including organizations that provide outreach, access, equipment, and support services to facilitate greater use of broadband services by vulnerable populations, including job-creating strategic facilities located in state or federally designated economic development areas; Auburn University Outreach is a widely recognized and long-respected training organization with a growing reputation for creating programs that foster civic engagement and participation.

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AUO, through its Center for Governmental Services, has decades of experience training a wide variety of county and local leaders and personnel in topics ranging from public works and public finance to ethics and emergency preparedness. Auburn has expertise in offering training in classrooms settings as well as online. The Distance Learning unit of AUO possesses all the latest tools to ensure effective online instruction and testing.

Auburn University's Wireless Engineering Research and Education Center (WEREC), a partnering organization, has extensive experience in training public agency users in the operation of wireless broadband equipment and systems.

AUO anticipates that training materials developed for use by rural librarians in Alabama— training them to provide much of their own technical support for their public library computer centers—can be made available to librarians and librarian trainers in other states. In small library scenarios, preparing librarians to do much of their own tech support can save on costly service visits from far-away technicians and ensure that there are fewer delays in troubleshooting systems and restoring them to use by the public.

Based on Auburn staff experiences, too often rural library staff "give up" on computer problems and simply set the equipment aside or turn it off, leaving it unavailable to the public. Smaller library staffers may be reluctant to call upon outside technical support services for fear of the expense or being seen as incompetent. By giving small library staffers the training and confidence that they can troubleshoot and solve many frontline technical support problems, more equipment can stay in operation providing more computing capacity to users, and the cost of technical support can be lowered by reducing the need for more advanced technical support services.

Training is also the key to ensuring the sustainability of a project like this. Once the initial equipment is installed and the training takes place, funding will expire, making it essential that the libraries themselves and support agencies like the Alabama Public Library Service (APLS) can operate and maintain these systems within current budgets and staff resources.

4. Stimulate the demand for broadband, economic growth, and job creation.

In rural areas, public computer centers at small libraries play a critical role in the workforce development process as they are used heavily for researching, preparing and submitting applications for employment. By increasing the number of workstations available at libraries and by enhancing the available bandwidth, this project encourages job-seeking activities. The project also creates some new technical

5. Enhance broadband services for health care delivery, education, or children.

This proposal envisions the establishment of audio-visual conference centers at rural libraries that could serve as test-beds for next-generation health information and pharmaceutical advisory

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systems. Whereas urban residents can consult face-to-face with Walgreen's or CVS pharmacist regarding the pros and cons of particular drugs, this may be be impossible in smaller communities without drugstores. Auburn University's Harrison School of Pharmacy would like to use a few rural libraries to test the feasibility of using audio-visual conferencing centers to facilitate conversations between rural residents and Auburn pharmacists, facilitating discussions like those described above that occur in urban and suburban pharmacies on a daily basis.

12.   Recovery Act and Other Governmental Collaboration:

Providing increased public computer center capacity is a critical goal and objective for each library and for Alabama's library coordinating agency, the Alabama Public Library Service (APLS). Meeting the demands for publicly available broadband and computer technology severely strains the budgets of individual libraries and this state agency. By providing a one-time assessment and evaluation of the broadband situation at each small, rural library, and subsequently providing appropriate equipment and training that meets each site's particular needs, the project will allow libraries and their state funding agency to be relieved of purchasing pressures, thereby freeing up resources for other library initiatives. Furthermore, the training funded by this project will contribute to a decline in the demand for costly technical support, further freeing up funding for other library needs.

13.   Technology Strategy:

Each library will be provided an initial on-site inspection and in-depth consultation with wireless engineers from Auburn University and Tuskegee University to assess current broadband equipment and facilities, and then to evaluate options for improving public computer center capacity through this project. This initial evaluation will include an economic assessment of current broadband access service options available to each library. Sometimes a service provider or level of service chosen years ago is not the most economical or serviceable option today. The initial consultation will also evaluate the equipment needs for each library and determine the appropriateness of each facility for establishment of an audio-visual conference facility.
The budget also provides for identifying twenty (20) libraries that have sufficient space and bandwidth to support a small audio-visual conference room facility. These facilities include one (1) Polycom-HDX 702XL unit and video monitor and speaker systems.
Based on results of the initial assessment, each library will receive an appropriate allocation of new or replacement workstations, notebook computers and other Internet terminals. The following minimum specifications will apply to all:
Operating system: Windows XP or Mac OS X

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Memory: 4 gb of Ram
Wireless: IEEE 802.11 b/g/n
Storage: 500 gb-plus hard drive space
Display: 20-plus inches.
Software: MS Office suite, either for Windows or Mac
[NOTE: The Alabama Public Library Service (APLS) recommends Apple/Mac computers to provide for the lowest possible costs for their technical configuration and support. Because APLS provides essential long-term sustainable support for Alabama library computers, this preference will be respected.]

