

Piedmont City School District
Piedmont, Alabama
December 14, 2010



A PROPOSAL for

E-RATE DEPLOYED UBIQUITOUSLY (EDU)
2011 PILOT PROGRAM
WC Docket No. 10-222

Piedmont City School District submits the following information in support of its Proposal for E-RATE DEPLOYED UBIQUITOUSLY (EDU) 2011 PILOT PROGRAM.

(1) Full description of the current or planned Applicant Wireless Program, including but not limited to:

a. The nature of the Applicant Wireless Program, including the extent to which the use of connectivity is interactive and utilizes the Internet.

The Piedmont City School System became the first school system in Alabama to implement a one-to-one laptop initiative in grades 4-12 in the fall of 2010. The initiative, MPower Piedmont, ultimately will create a digital learning environment in these grade levels. Planning for the initiative actually began three years ago, but laptops were deployed to all students with access 24/7 when school started this year. It is important to note that Piedmont is a rural school system with a high percentage of students (65%) on free/reduced lunch. Not only is Piedmont the first school system in Alabama to implement a one-to-one initiative to this extent, but we are one of three public school systems in Alabama, Mississippi, and Louisiana to do so.

MPower Piedmont is an initiative of Piedmont City School District with the vision, “to transform our community as we empower students to fulfill their dreams.” The MPower Piedmont initiative provides a true 1:1 computing environment with **every** student in grades 4-12 receiving a school-owned laptop for their use 24 hours per day, 365 days per year. Every teacher in grades 4-12 received a school-owned laptop as well. All the laptops provide the appropriate software and access to network/internet resources for research, communication, multimedia content creation, and collaboration for use in and out of school (Obj. 4.2 of National Education Technology Plan).

Planning for implementation of this project dates back three years. At that time, the Piedmont City Board of Education and administration made a commitment to transforming the school system through the use of instructional technology. After a year of careful planning and analyzing budgets, the first major installation step occurred in the summer months of 2009, when one-time stimulus funds provided the foundation of our initiative. These funds provided 21st century equipment for every pre-K-12 classroom in our school district. This equipment consists of a ceiling-mounted projector; wall-mounted projection screen; wireless slate (which coupled with the projection system doubles as an interactive whiteboard); ceiling-mounted speaker system with classroom audio amplification; document camera; DVD/VCR integrated with projector and audio systems. Each classroom in grades 2-5 received infrared student response pads. Each classroom in grades 6-12 received text-enabled student response pads.

The next year, E-Rate funding assisted in providing a network infrastructure upgrade to 802.11n connectivity providing ubiquitous Internet access on all our campuses.

With equipment and infrastructure to support a digital learning environment in place, the next logical step was acquisition of an Internet accessible Learning Management System (LMS). The LMS we chose provides robust capabilities and ease of use for both students and teachers. The LMS is hosted on remote servers and is available to our students via the Internet anytime, anywhere in the world. The traditional

classroom has given way to a virtual classroom, without walls, available anytime the student chooses via the Internet.

Teachers now develop technology enriched instructional lessons that are delivered through the LMS. Each course is customized with lesson-specific resources that enhance the student learning experience. Collaborative tools built into the LMS facilitate course discussions during the regular class period but now also continue throughout the day as well as after school hours, if students have Internet access. Teachers maintain online office hours after school, providing additional interaction with their students, guiding and leading students to assume responsibility for their learning experiences. Teachers use their laptop along with their wireless slate to achieve classroom mobility, which promotes student-teacher interaction, and encourages student participation in learning. Students use the LMS daily for online lesson delivery, assignments enrichment, and assessment.

