

II. ACTION LIST

equipment.

- Districts should use the minimum staffing and salary requirements for the positions specified in objective 5.3.
- Districts should have a network manager in place.
- District staff, teachers, and students should be aware of basic Web accessibility guidelines when designing Web pages.
- Districts should designate a Web accessibility resource person to coordinate training and information sharing among district personnel.

III. IMPLEMENTATION ACTION STEPS

DISTRICT

- Maintain technology inventories, including assistive technology
- Conduct needs assessments to identify required technology, including assistive technology
- Create a strategic technology plan that includes strategies for acquiring, managing, and implementing required technology, including assistive technology
- Implement a district disaster recovery plan and an obsolescence and upgrade plan
- Seek funding from local, state, and federal sources
- Encourage and publicize flexible access schedules
- Create a vision for a multimedia infrastructure
- Encourage schools to provide multimedia-capable workstations
- Research and implement an integrated network infrastructure
- Use bundled distribution packages to manage fully converged networks
- Install and maintain secure networks
- Employ staff for adequate network maintenance and support
- Implement a district management application that monitors bandwidth on the LAN and WAN
- Ensure that schools have adequate electrical distribution systems
- Publish procedures and schedules for review of equipment and software used in multimedia development including rubrics for judging impact on teaching and learning
- Provide schools with the necessary guidance and training in creating Web pages to ensure that electronic information is accessible to students and teachers with special needs

SCHOOLS

- Each school includes in their school strategic plan provisions that deal with acquiring and implementing required technology, including assistive technology.
- Seek funding from local, state, and federal sources
- Create flexible schedules for access to technology
- Provide multimedia-capable workstations

IV. FUNDING CONSIDERATIONS

DISTRICT

- Total cost of ownership (TCO) calculation to determine the allocation per student per year necessary to keep the pace with the need for access to network resources [Consortium for School Networking's TCO tool available on-line at <http://www.classroomtco.org>]
- Technology committee meetings to develop products such as the multimedia infrastructure plan and the disaster recovery plan
- Multimedia teacher workstations including data projectors
- Interactive white boards
- Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards
- Technology director, networking engineer, and networking technician
- Equipment inventory assessment program
- Isolated circuit plan
- Support planning
- Technology needs assessments and surveys
- Maintenance on networked instructional software applications
- Maintenance on school attendance scanners
- Maintenance contracts on networking operating system software, anti-virus software, filtering software, routers, and file servers

SCHOOLS

- Software support maintenance for automated library cataloging/circulation software
- Multimedia teacher workstations including data projectors
- Interactive white boards
- Network printers
- Printing supplies
- Tape backup media for file servers as part of the disaster recovery plan

V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)					
			2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
<p>5.1 The school district will ensure that all students, including those with special needs, and teachers have access to electronic information resources.</p>	<ul style="list-style-type: none"> Districtwide achievement test scores District and school report cards 	<ul style="list-style-type: none"> Districtwide achievement test scores District and school report cards 	<p>Technology-rich resources in all school buildings</p> <p>Smartboards</p>					
<p>5.2 The school district will ensure that their schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection and distribution, and distance learning.</p>	<ul style="list-style-type: none"> Professional development tracking and surveys District, school, and community surveys District technology plan and school/district strategic plans 	<ul style="list-style-type: none"> Professional development tracking and surveys Observations and interviews Documented access to technology resources 	<p>District email services for all faculty</p> <p>Filtering</p> <p>Anti-virus software</p>					
<p>5.3 The school district will have qualified technical staff, including one networking engineer per WAN or per ten LANs, one networking technician per LAN, and one end-user support technician per every five hundred users.</p>	<ul style="list-style-type: none"> Documented access to technology resources Technology needs assessments SDE Technology Counts on-line survey 	<ul style="list-style-type: none"> District, school, and community surveys District technology plan and school/district strategic plans 	<p>District Technology Department</p>					
<p>5.4 The school district will implement a disaster recovery plan for all points of failure in LANs and WANs, including redundant data storage, robust automated backup, and immediate hardware recovery.</p>	<ul style="list-style-type: none"> Budget data State personnel reports 	<ul style="list-style-type: none"> Documented access to technology resources Technology needs assessments 	<p>Maintenance Contracts on all core equipment</p> <p>Contracted Services.</p> <p>Redundant networking equipment</p>					