Libraries that currently do not offer wireless access, or that want to improve their current wireless access, will be offered consultation and installation of a wireless network system. As for wireless implementation, our overall technology plan consists of three basic components: Basic WiFi technology to provide wireless broadband connectivity among the users in a Local Area Network (as at a single library; Wireless Distribution System (WDS) for intra-site connectivity of access points (as between buildings or campuses of a school system); and using Intel's Rural Connectivity Platform (RCP) to increase the broadband connectivity range to users which are far off the main facility or campus (broadband feed) and also for backhaul and possibly inter-site/campus connectivity.

WiFi is a well-established technology based on IEEE 802.11 standards for Wireless Local Area Networks. A Wireless router based on the IEEE 802.11g standard which can provide up to 54 Mbps and operates at 2.4 GHz unlicensed ISM band is a good option for our purpose. Using encryption algorithms, 802.11 standards have embedded in them security solutions and are capable of establishing secure broadband local network. Moreover, it is easy to set up and a basic training would be enough for everybody to learn how to launch and manage these networks.

A WDS will enable interconnection of access points wirelessly and thereby increasing the broadband coverage. It allows a wireless network to be expanded using multiple access points without the need for a wired backbone to link them, as is traditionally required. WDS may also be referred to as repeater mode because it appears to bridge and accept wireless clients at the same. Mesh routers and repeaters would be required to increase the coverage in large campuses.

RCP is an Intel's solution for robust long-distance WiFi-based backhaul connection. RCP nodes can establish point to point links with high data rate/range (throughput 8Mbps@100km). RCP nodes can also be daisy chained to connect more communities where intermediate nodes act as relays [1]. It consists of two radios: one for the access point and one for long-distance links. The operating frequencies are the standard 802.11 spectrums. The long-distance link operation is made possible by modification at the MAC layer of IEEE 802.11 standard. RCP nodes can be

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used to increase the range of broadband access and also provide connectivity among campuses which are located far apart.

All technical specifications and recommendations provided through this project will receive the review and approval of the Alabama Public Library Service to ensure the sustainable operation of these systems after the project is completed.

14.   Public Availability:

➢ Public libraries will serve the general public as they do today, without any charges. School library centers will be restricted to student use.

15.   Restrictions on Center Use:

➢ The Centers may be used only during normal operating hours for the libraries and schools.

16.   Involvement of Community College:

➢ N/A

17.   Is the applicant is seeking a waiver of the Buy American provision pursuant to section x.Q of the NOFA?

➢ No

18.   Is the applicant deliquent on any federal debt?

➢ No

➢ If Yes, justification for deliquency:

19.   Are you seeking a waiver of any requirement set forth in the NOFA that is not mandated by statute or applicable law?

➢ No

C. Partners
20.   Are you partnering with any other key institutions, organizations, or other entities for this project?
➢ Yes

If YES, key partners are listed below:

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Project Role: Other
Name: Mitchell, Rebecca
Email: rmitchell@apls.state.al.us
Address 1: 6030 Monticello Drive
Address 2:
Address 3:
City: Montgomery
State: Alabama
Zip Code: 36130
Organization: Alabama Public Library Service
Organization Type: State or State Agency
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Sub-recipient
Name: Narang, Hira
Email: narang@tuskegee.edu
Address 1: Tuskegee University
Address 2:
Address 3:
City: Tuskegee
State: Alabama
Zip Code: 36088
Organization: Tuskegee University
Organization Type: Non-profit Institution
Small business: No
Socially and economically disadvantaged small business concern: No

21. Description of the involvement of the partners listed above in the project.

Auburn University (AU) and its partner, Tuskegee University (TU), will jointly implement the plan described in this proposal. The Universities have worked, and will continue to work, with the partnering state agency, the Alabama Public Library Service (APLS), to develop plans and specifications that are compatible with the past, present, and future plans, policies, and procedures developed by APLS to coordinate the delivery of technology services by and through Alabama's public libraries.