Partnership development is vital to the success of this project. Piedmont City Schools has partnered with Jacksonville State University's (JSU) Teacher In-service center and College of Education, Samford University's College of Education, Gadsden State Community College (GSCC), Mooresville Graded School District (North Carolina) and Technology in Motion (TiM). We believe it is important to note the cross-section of partnerships. JSU is a state-funded public university that houses the largest College of Education in Alabama. Samford University is a private university that is compared in the same tier with Ivy League schools in the area of research. GSCC is recognized as one of the largest work-force development institutions in our state. They continually provide training for Honda and Mercedes. Lastly, one of the main reasons for the initial success of MPower Piedmont is the truly unique partnership with an out-of-state public school system, the Mooresville Graded School District in North Carolina. By partnering with the Mooresville Graded School District, we have adopted some of the best practices in the nation.

The JSU In-service Center has committed to providing professional development to support this project. Beginning during the 2010-2011 school year, 25% of Piedmont City School District teachers are working towards National Board Certification. The development of a National Board Certified staff will provide our students better learning opportunities. Piedmont City School District is committed to sharing our vision and new pedagogy with other schools by hosting site visits during the school year and training sessions in the summer. JSU College of Ed. has paired 25 student teachers with teachers at PHS and PMS for SY2010-11. These student teachers will be immersed in a digital learning environment having the opportunity to plan and teach digital natives with the best technology. As these new teachers go into the workforce, they will begin to transform teaching and learning throughout the state. Samford University's College of Ed. has committed to a three-year impact study. They will evaluate the effect on assessment, attendance, and discipline. Perhaps more importantly, they will also assess the level of student engagement in classrooms and ultimately evaluate the success of our initiative to transform education in our schools. Imagine the impact this study could have on the field of education. GSCC has committed to provide online college classes for Piedmont High School students. Additionally, they will provide a Career Coach to work with students, using online career assessments, to help determine a path for higher education. Finally, we will collaborate with GSCC to provide online GED classes for siblings and parents of students.

Our partnership with Mooresville Graded School District is unique and exciting. Mooresville Graded School District is in year 3 of their implementation of a 1-1 laptop initiative. They have agreed to mentor our teachers and administrators through online meetings and site visits. This summer, our staff will visit Mooresville Graded School District to participate in 3 days of intensive training. The opportunity to partner with a school district, nationally recognized for their integration of technology, will certainly make our project more successful.

The TiM Specialist assigned to Piedmont City School District will lead in establishing professional learning groups focused on 21st Century Teaching. TiM has committed to providing a technology integration course leading teachers to develop student-centered learning through technology integration and challenge-based approaches. The training will consist of 32 hours of hands-on instruction delivered in eight modules throughout the school year. The TiM specialist will also serve as a Technology Coach at PHS and PMS for two days a month throughout the year.

The wireless access project for Piedmont City School District will utilize 802.11a/g wireless mesh technology to provide ubiquitous wireless coverage of a three square mile area that encompasses Piedmont's city limits. This will provide off-campus wireless coverage for approximately 85% of the students attending Piedmont City Schools. The schools are each connected with an existing fiber optic WAN, which will be utilized for backhaul between areas of coverage. In addition, ten city buildings interconnected with fiber cabling will be used to extend the coverage beyond the range of the school facilities. 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. Although our existing project is achieving amazing success, ultimately only with 24/7 Internet access will we achieve the level of engagement, student-centered learning, and assessments that will truly transform our school system. We have made an enormous commitment by placing laptops in all of our students' hands 24/7, providing an unparalleled level of professional development for our staff, but ultimately this wireless access project will provide the means to take our project to the top level. Low-income students in rural Alabama will have the same opportunities as students from suburban areas with unlimited bandwidth and adequate funding for all aspects of education.

b. How long the Applicant Wireless Program has been in operation and the mobile wireless device(s) being used.

The MPower Piedmont 1:1 initiative became a reality in September 2010, as we rolled out 824 student and teacher laptops with 802.11n wireless connectivity. Our primary mobile wireless devices are the student and teacher laptops. Our students and teachers have access to their laptops 24/7. Surveys and parent/student interviews have shown that approximately 40% of our students have Internet access at home. Students are utilizing local businesses and churches for limited Internet access after school hours. Additionally, we are working on plans to provide extended school hours for Internet access. As previously stated, only with 24/7 Internet access can our project be implemented to the fullest.