V. EVALUATION								
Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)					
			2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
<p>5.5 The school district will implement obsolescence and upgrade plan to replace and recycle equipment and software.</p>		<ul style="list-style-type: none"> SDE Technology Counts on-line survey Budget data State personnel reports 	<p>Business Ed replacement coordination</p> <p>Available replacement hardware</p>					
<p>5.6 The school district will increase their ability to design Web pages and Web-based instruction that are accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.</p>			<p>DreamWeaver</p> <p>Microsoft Frontpage</p> <p>Moodle</p>					

CUMULATIVE TARGETS AND BENCHMARKS

Note: These targets and benchmarks will be monitored and adjusted annually in the report to the people of South Carolina.

2007-2008

Learners and Their Environment

- Thirty-five percent of the district's students will have demonstrated their acquisition of grade-level-appropriate competencies as well as their use of a variety of technology tools to complete authentic tasks.
- Thirty percent of the district's students will possess effective communication skills and technology literacy as evidenced by teacher and student technology projects and by successfully completing the keyboarding course.
- Introduce new technologies for the classroom (LCD projectors, and Interactive White Boards).
- Introduce changes to the Internet Acceptable Use Policy so that new technologies can be implemented in the school district.

Professional Capacity

- Sixty percent of Aiken County's teachers will possess technology proficiency as evidenced by teacher echnology proficiency assurance forms. Fifty percent of the district's teachers will also demonstrate proficiency by keeping a journal of course experiences interacting with the school technology coach, and integrating technology into the curriculum to teach the state curriculum standards.
- Ten percent of the schools will have an assistive technology coach who trains teachers and visits classrooms to help teachers integrate assistive technology into the curriculum.

Instructional Capacity

- Thirty-five percent of the district's teachers will integrate technology and information literacy skills into their teaching of the South Carolina academic standards as evidenced by the technology proficiency assurance forms.
- Thirty percent of students will meet the information literacy and technology skills for their grade level as found on the SDE's performance matrix for information literacy and technology education.

Community Connections

- The district will show a 10 percent yearly increase in community collaborations that result in better teacher and student access to technology, better teacher and student use of technology, more teacher and student real-world experiences in technology-related fields, more research and evaluation of technology projects, and more community collaboration technology grants submitted and dollars funded.
- Thirty percent of the district website will contain links to community participants and partners who can provide services to supplement the curriculum.
- Twenty percent of the district's elementary, middle, and high schools will provide access to technology-related facilities after hours for parents, teachers, and community members.

Support Capacity

- Sixty percent of the district will include in the technology plan an assessment of current technology needs, current technology inventory, and current technology support strategies.

2008-09

Learners and Their Environment

- Forty percent of the district's students will have demonstrated their acquisition of grade-level-appropriate competencies as well as their use of a variety of technology tools to complete authentic tasks.

Appendix 1: No Child Left Behind Action Plan

- 1. Describe how your district will use federal funds under Enhancing Education Through Technology (Ed Tech) section to improve the student academic achievement, including the technology literacy, of all students attending schools served.*

Enhancing Education Through Technology Formula Sub-grant Program

The district utilizes the federal funds under Enhancing Education Through Technology (E2T2) to provide technology funding to schools. These formula grant funds provide professional development opportunities to teachers. The E2T2 formula grant provides additional pay for school-based technology coaches to assist and train teachers in their schools

This project will accomplish two goals: 1). To increase student achievement and 2). To increase teacher technology proficiency and the use of technology in instruction and assessment. These are continuing goals in the district based on data gathered and reported specifically since the implementation of PACT testing in grades three through eight and the state's proviso on teacher technology proficiency.