The Mission of the Alabama Public Library Service (APLS) is to promote and support equitable access to library and information resources and services to enable all Alabamians to satisfy their educational, working, cultural, and leisure-time interests. These resources and services will be

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provided through APLS's statewide programs and through direct grants and assistance to libraries and library systems to meet user's needs.

More than fifty (50) individual libraries that will benefit from this project have already played a role in shaping its goals, objectives and benefits by participating in an online and telephone survey that solicited information and perceptions of needs as part of the pre-proposal development of this plan.

The results of this survey were compiled and analyzed by AUO in cooperation with the staff of the Alabama Public Library Service (APLS), the legislatively-designated statewide coordinating agency for Alabama's public libraries. The analysis informed several important conclusions: 1) some libraries would prefer that additional public computers are portable or notebook computers to allow flexibility in their placement and use within space-constrained library premises; 2) some libraries (approximately one-third of those surveyed) need wireless service to facilitate the expansion of their public computer center capacity within their current space limitations; 3) some libraries will require construction and physical space expansion to accommodate additional public computers; 4) additional public computer capacity can be freed up by expanding library computing capacity in nearby schools; 5) some libraries have unused space that can be used for enhanced broadband services, like an audio-visual conferencing facility; and 6) a primary usage for the public computers in these libraries is workforce related, allowing users to search online for jobs, develop resumes and other career development materials, and applying for employment, training, or related assistance.

Auburn University Outreach will provide overall leadership for the implementation of the project. Outreach's Center for Governmental Services (CGS), a training and research organization, will provide leadership for coordination and administration of the training program, training both tech interns and librarians The faculty and staff of Auburn's Wireless Engineering Research and Education Center (WEREC), Auburn Libraries and the university's Office of Information Technology will provide professional and standard-setting consultation to the project. Additionally, faculty and staff of Auburn's Harrison School of Pharmacy will provide advice and consultation regarding the installation of a limited number of audio-visual conference facilities (~20) in libraries that have ample space for same, facilities that will be capable of providing advanced public health information to the public, as authorized and permitted by local libraries.

Tuskegee University's Department of Computer Science will also provide professional and standard-setting consultation to the project. Furthermore, Tuskegee's faculty will recruit and manage student interns who will play a key role in the initial site consultations at each library as

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well as the installation of workstations and wireless networking equipment at the libraries.
Auburn University student interns will join this effort.

The various units of Auburn University, along with representatives of Tuskegee and APLS, will meet regularly to plan and coordinate jointly each aspect of this plan.

D. Congressional Districts

22.   Applicant Headquarters

  ➢   Alabama

23. Project Service States

Alabama

24.   Project Service Areas

Alabama - 1

Alabama - 2

Alabama - 3

Alabama - 4

Alabama - 5

Alabama - 6

Alabama - 7

25. Will any portion of your proposed project serve federally recognized tribal entities?

  ➢   No

26.   Indicate each federally recognized tribal entity your proposed project will serve.

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27. **Have you consulted with each of the federally recognized tribal entities identified above?**

   ➢ No

E. Demographics

Demographics

28. **Will your proposed project be specifically directed to serve vulnerable population groups?**
   ➢ Yes

If "Yes" which vulnerable population groups will your proposed project serve? Check as many as apply:

Hispanic

Black/African-American

English as Second Language (ESL)

Disabled

Low Income

Unemployed

Senior Citizen (55 and over)

Other

Other: See vulnerable pop. discussion.

29. **Vulnerable Populations**

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The libraries to be served through this project were selected because they are rural. The rural communities they serve contain significant percentages of vulnerable residents, including seniors and those with low socio-economic status as measured by their education and/or incomes. To understand the incidence and prevalence of vulnerable persons being served by the targeted libraries, we conducted a survey, asking this question: What percentage of your patrons belong to a vulnerable populations (i.e. low-income, minorities, non-English speakers)? The average percentage of patrons reported by the librarians was 61 percent. No specific percentages by category were recorded.

30. Accessibility

All libraries to be funded meet all applicable ADA rules and guidelines pertaining to access by persons with disabilities.In addition, software recommended by Alabama Public Library Service's Blind and Physically Handicapped unit will be added to make at least one of the computers in each library, supplementing computers already equipped with this software.

31. Other Languages

> - Multilingual training is not anticipated.