After careful planning, the initiative began as a small pilot in August 2009 targeting Piedmont High School with a mobile cart and 31 wireless capable laptops. The cart was made available for classroom use through a flexible checkout program. The demand for the mobile cart far surpassed our initial estimate, and we quickly saw that we needed more laptops for students. In September 2009, we applied for and received ARRA EETT Competitive Grant receiving funding in the amount of \$160,000. This funding provided three additional mobile carts and a total of 120 laptops for student use, almost a 3:1 ratio of students to laptops.

In December 2009, Piedmont City School District received E-RATE funding to upgrade our wired LAN infrastructure to 802.11n wireless connectivity providing ubiquitous Internet access on all our campuses. Our students have quickly learned to utilize this new, always available Internet access to become adept at gathering and processing information while completing their assignments. They have learned to collaborate in real-time with others around the world, which in turn has brought diversity to their educational experiences.

Future plans include adding such devices as iPods, iPads, and eReaders in grades K-3, as funding opportunities arise.

c. A description of any technical issues associated with implementing the Applicant Wireless Program including an analysis of any problems with the availability of wireless access to students or patrons off the school or library premises and how those issues are being or will be addressed by the school or library.

The technical issue associated with implementing MPower Piedmont is the lack of affordable broadband Internet access in the community surrounding the Piedmont City School District. Currently, students are required to provide their own Internet access when they are away from campus. Student and parent surveys show that at least 60% of PCS students do not have Internet access at home. The reasons for this low level of access are two-fold. The primary reason is financial. Sixty-five percent of our students are on free/reduced lunch and their families simply can't afford Internet access. Other students who might be able to afford limited access do not have broadband available in the area in which they live.

The Piedmont City School District is located in rural northeast Alabama, in the foothills of the Appalachian Mountains. Because of the limits on local financial support along with the low-income nature of the majority of our students, the Piedmont City School District has struggled in recent years to implement instructional technology initiatives that fully engage our students in the learning process.

Our pilot application is unique because we are planning a blended approach:

Part I. By extending the school wired LAN into the community through the City of Piedmont's existing fiber Metropolitan Area Network (MAN). The existing MAN consists of a great deal of dark fiber that will be utilized for this project. This will increase wireless availability for all students in the 3 square mile radius of the city (See Attachment 1, PiedmontCityMeshDesign.EDU2011.pdf and Attachment 2, PiedmontCityMesh.CoverageArea.pdf); and

Part II. By providing wireless air cards (access for 1 laptop) for students who live outside the 3 square mile radius. Verizon Wireless has the most reliable and widest coverage for our area. At this time, other providers do not provide reliable coverage in our area.

d. What training has been or will be provided to teachers, librarians, students or parents to implement the Applicant Wireless Program

To date, our project has provided over 40 hours of professional development for teachers and administrators. Classes are being transformed from a traditional teacher-led, lecture model into a digital learning environment. This environment promotes engagement and anytime/anywhere learning for students and teachers. Students are benefitting from the experiences of a student-centered, media-rich environment, which will prepare them to address problems that can't be addressed by any one specialty. Professional learning groups have been established and they provide a forum for collaborative exchange among teachers. Students and teachers work together as a collaborative learning group using 21st century and emerging technologies to connect to the rich relevant content that has not been available in the traditional 20th century classroom settings.

Additionally, a key component of on-going training is Leadership Development. This training will support leaders, provide mentoring and increase their knowledge of technology and promote change. It will also provide tools and methodology for evaluating the impact of a technology initiative and use of teacher assessment tools. Teachers and administrators will have the professional development that will allow them to effectively use the tools of a 21st Century classroom.

Teachers and administrators are also being trained to assist parents as they explore all the features of the learning management system's parent portal. Parents will be able to monitor their student's classroom progress through the parent portal of our learning management system. Not only will parents be able to view grades and homework assignments, they can view daily activities and actual questions from assignments. Parents whose schedules may have previously limited their involvement in their student's education will now have 24/7 access into their student's education. Parents will be trained to use the parent portal as a means of monitoring their student's progress. The parent portal will also facilitate better communication between school and home.