District data demonstrates the need to improve student achievement in English/Language Arts and Math and to maintain levels of achievement. (Complete testing data, available on the state website, shows discrepancies between groups as well as low levels of achievement in science and social studies.) With the requirements of No Child Left Behind, students must move beyond meeting Basic to Proficient and Advanced levels of achievement. The District maintains that access to and use of technology by students and teachers will bring these results. Providing sustained professional development to teachers for improving the teacher's ability to integrate technology into the curriculum will directly affect student academic achievement.

The District implemented MAP (Measures of Academic Progress) in 2007-2008 for all elementary and middle schools to provide teachers the data to assess students' mastery of reading, ELA and math standards using diagnostic tests. These tests are all done on-line with results, diagnosis and disaggregated data immediately available to teachers. The District also installed Testview (a web-based student data aggregation warehouse) for all schools to provide all testing (both state and local) and demographic data to teachers to better align and refine instruction.

The District has funded two District Technology Specialists who have a Masters in Educational Technology and work throughout the district providing professional development for teachers and administrators. They provide training for the identified technology coaches in each school using a train the trainer model. The E2T2 formula grant provides additional pay for these school technology coaches to assist and train teachers in their schools. Administrators have noted an increase in teachers' use of technology in instruction and assessment. Based on these findings, this grant proposes to continue funding the local tech coaches in each school to provide professional development for teachers and administrators.

The use of school technology coaches will continue to provide teachers with **site-based professional development** in technology skills and the uses of technology for instruction and assessment, leading to teacher proficiency and increased student learning and achievement.

Scientificallly-based research has demonstrated that technology used in instruction and learning increases student motivation and learning. By targeting instruction and assessment to the state academic standards, student achievement increases. The use of this formula grant

money will contribute to the district's efforts to increase teacher knowledge and use of technology including interactive white boards, resulting in increased student learning and achievement.

- 2. Describe your district's specific goals for using advanced technology to improve student academic achievement, aligned with challenging State academic content and student academic achievement standards. This explanation should include a description of the curriculum and teaching strategies that integrate technology effectively into curricula and instruction, based on an intensive review of relevant research.***

GOAL: Through the use of technology in the classroom, students will master higher the state academic standards, thus improving in test achievement. Teachers and students will demonstrate technology proficiency.

Teachers are using technology in the classroom for information, demonstration, research and assessment. In creating the learning environment for students, technology is an integral part. It will address the diverse needs of students.

To accomplish the goal, teachers must first become proficient in the integration of technology, hence the numerous staff development opportunities. Certified Technology Trainers and technology coaches will provide comprehensive, sustained professional development for teachers and administrators.

- 3. Describe the steps the district will take to ensure that all students and teachers in schools served by the local educational agency have increased access to educational technology.***

Wireless computer carts have been provided to all elementary schools and most middle schools over the past five years by using a combination of local, state, and federal monies. Priorities were established to address schools in greatest need in combination with the highest poverty indices. Also, Public Education Partners (PEP) works closely with the schools and district to engage the community's support for quality public education with innovative programs, many of which are technology oriented, to create measurable improvement in the schools. In addition, significant local, federal, and school and district dollars are allocated yearly for upgrading existing technology resources and infrastructure to accommodate expansion of educational technology. Aiken County Schools believes that integration of technology appropriately can significantly impact the efficiency and effectiveness of the instructional program. Ongoing project to equip each classroom with a interactive whiteboard and project is sustained by monies from all sources.

4. ***Describe how your district will use funds under this subpart (such as combining the funds with monies from other sources such as federal, state, and local sources), to help ensure that students in high-poverty and high-needs schools have access to technology and to ensure that teachers are prepared to integrate technology effectively into curricula and instruction.***

High poverty and high needs schools are served first with the installation of any new equipment. Using these funds, an identified technology coach in each school will be supplemented for working with teachers after school hours. Principal and teacher input will help the two District Technology trainers (paid from local funds) plan courses and offerings for the school year. Courses (through PDSI and Technology funding) are now available to teachers for graduate credit or recertification credit. A post assessment follows the completion of courses. Networking infrastructure is locally funded, as well as the purchase and installation of a 30 unit mobile lab for every school (this is on-going).

