

EDU2011 Pilot Program Application
RE: WC Docket No. 10-222
Lowndes County Public Schools
80 South Commerce Street
Hayneville, AL 36040

Section #1 – Required Information for all applicants:

- (1) Lowndes County Public Schools, located in historic Lowndes County, Alabama, serve approximately 1,860 students in grades K-12, and 315 youngsters in Head Start Pre-K Programs via a consolidated LEA. Lowndes County Public Schools are currently participating in a pilot program:(Project CARE) that provides laptop computers to k-12 students at four Lowndes County Schools: Jackson Steele Elementary School, Lowndes County Middle, Hayneville Middle School and Calhoun High School. This 1:1 project is specifically designed to use 21st Century technologies to improve Lowndes County student achievement, decrease dropout rates, and improve AYP status. Grant funds will provide equipment and staff development to the selected elementary, middle and high school teachers.
- a. The wireless access project for Lowndes County will utilize 802.11a/g wireless mesh technology to provide ubiquitous wireless coverage within approximately two square miles of each school or community center location. The project will leverage the school’s existing fiber-based Wide Area Network infrastructure for backhaul between areas of coverage. The existing infrastructure that filters and routes internet access will continue to be used in this project to provide protected and completely interactive internet access.

Project CARE originated with the idea that student achievement would be positively impacted by providing one laptop to every student. This program offers some of the most engaging and individualized instruction of any virtual school solution available today. It combines best-practice pedagogy with next-generation technology that enables the school to customize content and settings while providing an opportunity for students to learn at their own pace and make meaningful academic gains. With off-site connectivity available, students would have the opportunity to access on-line resources while at home, essentially extending the school day and allowing more time to use and interact in web-based learning environments.

Information technology is playing an increasingly important role in the work and personal lives of citizens. Computers, communications, digital information, software--the constituents of the information age--are everywhere. In order for students to compete in the global society in which they live, it is imperative that technologies become infused in all classrooms; and, access to emerging technologies be available to all students in school as well as after school hours. Technology support services will be provided to teachers, administrators and support staff.

In the Lowndes County Public School System, technology is being used on a daily basis., by all stakeholder in various ways. It begins each day when students enter the school buildings with teachers taking attendance throughout the day utilizing STI-INOW student database management system. Administrators use VoIP to communicate with teachers and students in the mornings and during the day. Teachers and administrators use the Internet to check email, and parents use STI-Home to check students grades, attendance and discipline information.

Teachers are required to utilize the technology course of study for the integration of technology. During the 2004-2005 school year the district purchased a software program, Curriculum Advantage, to assist teachers and students with meeting the goals set by "*No Child Left Behind*" and other state and federal requirements for student achievement.

In 2006, an additional software program EDU TEST, was also purchased to further assist administrators and teachers with disaggregating student data. Personnel in the district also are utilizing the following programs:

Alabama Learning Exchange (ALEX)- ALEX is a project created by the Alabama Department of Education designed to share all types of educational materials, resources and information through a single website. Within this website are lessons developed by other teachers which are approved by the Alabama State Department of Education. Teachers are able to view the Alabama Course of Study at a touch of a button, leading them directly to the grade level and subject area to assist in planning engaging lessons and activities. In addition, this website also has a "Teacher Zone" where teachers are able to view technology tips for their classroom.

Alabama Virtual Library (AVL)- Provides students, teachers, and citizens of the state with online access to **library** information resources.

CONCOURSE-Library automated software

APTPLUS/LEARN 360-

In addition, STI-Assessment, a program that allows administrators and teachers the ability to create posttests and pretests. was purchased in 2006 for two of our schools in school improvement and because of the success of the program, we have purchased the program for the entire school district to .

Consequently, all teachers are required to document the use of technology on a daily basis in their lesson plans. In 2007-2008 , we began providing monthly technology training sessions at all schools on the many uses of Microsoft PowerPoint and United Streaming, and APT Plus. Teachers are now able to use PowerPoint as bell ringers, showing videos embedded in PowerPoint slides, and providing handouts as study sheets.

During the 2008-2009 school year, every teacher was trained on how to create their own webpage utilizing Google Sites. This allowed teachers to showcase what was taking place in their classrooms, providing links to subject specific websites and other resources. The creation of these teacher websites serves as another form of communication for our parents and the community.

Each year the district hosts its MEGA Day, a professional development day for all employees. During this event, teachers are provided additional opportunities to participate in various technology sessions geared toward teacher and student engagement.