Students, parents, and faculty will be trained to setup the wireless client. Training will also cover login procedures. Additionally, community educational programs are being developed to address the areas of Internet access and safety, cyber bullying, and general use of all the resources available through the MPower Piedmont initiative.

e. The extent to which the Applicant Wireless Program is integrated with federal, Tribal, state, regional or local government or non-profit initiatives to achieve educational or community access outcomes

Extending the Piedmont City School District LAN to link to the City of Piedmont's existing fiber Metropolitan Area Network (MAN) will provide wireless connectivity

within a three-square mile radius of the school. Extending wireless coverage will provide affordable access to low-income families and the elderly who reside in the Piedmont Housing Authority dwellings. We are investigating the possibilities of linking this Applicant Wireless Program with the Distance Learning and Telemedicine Program (DLT) as well as the Community Connect Grant Program to make a tremendous difference in the quality of life for all citizens of Piedmont, Alabama. As an added benefit, extending wireless connectivity could be an incentive for industry to locate or expand in the City of Piedmont area, further improving the quality of life for the citizens of Piedmont, Alabama.

In order to ensure the on-going involvement of city and business leaders, the Mayor, a City Council member, and local businessman all serve on the Leadership Team for MPower Piedmont.

- (2) *The poverty level based on the percentage of students eligible for a free or reduced-price lunch under the national school lunch program (NSLP) or a federally approved alternative mechanism, and the current discount rate of the school or library.***

Piedmont City School District has a Free/Reduced population of 64.94%, resulting in an 80% E-Rate discount. Census data reflects that the poverty level in Piedmont is more than double that of the national poverty level.

- (3) *The financial need of the school or library, including any additional budgetary hardships, notwithstanding the school or library's current discount rate;***

The Piedmont City School System has been cut \$1.5 million in state education funds over the last two years. This is resulted in a 10% cut in the overall budget. Additionally, the school system has seen the number of students who are on free/reduced lunch increase by 12% in the last five years. The percentage of families in Piedmont who live below the poverty line has increased to over 20% in the last two years. This percentage is more than double the national average. Piedmont is a prideful community that truly cares about its school system. Unfortunately, we have lost the textile-based jobs that made once made Piedmont a thriving community. The local tax-base has decreased drastically.

The Piedmont City Board of Education has made an extraordinary commitment to the students in our school system by implementing the MPower Piedmont initiative. This commitment was made possible through grants, stimulus funds, and prioritizing limited local funds. Participation in this pilot project will make the completion of the Mpower Piedmont initiative a reality by providing true access to vital resources 24/7.

- (4) *All costs, including those eligible for E-rate support and those not eligible for E-rate support, associated with implementing the Applicant Wireless Program including but not limited to costs for equipment such as e-readers or laptops, access and connection charges, teacher training, librarian training, or student/parent training;***

(See Attachment 3, PiedmontCityEDU2011.BOM.pdf)

Cost of Applicant Wireless Program consists of the following:

Part I (E-Rate eligible)	
Extending the School Network:	
One-time cost for the wireless mesh equipment and installation	\$750,000.00
Part II (E-Rate eligible)	
Monthly Internet access	
Wireless air card devices for approximately 15% of the student population	\$ 73,500.00
Training (E-Rate INELIGIBLE) to support of Parts I & II	<u>\$ 5,000.00</u>
	\$828,500.00

(See Attachment 4, Piedmont City School District Planned Applicant Wireless Program Cost Effectiveness Analysis for detailed cost information.)

Wireless laptops have already been purchased for every student and teacher in grades 4-12. Other mobile devices such as iPods, iPads, and eReaders may be acquired as funding becomes available.

(5) *The committed school or library resources available to implement the entire Applicant Wireless Program, including whether those funds are from the school or library's general budget or from an outside funding source;*

Piedmont City School District has committed \$200,000 per year in local funds towards the on-going purchase and technical support of Internet Access Devices (laptops). Additionally, state and local funds are used to provide salaries and benefits (\$115,000) of technology staff. Title I (\$25,000) and IDEA (\$15,000) funds will be budgeted annually to help provide Learning Management System software and on-line resources.