K-5 Lottery and Middle Level Lottery funds are supporting the purchase of interactive whiteboards and video projectors. Through Proviso 1A.70 and appropriations for the Education Improvement Act (EIA), the South Carolina General Assembly provided funding through a grant application award “iAm” to provide laptops to the same group of students for a four-year period in one of our high schools.

5. ***Describe how your district will provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel serving the local educational agency, to further the effective use of technology in the classroom or library media center, including, if applicable, a list of the entities that will be partners with the local educational agency involved in providing the ongoing, sustained professional development.***

Sustained professional development will be provided to teachers, principals, administrators and school library media personnel through a variety of means. District technology trainers offer a variety of courses and workshops at all levels and local school technology coaches offer training to their building teachers using the District syllabus for demonstrating technology proficiency and assisting teachers one-on-one. USC-Aiken offers technology courses to educators, as well as the implementation of a Master’s degree program in Instructional Technology.

As new software and on-line programs are implemented, teachers and administrators are provided with professional development to insure an effective implementation.

6. ***Describe how your district will integrate technology (including software and other electronically delivered learning materials) into curricula and instruction to support standards-based learning. Provide a timeline for such integration***

2002-2003	Increase awareness of technology standards and integration through implementation of 2002 ELA Standards
2002-2003	Certified personnel complete the Diagnostic Technology Needs Assessment
2002-2003	Computer stations, printers and cameras installed

2002-2004	Staff development training programs set up, based on needs and new technologies
2002-2004	Online courses with accompanying teacher portfolios and plans available to certified personnel
2002-2005	Teacher plans posted on the district website and the HUB website Building level technology coaches assist teachers and provide staff development specific to schools Administrators work with teachers on the technology goal as required by Goals-based Evaluation and observe in the classroom District data analyzed yearly to determine improvement in student achievement and the number of teachers technology proficient who are integrating technology into instruction
2006-2011	Continue installation of mobile labs Adopt rubric for software evaluation and adoption and train teachers in its use Continue to develop leveled training courses for teachers to attain proficiency Continue the employment of tech trainers and coaches Continue to offer and deliver a variety of professional training opportunities Continue to analyze and use data for instructional decisions Conduct technology needs assessment Evaluate effectiveness of professional development Purchase and Installation of interactive white boards and video projectors for all classrooms Use of MAP and Testview
2010-2012	Continue installation of mobile labs (all high schools) Adopt rubric for software evaluation and adoption and train teachers in its use Continue to develop leveled training courses for teachers to attain proficiency Continue the employment of tech trainers and coaches Continue to offer and deliver a variety of professional training opportunities Continue to analyze and use data for instructional decisions Conduct technology needs assessment Evaluate effectiveness of professional development Purchase and Installation of interactive white boards and video projectors for all classrooms Use of MAP and Testview Implement Parent Portal of PowerSchool Development of parent resources web page Continuation of added instructional materials on Instructional Web Page

- 7. Describe how your district will encourage the development and utilization of innovative strategies for the delivery of specialized or rigorous academic courses and curricula through the use of technology, including distance learning technologies, particularly for those areas that would not otherwise have access to such courses and curricula due to geographical isolation or insufficient resources.***

Through the services of virtual schooling and distance learning, we will continue to extend the offerings of rigorous academic courses to areas and schools who would not otherwise have access to these. The district encourages the utilization of innovative strategies by having two technology coaches on site to provide training and support to teachers. Also, the district provides two certified technology teachers who regularly make school visits to train teachers and administrators on effective use of new existing technology in their classroom curriculum.

- 8. Describe how your district will ensure the effective use of technology to promote parental involvement and increase communication with parents, including a description of how parents will be informed of the technology being applied in their child's education. Explain how these strategies will allow parents to reinforce at home the instruction their child receives at school.***

The School District's Annual Report is mailed to every resident in Aiken County. It features an extensive section on Technology and its use in the schools. The School Report Card is distributed to all parents. The District website is accessible to parents and citizens alike for the latest news of the uses of technology in the schools. Local schools inform parents of their children's use of technology in the school through their handbooks, newsletters and websites. Many teachers list their personal websites in their first communication with parents. Several schools have sponsored Technology Nights for parents to show them firsthand what their child does with technology in school. The technology trainers will work with individual schools to extend this opportunity throughout the community.