Outreach

32. Public Computing Centers Outreach

Auburn University is a land-grant institution with a comprehensive outreach and service mission. The primary organizational unit for this mission is the University Outreach division. The division houses specialized centers providing training and technical assistance through on-site and distance methods to individuals as well as public and private institutions. The division engages through a number of local, state and federal civic partnerships in government, economic development, business, education and health care.

Auburn University's Wireless Engineering Research and Education Center (WEREC) was created to develop a comprehensive program of education and research in Wireless Engineering and provide a focal point for Auburn University's wireless activities. WEREC recognized the significant need for wireless away from university campuses, extending out into communities, so it developed a demonstration project that is in some ways is the precursor of this proposal. Funded by the Outreach Office of Auburn University, the project was carried out in Perry

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County, providing modern wireless data communication capability and network deployment at the Uniontown Public Library and the library at the Robert C. Hatch High School. Auburn University also provided laptops wireless capability and Auburn graduate students instructed and trained site personnel on troubleshooting and maintaining the networks.

Soon after Dr. Booker T. Washington, founder of the historic Tuskegee State Normal School (now Tuskegee University), began teaching the first class of 30 men and women in a one-room shanty on July 4, 1881, he assumed the new school had the obligation to educate its neighbors. Of particular concern was the destitute, illiterate ex-slave farming families who were earning a meager existence from the land.

Washington held annual Farmers Conferences on campus so the faculty could show these families improved methods of farming, home construction, food processing and other ways to improve their lives. Later, Dr. Washington had Dr. George Washington Carver design a mule drawn wagon, the "moveable School," equipped "to carry sufficient tools and materials for demonstrations of methods of improved farming and living to the very doors of the Negro farmers."

Today, Tuskegee University's outreach efforts are carried out through its Cooperative Extension Program whose mission is to provide comprehensive research-based educational programs designed for life-long learning to assist limited resource families and organizations, to improve their quality of life in a technological global society.

The present proposal seeks to leverage Auburn's and Tuskegee's historic commitments to extension and service with the institution's technical competence in wireless engineering and computer science.

33. **How many total users do you expect to generate through the use of BTOP funds at your public computer center(s)?**

   ➢

Training and Education

34. **Peripherals and equipment**

Wireless: IEEE 802.11 b/g/n (WiFi)
Libraries that currently do not offer wireless access, or that want to improve their current wireless access, will be offered consultation and installation of a wireless network system. All new workstations will be outfitted with WiFi capability. WiFi adapters will be retrofitted to all

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workstations previously purchased by libraries that do not have wireless capability. This basic
WiFi technology wil provide wireless broadband connectivity among the users in each libraries
Local Area Network.

WiFi is a well-established technology based on IEEE 802.11 standards for Wireless Local Area
Networks. A Wireless router based on the IEEE 802.11g standard which can provide up to 54
Mbps and operates at 2.4 GHz unlicensed ISM band is a good option for our purpose. Using
encryption algorithms, 802.11 standards have embedded in them security solutions and are
capable of establishing secure broadband local network. Moreover, it is easy to set up and a basic
training would be enough for everybody to learn how to launch and manage these networks.

35. Workstation software

➢ Microsoft Office suite of application programs
    Anti-virus and Internet Security Software

36. Training and education programs

Auburn University is a land-grant institution with a comprehensive outreach and service mission.
Auburn has an extensive capacity for design and delivery of non-credit instruction and training.
Collectively, the University Outreach division and its allied programs provide annually more
than 1,000 non-credit program activities, accounting for more than 50,000 registrations. In a
typical year, more than 500 of these programs are approved to offer continuing education units
(CEUs) to individuals for professional certification. More than 35,000 CEU awards are
registered annually. Program delivery is primarily dispersed throughout the state, but also
regionally and nationally. Auburn follows national accreditation guidelines for non-credit
program development and administration, as well as a number of more specific disciplinary
certification guidelines where applicable.

University Outreach houses multiple programmatic teams supporting its base of training and
technical assistance. Collectively, the division maintains professional and staff support for
training and development in a variety of formats ranging from large conferences to workshops
and seminars. The division maintains program development and delivery capacity for training
through on-line and distance delivery methodologies. The division also houses expertise for IT
support, CEU administration, program certification and assessment, and permanent participant
records management. The university owns and operates a conference hotel with some 22,000
square feet of meeting space, and can accommodate conferencing for up to 600 persons.
University Outreach utilizes a number of other public and private training venues in the area, or
can deliver programming on-site to accommodate constituent access. University Outreach's

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relationship with the Alabama Cooperative Extension System makes available its network of offices and technological resources for program delivery in every county of the state. Additionally, the division can provide support for program delivery at region or national venues on demand.