Piedmont City School District has also secured \$150,000 in State Capital Outlay grants to be utilized over the next two years to continue to upgrade networking equipment and as matching E-rate funds.

Professional development for teachers and parents is a vital component of this project. The school system recently was awarded an Enhancing Education Through Technology Grant that will provide \$112,000 for teacher and parent training over the next two years. We have also secured \$15,000 to coordinate community education programs for the next 18 months. High school students will assist in providing community technology training.

The Piedmont City School District has made a strong financial commitment to this project. Although we are experiencing very difficult financial times, the Piedmont City School District believes that this project will truly transform our school system and community. Local, state, federal, and grant funds have all been carefully fused to make this project possible. Funding from this pilot program will allow MPower Piedmont to reach its fullest potential.

(6) *The effect EDU2011 support for off-premise connectivity is likely to have upon the school's or library's projects;*

Mpower Piedmont has been implemented after several years of planning and two prior implementation years in which 21st Century classroom equipment was installed in every classroom and media center and a fast, reliable, wireless network was installed throughout the school system. This school year, all teachers and students in grades 4-12 were provided with a laptop 24/7. The results after one semester have been extraordinary. We have implemented a blended-learning model in all classrooms. Utilizing a learning management system, students communicate with their teachers digitally and face-to-face. Research has shown that the blended approach is best and our real-world implementation has proved the research correct.

Our schools in the past, like most, have been structured towards linear thinking students who sit in straight rows and learn in a nice, organized manner. Our laptop initiative is allowing all kids to shine. There are many bright students who aren't linear thinkers, who need another way to present what they know rather than writing a 500-word essay. We have begun to provide all student with alternative tools and methods. We have also been able to individualize learning to an extent that is not possible without technology. Our goal to increase Collaboration has become a reality with our project. Students collaborate with students, teachers with teachers, students with teachers, and teachers with parents. It is not uncommon for students to have virtual study groups, make and share digital study guides, and post their thoughts about assignments for everyone to see. However, a large number of our students do not have Internet access at home to view their own work and that of their peers. Many teachers have begun to offer on-line office hours at night for students and parents. This opportunity has proven beneficial for those student fortunate to have Internet access at home. We believe that all our students would benefit from on-line office hours IF they had 24/7 Internet access.

Our existing project is achieving amazing success. However, with 24/7 Internet access will we achieve the level of student engagement, student-centered learning, and online assessments that will truly transform our school system. We have made an enormous commitment by placing laptops in all of our students' hands 24/7, providing an unparalleled level of professional development for our staff, but ultimately this wireless access project will provide the means to implement our Mpower Piedmont initiative to the fullest extent. Based on our success to date, we believe that 24/7 Internet access would greatly improve the quality of life for our students, parents, teachers, and entire community

Unfortunately, most of the 60% of students without Internet access at home live in the poorest households. These student would benefit the most from virtual study groups, computer-assisted instruction provided over the Internet, and on-line tutoring provided by their teachers at night. Off-premise connectivity that is provided through EDU2011 will ensure that Mpower Piedmont will truly transform our school system and community. It will provide equitable learning opportunities to all students regardless of parent's income or level of education. Ultimately, EDU2011 will allow Mpower Piedmont to be used as a national model on transforming education through the use of technology.

(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

An analysis of the cost-effectiveness of the planned Applicant Wireless Program is attached (See Attachment 4, Piedmont City School District Planned Applicant Wireless Program Cost Effectiveness Analysis)

There are several advantages of the Wireless Mesh Network Solution that we plan to implement. With wireless mesh networks, each Wireless Access Point (WAP) acts as a repeater allowing data to hop from WAP-to-WAP until it gets to the Rooftop Access Point (RAP). The RAP then transmits data via a wired connection to the school's network, where the student can access the school resources or the filtered Internet connection. The benefits are:

- No monthly communication costs
- No need for towers, wiring, cabling or trenching costs
- Low infrastructure costs once put into place and low maintenance costs

The key network components of this mesh deployment design shown in the attached design are the following:

- WCS (Wireless Control System) —Key component in the management, operation, and optimization of the mesh network. This device will be housed in the MDF (Main Distribution Facility) at Piedmont City Board of Education.