During the summer 2009, media specialists were afforded a week of professional development to provide assistance to the District Technology Coordinator and to be able to assist teachers with additional technology integration utilizing the new course of study. June 2009, media specialists along with other teachers were provided with 32 hours of Intel Teach Essentials training taught by the District Technology Coordinator who is a certified Master Teacher.

In 2010 targeted Lowndes County Schools were awarded a grant which allowed for the implementation of several technology tools to include a mobile 1to1 initiative, complete 21st Century teacher/classroom, monitoring administrative tools and a data management system. All of these tools have aided in the transformation of the school's teaching and learning culture into a standards-based environment.

Our ultimate goal is to continue to provide high quality professional development to ensure that teachers and administrators are kept abreast of new and innovative changes in the area of technology that caters to student learning and higher achievement and to train teachers on incorporating project-based activities into the curriculum in order to engage every learner.

In an effort to make on-line resources and school assignments available to students after the school day, we hope to incorporate off-site connectivity to our existing 1:1 computing program. Due to the economic limitations as well as the geographical challenges Lowndes County students face, home connectivity is not an option for many families. Using the existing technology that is currently in place at Jackson Steele Elementary, Lowndes County Middle, Hayneville Middle and Calhoun High School the EDU2011 Pilot Program could provide an effective way to fund off-site wireless connectivity which would enable students to take full advantage of the technology tools already in place.

- b. The wireless program for access off-campus is currently in the planning stage. There has not been any implementation at this point. The students will use a combination of wireless-enabled laptops and mobile WiFi devices such as iPods and iPads to access school-provided learning resources such as digital lockers, teacher assignments, collaborative tools, archived video and many others.
- c. Because this is a pilot project, complete coverage for all students is not economically feasible due to the widespread locations where students reside across the county. The proposed wireless network will provide off campus access to approximately 25% of the students attending Lowndes County schools. Many of the students live in rural areas that are not within coverage area without using longer range solutions. One solution to the distance problem will likely involve a hybrid system that utilizes a combination of the newly approved 802.16e Wimax 2 standard for long range backhaul where fiber does not exist and traditional 802.11 WiFi for client access.
- d. Training on setting up the wireless client and login procedures will be provided to all students, parents and faculty. Telephone support will be provided to assist users who have difficulty accessing the wireless network.

- e. The four schools targeted for this pilot project have already been approved for a three year School Improvement Grant whose goal is to improve student performance. The program involves academic coaches, curriculum development, periodic student assessments, planning, etc. The addition of off campus wireless access will reinforce these programs by the after- hours access to educational resources.

Because Lowndes County is a very rural county in the state of Alabama, broadband providers do not serve a significant number of communities in this area. According to a 2009 National Telecommunications Information Agency (NTIA) study, only 48% percent of Alabama households subscribe to broadband service at home. This fact places Alabama next to last in state rankings. This information was provided by the Connecting Alabama website (www.connectingalabama.gov). ConnectingALABAMA is a multi-year initiative promoting the availability and adoption of broadband internet access throughout the state of Alabama. The goals of this state initiative seem to align with those of the EDU2011 Pilot Project.

Using the existing technology that is currently in place at the selected Lowndes County schools, the EDU2011 Pilot Program could provide an effective way to fund off-site wireless connectivity which would enable students to take full advantage of the technology tools already in place while also enriching their educational experience in Lowndes County.

(2)

Jackson Steele Elementary	K	1	2	3	4	5
	36	29	40	32	44	45
Black Female	16	11	28	19	21	20
Black Male	20	18	12	13	23	25
White Female	0	0	0	0	0	0
White Male	0	0	0	0	0	0

Jackson Steele Elementary School (K-5) has a current enrollment of two hundred twenty-six (226) students. Of the two hundred twenty-six (226) students, 220 students (97.35%) are on free or reduced lunches.

Lowndes Middle School	6	7	8
Black Female	30	32	34
Black Male	31	36	30
Multi Female	0	0	0
White Female	2	0	1
White Male	0	0	2

Lowndes County Middle School has a current enrollment of one hundred and ninety-eight (198) students. Of the two hundred and ninety-eight (198) students (100%) are on free or reduced lunches.

Hayneville Middle School	6	7	8
	91	84	62
Black Female	47	36	30
Black Male	44	47	31
Hispanic Female	0	0	0
Hispanic Male	0	0	0
White Female	0	1	1

Hayneville Middle School (6-8) has a current enrollment of two hundred thirty-seven (237) students. Of the two hundred thirty-seven (237) students, 222 students (93.67%) are on free or reduced lunches.