Training programs envisioned in this proposal fall under the Auburn University's academic policies for administration, certification and documentation of non-credit instruction. These policies and procedures are administered centrally for the university by the Office of Outreach Information and Program Certification (OIPC), a unit of the division of University Outreach. Non-credit programs are documented through OIPC, which houses permanent records on continuing education programs and provides official copies of continuing educations units (CEUs) awarded to qualified participants.

Auburn University awards CEUs to eligible individuals who have registered for and complete all segments of approved outreach noncredit instructional programs, and who meet satisfactorily all learning objectives stated for those programs.

Auburn University adheres to the guidelines and criteria for noncredit continuing education programming set forth by the Southern Association of Colleges and Schools (SACS) and the International Association for Continuing Education and Training (IACET). These define continuing education units as: "One CEU is equal to ten contact hours of participation in an organized continuing education activity under responsible sponsorship, capable direction, and qualified instruction."

Programs are documented and assigned CEUs based on their meeting the established criteria concerning the purpose and intended learning outcomes, requirements for satisfactory completion, content and content level, format, instructional methodology, instructor qualification, and schedule of instruction.

Auburn University maintains records on approved CEU awards for eligible individuals as an acknowledgment of their continuing education experience. All participant CEU records and personal information are maintained under strict guidelines for security and privacy of the individual; records and other communications are transmitted by secure and confidential means. These records are maintained permanently on behalf of the participant and a transcript of their CEU award can be provided to them on demand for a small fee.

Beyond the compliance aspect of this requirement, CEU certification adds value to the program offerings in several ways. For the granting organization, it demonstrates that these programs have met international standards of quality program administration. This assures that there is a uniform application of program administration across offerings, and a central system of permanent documentation and participant certification. It assures a uniform approach to quality

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assurance in non-credit studies, and provides guidelines to interpret and implement national criteria in the processes of design, development, delivery, and evaluation of non-credit continuing education and professional development activities.

It gives meaning to participants of the programs who qualify for the award of CEUs that they have received a beneficial educational experience. But more importantly, participants can be certified as having met the learning outcomes through qualified instruction.

37. **If you are providing educational or training programs, how many people in total will these programs reach on an annual basis?**

   ➢   100

38. **How many hours of training will be provided to each participant?**

   ➢   28

39. **How many Full Time Employee (FTE) instructors or facilitators will you employ for these courses?**

   ➢   1

F. Project Budget

40. Project Budget	
Federal Grant Request	$4,636,354
Total Match Amount	$1,162,527
Total Budget	$5,798,881
Match Percent	20.0%

41. **Projects Outside Recommended Funding Range:**

   ➢   none

42. **Sustainability:**

   ➢   n/a

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43. Matching Funds	
Applicant is providing matching funds of at least 20% towards the total eligible project costs?	Yes
Describe the matching contributions	The applicant is surrendering its federally negotiated indirect overhead rate of 20%, thereby making an in-kind contribution of $713,115. The remaining match of $449,412 will be covered by in-kind contribution of librarian wages for training and time spent assisting Auburn and Tuskegee staff with site assessment and equipment installation.
Unjust enrichment	None
Disclosure of federal and/or state funding sources	None

44. Budget Narrative	
Budget narrative	The budget contains four (4) programmatic areas of funding: 1) Overall project planning and direction; 2) on-site assessment of each library's equipment, networking, and broadband needs; 3) installation of equipment at each library; and 5) training of library personnel in the use, maintenance, and troubleshooting of equipment provided through this project.

The budget provides two (2)half-time personnel and one quarter-time employee to provide overall management and direction under Dr. Cook's overall leadership. (Note that Dr. Cook is NOT in the budget.)