- Wireless LAN Controller— Provides real-time communication between lightweight access points and other wireless LAN controllers to deliver centralized security policies, wireless intrusion prevention system (IPS) capabilities, RF management, quality of service (QoS), and mobility. Piedmont City School District has already invested in the purchase of several of these devices. There are actually 3 in the school District at this time. One additional WLAN is included with this application with the capability of managing up to 100 Access Points.
- Router between the network and the mesh—Provides a Layer 3 boundary where security and policy enforcement can be applied. The router also provides Layer 2 isolation of the RAP. This is necessary because the RAP bridges traffic from its local Ethernet port to the mesh, so this traffic must be limited to that necessary to support the solution so that resources are not consumed by the unnecessary flooding of traffic. A premise router already exists in at the boundary of Piedmont City Schools network.
- RAP— The wired network connected Mesh AP that provides the "path" home for the wireless mesh APs.



- A number of MAPs. We have included 70 1524 Mesh Access Points with this application.

The planned Applicant Wireless Program provides faster Internet access at 54Mbps with no monthly data limit. EDU2011 will allow us to provide high-speed broadband, as called for in the National Technology Plan, by implementing the Applicant Wireless Program.

As previously described, we will use a small number of wireless USB devices for the 15% of our students who live outside of the city limits of Piedmont. Although these devices do not provided the bandwidth that the wireless mesh does, they are the most efficient and reliable mechanism for providing access in these rural areas. The only other option is a satellite-based system that requires households to use satellite tv and it is neither fast nor reliable.

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

The current Technology Plan has been approved through 2011 and is attached. (See Attachment 5)

The long-term objectives for the Applicant Wireless Program include extending the Piedmont City School District LAN to join with the City of Piedmont's existing fiber Metropolitan Area Network (MAN). This will provide wireless connectivity within a three-square mile radius of the school. Extending wireless coverage will provide affordable access to low-income families and the elderly who reside in the Piedmont Housing Authority dwellings. We are investigating the possibilities of linking this Applicant Wireless Program with the Distance Learning and Telemedicine Program (DLT) as well as the Community Connect Grant Program to make a tremendous difference in the quality of life for all citizens of Piedmont, Alabama. As an added benefit, extending wireless connectivity could be an incentive for industry to locate or expand in the City of Piedmont area, further improving the quality of life for the citizens of Piedmont, Alabama.

(9) *A description of the specific measures taken, or that will be taken, to ensure compliance with the Children's Internet Protection Act and measures to protect against waste, fraud, and abuse;*

Currently, Internet access is provided by Alabama Supercomputer Authority and is filtered in compliance with the Children's Internet Protection Act. (See Attachment 6, ASA/AREN Agreement for Activation of CIPA Content Filtering). All Internet access, whether on the campus LAN or off the campus LAN is filtered back through the Alabama Supercomputer Authority using a mobile client that is installed on each laptop. The software is hidden, automatically launches at system startup, and requires an administrator password to remove. Through automatic network detection, the mobile client provides total filtering to laptops and remote users anytime, anywhere regardless

of Internet connection. Centralized configuration and remote administration coupled with configurable user lockout prevents students from altering the client's filtering capabilities.

Our Required Use Policy provides measures to protect against waste, fraud, and abuse. Students and parents are given a copy of the Required Use Policy prior to receiving a laptop. Administrators discuss the requirements regarding the proper educational use of the laptops and emphasize that students will refrain from downloading or installing potentially harmful programs; students will not tamper with hardware, vandalize, or destroy the laptop; students are not to attempt to bypass the filtering software or change any configurations. Monthly meetings with students provide reinforcement of proper use and care of the laptops.