- 9. Describe how programs will be developed, where applicable, in collaboration with adult literacy service providers, to maximize the use of technology.***

The four Parenting/Adult Literacy Centers and Adult Ed classes are currently using technology to prepare clients for their GED. GED preparation is also available online. Other centers use technology in instruction and assessment, and will continue to do so.

- 10. Describe your district's process and accountability measures that will be used to evaluate the extent to which activities funded under the Ed Tech program are effective in integrating technology into curricula and instruction, increasing the***

ability of teachers to teach, and enabling students to meet challenging State academic content and student academic achievement standards.

The District will use the following measures to evaluate the effectiveness of the activities funded under the Ed Tech program:

- Classroom observations by administrators and trainers
- Evaluations from courses and workshops conducted by trainers and coaches
- Usage of Compass Learning, Plato and Destination Success for instruction and achievement
- Analyzing student test data from PACT, SAT, Terra Nova, HSAP, and End of Course Tests

11. Describe the supporting resources that will be acquired to ensure successful and effective uses of technology.

- Additional mobile wireless labs
- Laptops for 10th and 11th graders at Midland Valley High
- Servers for District Office to house web-based programs (Plato, Destination success)
- Interactive whiteboards and video projectors to integrate technology into teaching
- Synergistic Labs in Middle Schools
- Upgrades to Business Education Labs
- Career and Technology CADD Programs and specialized software programs for career-oriented fields of study
- Mobile labs for all high schools funded by E2T2 Grant (2009-2010)

Appendix 2: Teacher Technology Proficiency Proviso Professional Development Plan

STAFF DEVELOPMENT/TRAINING

VISION STATEMENT

The purpose of staff development for integrating technology into the K-12 environment is to provide continued training opportunities and technical assistance for all district employees such that all have the necessary knowledge and skills to apply technology in their daily instructional and administrative activities.

OVERVIEW

The staff development component of the technology plan addresses the implementation process, resource recommendations, development plan, status, and budget for the successful implementation of integrating technology into the curriculum. Effective integration and use of existing technology and future innovative technologies into the curriculum requires training opportunities and technical assistance be provided to adequately train staff. If we do not have adequate training staff to utilize technologies in their daily activities, then existing and added technology is worthless. In order to meet the staff development needs, this plan, 1) Specifies the current staff development resources, 2) Identifies standards that staff should achieve, 3) Discusses the training plan to assist staff in meeting these standards.

This plan includes technology integration with adequate opportunities for teacher to attain technology proficiency. Formal classroom training includes all courses, mini-courses, and workshops that encompass the six ISTE standards.

The goal of increasing technology usage, as one of many supporting mechanisms in the curriculum in Aiken County Schools, is to make our staff more efficient in utilizing and applying technology in their everyday activities. The desired outcome is that once minimum technology standards are mastered, it will provide the motivational vehicle for new innovative applications of technology in instruction and assessment.

The standards section of this plan emphasizes the minimum technologies that staff are expected to understand; however, one must realize that technology is always changing. For this reason, minimum standards for technology proficiency will likely require yearly updating given the volatile, changing nature of technology.

Finally, this plan addresses necessary schedules for teacher technology training. This segment of the plan is the compass for assessing the progress our staff is making towards technology proficiency.

Staff Development (Objectives 2, 8)

The Staff Development Subcommittee of the original 3-Year Technology Plan was tasked with defining the necessary plan to include but not limited to resources funding, facilities, and mechanism for adequate training of teachers.