For on-site assessment visits and later equipment installations there are three positions for tech-installers (who will be deployed regionally) who will be assisted by a corps of student interns, principally from Tuskegee University. There are consulting fees for professional staff of Auburn's Wireless Engineering Research and Education Center (WEREC) and Tuskegee's computer science department, recognizing |

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	their contributions for reviewing the specifications for the project, results and recommendations from each on-site library assessment, and structuring of the internship program. The Alabama Public Library Service (APLS) will receive a consulting fee for reviewing the specifications for the project, results and recommendations from each on-site library assessment, as well as reviewing the training project materials and pedagogical plans. The training functions will require a training supervisor. Training insights will also be contributed by other employees consultants of the project, as well as unbudgeted contributing professionals from the staff of Auburn University. A separate fee is budgeted for individual training tuition. Mileage is provided for the on-site visits to libraries by technical staff and interns, as well as for travel by librarians to training. The budgeted equipment assumes that each library will obtain a requested number of computers, within guidelines. Only those without wireless currently, or with sub-standard wireless, will receive network routers, estimated to be 60. Only a small, select group of libraries will qualify for the RCP equipment (30) and AV conference rooms (20), subject to the outcome of the initial on-site assessments.
Budget reasonableness	The salary portion of the grant is the minimum necessary to procure and install the equipment to be provided under this proposal. The equipment price estimates are provided by the equipment manufacturers/suppliers and are consistent with published pricing. The per-training pricing is consistent with norms of training provided by the Alabama Association of County Commissioners for comparable coursework.
Demonstration of need	For Alabama's public libraries, the year of 2009 brought the demise of many ideas and programs that could not be funded as well as the curtailment of ideas and programs, long staples of the Alabama Public Library Service (APLS, the state's designated library coordinating agency), which could no longer be funded. Included in the changes

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were the removal of the agency's book collection, diminished ILL services and the loss of approximately one-third of the agency staff due to forced lay-offs. Additionally, state aid to public libraries was decreased as was the state agency's funding. Cuts were so severe, it was not a case of "doing more with less" as much as it was a year of learning what could be "completed within the confines of what was available." While many remember financial hardships from the beginning of the decade and even from the late 1980's, none remember the continuation of hard financial times such as was experienced in 2009 as a continuation of the fall of 2008 and as extended into 2010.

State aid appropriated from the state legislature to all public libraries based on a per capita amount is down to the 2002-2003 level of $.84. State aid funds are used for additional salaries, education, collection development, purchase of equipment and programming at the local levels. At the same time most of the 219 public libraries in the state are facing reductions in their local appropriation due to a lagging economy.

Falkville Public Library located in extreme north Alabama was faced in the 2009-2010 fiscal year with no local support for Internet services for their patrons. The Alabama Public Library Service intervened with an emergency grant to continue their internet services for one year, allowing the library to apply for e-rate to continue past this year. This is just one indication of the types of problems faced by the public libraries of the state.

In the late 1990's Alabama was chosen by the Bill and Melinda Gates Foundation as the first state for public libraries to receive assistance in providing Internet access and computers to their patrons. Since that time, the Alabama Public Library Service has placed in its "5 – year Plan" an emphasis on the continuation of this project through providing resources to purchase upgrades in software and hardware. This emphasis is being hampered through lack of funding both at the

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	local and state levels. All of the State's 219 public libraries have public access computers but due to the increase in patron's demands for more online resources, availability of computers, lack of space to expand space designated for computers, new users with few or limited computer skills, lack of staff to assist patrons, business requiring job applications be filled out on line and e-government, etc., their resources are stretched to the max. New solutions like the Auburn plan are needed to meet the growing demands.

45. Funds to States/Territories

States	Amount of Federal Grant Request
Alabama	4,636,354

Funds to States/Territories Total: $4,636,354

G. Historical Financials

46. Matching Funds

	2007	2008	2009
Revenue	866,400,955	881,469,108	843,536,329
Expenditures	707,318,186	766,590,509	784,042,362
Net Assets	1,035,539,626	1,150,418,225	1,209,912,192
Change in Net Assets from Prior Year	159,082,769	114,878,599	59,493,967
Bond Rating (if applicable)	AA-	AA-	AA-

H. Public Computer Center Summary

47. Jobs

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How many direct jobs-years will be created from this project?	63
How many indirect jobs will be created from this project?	40
How many jobs will be induced from this project?	23

48. Methodology used to estimate jobs:

Used CEA method

49. Proposed # of Public Computer Centers	
Schools (k-12)	21
Libraries	94
Medical and Healthcare Providers	0
Public Safety Entities	0
Community Colleges	0
Public Housing	0
Other Institutions of Higher Education	0
Other Community Support Organization	0
Other Government Facilities	0