If accepted into the Pilot Program, Piedmont City School District will revise the RUP to include any new requirements that may result from installing the equipment as specified in the Applicant Wireless Program.

(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.*

Piedmont City Schools provides all students access to the Internet, network resources, as well as laptop computers in grades 4-12, as a method to promote achievement and provide diverse opportunities during the educational experience. The district Required Use Policy (RUP) provides guidelines and information about the limitations that the district imposes on use of these resources. The RUP is posted for public access at <http://www.piedmont.k12.al.us> under the link MPower Piedmont on the district website. Topics covered in the RUP include using appropriate language, avoiding cyber bullying, rules of netiquette, following copyright laws and fair use guidelines, protecting personal information, and attempts to locate materials unacceptable in a school setting. Technology will be used for school-related purposes only during the instructional day. Failure to honor all terms of the district RUP may result in denial of access to Internet and other electronic media, and students are subject to disciplinary action outlined in the PCS Student Code of conduct.

Required Information (Schools only)

Location of the school:

Piedmont City School District
502 Hood Street, West
Piedmont, Alabama 36272

Name of the school applicant, along with a complete list of the individual schools that will be served, including the billed entity numbers:

Piedmont City School District (BEN: 128103) is the applicant, with the following schools that will be served:

Piedmont High School
750 AL Highway 200 Bypass
Piedmont, Alabama 36272
BEN: 40165

Piedmont Middle School
401 North Main Street
Piedmont, Alabama 36272
BEN: 40164

Piedmont Elementary School
504 Hood Street
Piedmont, AL 36272
BEN: 212295

Description of the school district or school, including the type of school, such as private, public, charter, or other special type of school:

Piedmont City School District is a K-12 public school system consisting of Piedmont High School, Piedmont Middle School, and Piedmont Elementary School.

Description of the Program's curriculum objectives, the grade levels included, and the number of students and teachers involved and/or being served as part of the program

Grades four through twelve are targeted for the pilot of the Wireless Applicant Program. Included in this program are 753 students and 50 teachers. The basic goal of the program is to provide an innovative learning environment that eMPowers our students to fulfill their dreams. The program is designed to facilitate the creation of a "technology immersed" campus and community. This is a program that will use technology as a bridge to a more engaged, relevant, meaningful, and personalized student learning experience that will extend learning beyond the traditional confines of the classroom. This program will provide online instructional resources in the four core academic subject areas, as well as extend student opportunities through the ACCESS distance-learning program. Interacting with these resources allows students to build new knowledge and visualize difficult-to-understand concepts. Technology is a crucial vehicle for helping students access information, comprehend text, communicate effectively in a variety of contexts, and think creatively and critically. This program will further extend to the greater

community by providing opportunities for parents of students to reach personal goals such as completion of GED or distance learning courses needed for a college education.

Ultimately, besides measuring student engagement, collaboration, and leadership skills, we will also measure the effect on the Alabama High School Graduation Exam (AHSGE) and Alabama Reading and Math Test (ARMT). Both of these assessments are used to determine AYP. We are also measuring the effect on discipline referrals, attendance, and parental involvement.

Summary of any data by the school on Program outcomes and achievement of Program objectives

The Piedmont City School District has provided wireless network connectivity as a component of the MPower Piedmont initiative. As a result of the initiative, we are observing students who were previously disengaged from the learning process become fully engaged in their coursework. Their creativity and innovative abilities are beginning to manifest as they become familiar with the technology available in the new digital learning environment. Students are conducting virtual study groups, engaged in community projects, and truly taking responsibility for their own learning.

During the first nine weeks of school, we have seen a slight decrease in discipline referrals and attendance rates were up 2% during the first 40 days of school. Based on benchmark tests, we expect improvement this spring in both the AHSGE and ARMT.

Most importantly, during the first semester of full implementation, we have observed a level of pride and responsibility in our students that we have not previously seen. We have seen special needs students participate in classes and make individual gains that are remarkable. We fully expect to see more results at the end of this year and upcoming years.