(b) ITEM	(c) STATUS
<p>Implementation Plan: Provide basic mandatory curriculum.</p> <p>Resource Recommendation: Aiken County Schools will provide the necessary resources (i.e. training, funding, facilities) to meet defined training requirements.</p>	<p>Future Consideration (Implement Approved Technology-certified Plan to SCDOE) Continuing</p>
<p>Implementation Plan: Provide sufficient hardware for onsite teacher training</p> <p>Resource Recommendations: Provide additional computer labs to schools.</p>	<p>Implemented Continuing</p>
<p>Implementation Plan: Provide personnel in schools to assist staff with integration of technology.</p> <p>Resource Recommendations: Provide Technology Teachers/Facilitators</p>	<p>Implemented Future Consideration</p>
<p><u>Standards:</u></p> <ul style="list-style-type: none"> • Staff should be trained within 5 years for use of subject-area/curriculum specific technologies. • Staff will be able to utilize minimum technologies as it applies to subject area/curriculum specific functions. • Staff will be able to utilize other technologies in classroom instruction 	<p>Continuing Continuing Continuing</p>
<p><u>Formal Training:</u></p> <ul style="list-style-type: none"> • District will provide training opportunities, equipment, and facilities to allow staff to meet defined technology standards. • On-line Staff-Development classes will be offered for all school administrators and teachers in curriculum areas. • Graduate classes offering the integration of more advanced technologies are offered 	<p>Continuing On-going Continuing</p>
<p><u>Incentive Programs:</u></p> <ul style="list-style-type: none"> • Stipend for identified technology coaches. • District pay technology training. • Stipend for extra time spent on training. • Provide training on district-selected software. • Provide training on on-line resources 	<p>Continuing Continuing Continuing Continuing Continuing</p>

Aiken County Public Schools
2007-2011
Teacher Professional Development Plan

II. Standards

Our district has adopted the ISTE Teacher Technology Standards.

Superintendent's Signature: _____

III. Professional Development Offerings

The following technology integration professional development opportunities are available to our teachers and administrators. All courses, mini-courses, and workshops encompass the six ISTE standards.

A. Courses

1. Technology Integration Proficiency in the Classroom provides the classroom teacher with the skills and resources to integrate technology into the instructional program. This 45 contact hour course is a standards-based course providing teachers with (1) basic knowledge, skills and understanding of concepts related to technology and (2) application of skills to design instructional units and assessment instruments using technology integration. Participants must demonstrate proficiencies to successfully complete the course.
2. Mini-courses will provide the classroom teacher with the skills and resources to integrate technology into the instructional program. These mini-courses will offer the classroom teacher 8+ staff development points. These courses will be offered for the following software programs: Word Basic, Word Intermediate, Excel, Internet, PowerPoint, Inspiration, Moodle and Integrate Pro 7.0. The District Technology Trainers and/or School Technology Coaches will provide instruction.
3. Advanced coursework (graduate course) in the use of the interactive white boards and other technologies in the classroom.

B. Workshops

1. Content and skill specific provide teachers and administrators with instruction and hands-on practice in programs necessary for integration of curriculum and technology. Instruction is provided by the District Technology Trainers and School Technology Coaches. These workshops are based on teacher need and conducted at the local school or district lab or district office.
2. Local school trainers assist teachers one-on-one to assemble the individual teacher's portfolio necessary to demonstrate proficiency if the teacher chooses not to participate in a course.
3. Tech Trainers provide workshops in the use of software and on-line programs to integrate technology.

IV. Assessment

Our district conducts ongoing assessment to measure technology integration into the classroom curriculum. Teachers may demonstrate proficiency by any one of the following assessment methods.

- A. Completion of technology courses to include graduate courses to be verified by review of staff development records.

- B. Successful completion of standards-based Technology Integration Proficiency Course demonstrating proficiencies offered by district approved technology instructors totaling 60 staff development points.
- C. Successful completion of standards-based mini-courses/workshops offered by District Technology Trainers and/or Schools Technology Coaches.
- D. Successful demonstration of Technology Proficiency attained through on-site project completions through the district.
- E. Select teachers use the State’s e-portfolio system.

Our district provides remediation for teachers and administrators who have difficulty attaining the minimum technology standards through specific workshops and one-on-one assistance by the District Trainers and Technology Coaches. There are two District Trainers that coordinate and direct training for the District. In addition, there is at least one Technology Coach providing assistance/training at each school in the District. District Trainers are certified teachers with Master’s Degree in Instructional Technology. Technology Coaches are teachers/staff members identified by the school principal who assist and coach teachers on an individual basis. Technology Coaches may also teach mini-courses and workshops at their schools. They serve as a liaison between the school and the District Trainers.