Total Proposed Public Computer Centers	115
Current Total Persons in Service Area	1059000

50. Minority Serving Institutions	
Historically Black Colleges and Universities	0
Tribal Colleges and	0

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Universities	
Alaska Native Serving Institutions	0
Hispanic Serving Institutions	0
Native Hawaiian Serving Institutions	0
TOTAL MINORITY SERVING INSTITUTIONS	0

51. Weekly Usage Summary	
Total Current # of Persons Served per 120-hour Business Week	14690
Total Proposed # of Persons Served per 120-hour Business Week	25710
Total Current # of Persons Served per 48-hour Weekend	254
Total Proposed # of Persons Served per 48-hour Weekend	739

52. Broadband Workstation Summary	
Number of Current Workstations proposed to be upgraded	477
Total Current # of Broadband Workstations	1326
Total Proposed # of Broadband Workstations	2338
Average Current Facility	1.30 Mbps

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Broadband Connection Speed	
Average Proposed Facility Broadband Connection Speed	6.00 Mbps

I. Project Readiness

53.   Licenses and Regulatory Approvals

None

54. Organizational Readiness

As described elsewhere in this proposal, WEREC has previously completed comparable tech installation projects in Uniontown, Alabama. University outreach regularly provides the type of training for county employees.

55. Project Timeline and Challenges

Year one: on-site assessments at each library.
  Year two: installations.
  Year three: training (though some initial training will start for the first steps in years one and two).

56. SPIN Number

J. Environmental Questionnaire

57.   Does this PCC application have construction or ground disturbing activities?

No

If no, please answer the questions below. If yes, please do not answer the questions below and instead proceed to the next page to answer the expanded environmental questionnaire.

58. Does the proposed action involve the procurement of materials? If so, will the materials be installed, stored or operated in an existing building or structure? If yes, please click "Add" to include the list of equipment and peripherals to be procured.

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No

59. Does the proposed action involve procurement of electronic equipment? If yes, will the equipment be disposed of in an environmentally sound manner at the end of its useful life?

No

60. Does the proposed action involve construction, remodeling, or renovation? If so, will these activities be limited to only minor interior renovations to a structure, facility, or installation? If yes, click "Add" to include a description of the proposed renovations with your project summary.

No

61. Does the proposed action involve the production and/or distribution of informational materials, brochures, or newsletter?

No

62. Does the proposed action involve training, teaching, or meeting facilitation at an existing facility or structure? If yes, click "Add" to explain.

Yes

Training at the Center for Governmental Services at Auburn University

63. Does the proposed action involve ground or surface disturbance to accommodate new fiber optic cable? If yes, please click "Add" to include a description of the extent of service upgrade, a list of the permits required, and linear footage of underground fiber optic cabling required.

No

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64. **Does the proposed action involve an upgrade of broadband service to an existing facility or structure? If yes, please include a description of the extent of service upgrade, a list of the permits required, and linear footage of underground fiber optic cabling required?**

No

K. Environmental Questionnaire – Part 2

65.   **Project Description**

66. **Property Changes**

67. **Buildings**

68. **Wetlands**

69. **Critical Habitats**

70. **Floodplain**

71. **Protected Land**

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72. Coastal Area

73. Brownfield

**Broadband Non-Infrastructure Application
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Uploads

The following pages contain the following uploads provided by the applicant:

Upload Name	File Name	Uploaded By	Uploaded Date
Management Team Resumes and Organization Chart	Org chart & Consolidated CVs.pdf	Taylor, Lester	03/15/2010
Government and Key Partnerships	support_letters.pdf	Taylor, Lester	03/15/2010
Historical Financial Statements	f-rpt09.pdf	Taylor, Lester	03/12/2010
Historical Financial Statements	f-rpt08.pdf	Taylor, Lester	03/12/2010
Public Center Detail	PCC Details Attachment.xls	Taylor, Lester	03/15/2010
Detailed Budget	Auburn Detailed+Budget Auburn.xls	Taylor, Lester	04/08/2010
BTOP Certifications	BTOP Certification.pdf	Taylor, Lester	03/12/2010
SF424 Budget (A or C)	PCC SF-424 A and C Forms.pdf	Taylor, Lester	04/08/2010

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SF424 B and D Assurances	assurances.pdf	Taylor, Lester	03/12/2010