Calhoun High School	9	10	11	12
	86	84	59	47
Black Female	42	51	29	23
Black Male	42	31	30	24
White Male	2	2	0	0

Calhoun High School (9-12) has a current enrollment of two hundred seventy-six (276) students. Of the two hundred seventy-six (276) students, 249 students (90.22%) are on free or reduced lunches.

(3) Lowndes County's current unemployment rate is 14.7% which is 9th highest in the state of Alabama. The County has no major source of retail business. The business environment is manufacturing and "mom and pop" stores which leaves the county with a very small sales tax base. Lowndes County is currently ranked as the 4th poorest county in the state of Alabama. The County only collects 15 mils of property tax which also places it very low in state rankings. With little local funds available, the County relies on state appropriated funds for 85% of its annual budget.

(4) The costs that are associated with wiring, cabling, installation of the wireless program are E-rate eligible (see spreadsheet); however, the costs associated with training and end user devices are not E-rate eligible. Consequently, the school district will utilize local funds to offset all costs for the training of stakeholders to include; teachers, students, and parents.

(5) The Lowndes County School District has no funds to support the Wireless Program from the committed schools or library resources. Library enhancement funds have not been allocated to school districts from the state level in three years due to proration.

(6) Off-premise connectivity would essentially extend the school day for students, allowing them to access on-line resources from home. Research has shown that today's students are learning differently than students in past generations. 21st Century students need more to engage their senses, stimulate their creativity, and gauge their own learning. Off-site connectivity would afford students the opportunity to access many of the same resources they are able to use while at school.

Parents of students from the selected schools would also benefit from this program as well. On-line resources for both parents and students are already provided on the school website which could be utilized more if off-site connectivity were available. Due to the economic and geographical challenges some Lowndes County residents face, wireless access from home would give parents an opportunity to stay informed and up-to-date with school events and news while also allowing students to engage in online learning centers and access electronic classroom resources that would be beneficial to the academic success of Lowndes County students.

(7) an analysis of the cost-effectiveness of the current or planned Applicant Wireless Program as compared to the use of other types of technology that would also meet the Program's objectives;

Currently there is no other technology that would be more cost effective other than the availability of 3G. However, 3G would drive the cost of the end user device up. Presently 3G is not very available in Lowndes County.

(8) any relevant technology planning documents and, if applicable, a statement of long-term objectives for the Program;

The model acknowledges the fact that in year one the three entities (instruction, data, technology integration) remain individualized as they represent a significant paradigm shift for the teacher to make in one year even with support well beyond what schools normally provide their teachers. Thus the model promotes a movement toward convergence of the three in year two with total convergence occurring in year three. Throughout this process however, student outcomes are affected because of the attention that is being spent on individualization, content standards, and engagement through the use of 21st century tools.

(9) The existing infrastructure that filters and routes internet access for the school system will also be used in this project to provide CIPA compliant internet access. The filtering system will be monitored to detect and prevent any inappropriate use. Access to the wireless network will be controlled using guest access servers. This will require authentication against the school's account database before granting access to the wireless network. This will prevent use of the network by those not associated with the school system.

(10) a description of internal policies and enforcement procedures governing acceptable use of the wireless devices used in the Program off the school or library's premises.

See Lowndes County Technology Plan (Attached Document)

Section #2 - Required Information (schools only)

**(1) Calhoun High School
8213 County Road 33
Letohatchee, AL 36047**

**Hayneville Middle School
101 Lafayette Street
Hayneville, Al 36040**

**Jackson-Steele Elementary School;
570 Freedom Road
Hayneville, AL 36040**

**Lowndes County Middle
510 Montgomery Street
Ft. Deposit, AL 36032**

**(2) Calhoun High School – 39964
Hayneville Middle School -39954
Jackson-Steele Elementary School – 39959
Lowndes County Middle School - 39942**

(3) Lowndes County Public Schools, located in historic Lowndes County, Alabama, serve approximately 1,860 students in grades K-12, and 315 youngsters in Head Start Pre-K Programs via a consolidated LEA. This predominantly rural county, which covers 718 square miles, is home to less than 13,473. Located in the heart of the Blackbelt, Lowndes County residents desperately need vast improvements in the funding of its public schools. Ninety-eight percent of students enrolled in Lowndes County Public Schools qualify for free and reduced lunch. However, the school district will utilize all federal, state and local dollars to truly focus on teaching and learning. This funding effort will primarily focus on wireless support at students' home base in order for students to acquire the knowledge, competence and skills needed for them to become "fierce competitors on the economic world stage." Lastly, the district will continue to maximize the data collected from this needs assessment to coordinate funds from the aforementioned sources to sustain the continuous improvement of school improvement efforts.

(4-5)Project CARE is a comprehensive Instruction, Data and Technology Integration process which encompasses the following research based tools. In Lowndes County Project CARE encompasses four schools: one elementary, two middle and one high school serving grades k-12 and employing 67 teachers.

1. SMART
2. Fujitsu
3. Data Director
4. E2020 (Education 2020)
5. Blue Ribbon Schools of Excellence, Inc.
6. LoTi
7. Eduphoria
8. Auburn University

Each partner provides services, support, and products that are targeted at insuring student success. The Blue Ribbon Schools of Excellence non-profit organization will do an initial evaluation of each school utilizing their research based tool “Blueprint for Excellence”. This measure of perception versus reality instrument provides the ITS consultants and the school with an excellent baseline measurement in the following nine areas of school improvement:

1. Student Focus and Support
2. School Organization and Culture
3. Challenging Standards and Curriculum
4. Active Teaching and Learning
5. Technology Integration
6. Professional Community
7. Leadership and Educational Vitality
8. School, Family, and Community Partnerships
9. Indicators of Success

The ITS Consulting team will then utilize this baseline data to identify priorities for making “cultural changes” in the school.

The consulting group will be onsite for 160-180 days each of the grant three school years to mentor, support, and build leadership capacity. The foundation for the project, however, is the utilization of a process developed by the group called the IDT Model (Instruction/Data/Technology) that combines instruction, data, and technology integration to drastically change classrooms from teaching environments to learning environments. While standards-based instruction is certainly not a new concept to classrooms across the country, the real measurement of “what students know and are able to do” in classroom is controversial at best. Grade inflation and social promotion continue to be two delimiting factors in student achievement. There have also been multiple inconsistencies on the effectiveness of 21st century technology tools as they relate to both student engagement and student achievement. (Does buying an interactive board and learning how to use it really change instruction?) The IDT Model promotes the integration of true standards-based instruction that is data driven and utilizes technology strictly as a tool of engagement for everyone in the classroom as opposed to an add-on for teacher instruction. The model acknowledges the fact that in year one the three entities (instruction, data, technology integration) remain individualized as they represent a significant paradigm shift for the teacher to make in one year even with support well beyond what schools normally provide their teachers. Thus the model promotes a movement toward convergence of the three in year two with total convergence occurring in year three. Throughout this process however, student outcomes are affected because of the attention that is being spent on individualization, content standards, and engagement through the use of 21st century tools.

Applicants must also apply for E-rate funding by following the regular E-rate program rules. Specifically, in addition to the information requested above, eligible schools and libraries must submit an FCC Form 471 application to USAC during the regular application window. We direct applicants to file an FCC Form 471 application specifically for the wireless connectivity services to be used off-premises as part of the program for which the applicant is seeking funding and file a separate FCC Form 471 for any services to be used on premises. Applicants should type "EDU2011" in the form identifier field of the FCC Form 471 application for the wireless connectivity services to be used off-premises. Applicants should also list all of the schools and/or libraries that will be receiving the off-site wireless connectivity services in Block 4 of the FCC Form 471 application. Because potential applicants will most likely already be using portable wireless devices in their school or library, applicants may have an established relationship with a service provider. Therefore, the Commission has waived, to the extent necessary, the applicable sections of the Commission's E-rate competitive bidding rules for those EDU2011 pilot program applicants that have already entered into legally binding agreements with service providers for off-premises connectivity for portable wireless devices. The Wireline Competition Bureau (Bureau) will notify applicants and USAC when it has selected applicants to participate in the EDU2011 program. Selected applicants will receive the allotted connectivity support and will not be required to cost-allocate the dollar amount of support for the time that portable devices are not on school or library premises. Applicants will receive funds sufficient to cover the amount of connectivity expenses eligible for E-rate funding based on their discount; they will still be required to pay their non-discount share. After the one-year trial period, participants will be required to submit a report to the Bureau describing in detail any data collected as a result of the program and a narrative describing lessons learned from the program, which may assist other schools and libraries desiring to adopt similar programs in the future.

EDU2011 Application Filing Procedures:

Eligible schools and libraries may submit their applications either (1) by using the Commission's Electronic Comment Filing System (ECFS) or (2) by filing paper copies. **All applications submitted as part of the EDU2011 pilot program must refer to WC Docket No. 10-222.**

- Electronic Filers: Applications may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/>.

- Paper Filers: Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

Eligible schools and libraries may also send a courtesy copy of their filing via email to EDU2011pilot@fcc.gov or by mail to Regina Brown, Telecommunications Access Policy Division,