V. Timeline

Our district timeline contains the activities, the person(s) responsible, and the timeframe for a three year planning horizon with an annual update cycle.

Activity	Person(s) Responsible	When
Conduct Technology Needs Assessment of all certified personnel	Technology Trainers Input from Principals and Teachers	Ongoing
Create professional development offerings and delivery schedule based on needs of teaches and the District	Michele Conner, Director Elementary Education Dal Stanley, Director of Educational Technology	Continuing
Deliver continuous professional development in a variety of settings	District Technology Trainers School Technology Coaches	Ongoing
Posttest and assess staff to determine proficiency in ISTE standards	Course Instructors District Technology Trainers School Technology Coaches State Technology Test required by E2T2	Ongoing/Yearly
Offer on-line courses to achieve proficiency	Use of Teacher Universe Coursework	2002-2005 School years- Completed

As ISTE standards have been met, record on PCS that the teacher is proficient in technology prior to the conclusion of his/her validation period	Michele Conner, Director of Elementary Education Grady Belger	Yearly
Develop courses based on needs assessment and requests	District Technology Trainers	Ongoing
Conduct annual review and updating of the technology plan	Dal Stanley, Executive Director of Educational Technology Michele Conner, Director of Elementary Education	Summer of each year

VI. District Contact

This person is the primary contact for the implementation and management of this plan:

Name: Michele B. Conner
 Title: Director of Elementary Education
 District: Aiken
 Mailing Address: 1000 Brookhaven Drive
 City, State, Zip: Aiken, SC 29803
 Fax Number: 803-641-2491
 E-mail Address: mconner@aiken.k12.sc.us

Submit to:
 State Department of Education
 Attn: Dave Altus
 1429 Senate Street
 Room 513D
 Columbia, SC 29201

Technology Integration Proficiency Course (Designed to meet state technology requirements for teacher proficiency)

This course focuses on Basic computer operations, Office 97/Office 2003, the Internet, and instruction on how to incorporate technology into teaching. The ultimate goal is for both teachers and students to become proficient in using technology. It is designed to meet the ISTE National Educational Technology Standards. Students in the class may select projects that will be useful within their specific teaching area.

Introduction

- Basic computer operations – start up/shut down/ using the mouse
- Windows functions – icons/control panel/settings/ display panel
- Maintenance – checking connections/cleaning of computer/printer care/ changing cartridges
- Ethics – Software copyright laws/computer manners
- Scanning for viruses

Word

- Save and save as differences – the hard drive and the floppy drive
- Basic word documents, brochures, and professional newsletters
- Fonts – size/color/style/italic/bold/underline
- How to open a file/delete a file/and find a file
- Highlighting – copy/cut/paste/undo
- WordArt – shapes/color fills/rotation/line fills
- Labels and envelopes in Word
- Customizing the toolbar for the user
- Drawing auto-shapes/circles & squares/lines & arrows/shadows & 3-d effects
- Columns, bullets, numbering, headers and footers
- Creating tables, lists and border art in a document
- Inserting Excel spreadsheets into a document
- How to use print merge (optional)
- Other tools – spell check/word count/thesaurus/grammar check/highlight pens/ lines/arrows
- Templates – Memos/Fax/Letter/Newsletter
- Animation

Excel

- Creating order requisitions - including figuring discounts/multiple items/tax
- How to create formulas and how to use the formula functions on the toolbar
- Inserting additional cells/rows/columns
- Charts, graphs, and maps, including customizing bar graphs
- Alphabetizing and sorting
- Headers and footers
- Basic calculations

PowerPoint

- Creating a PowerPoint presentation for instructional purposes
- Sounds, backgrounds, templates
- Inserting clipart, word documents, charts and graphs
- Using Internet images and text
- Custom animation
- Slide transitions, backgrounds and color
- Printing presentations, note pages, and adding to school Web pages
- How to use “Pack and Go”

The Internet

- Search engines
- Bookmarking sites and creating bookmark folders
- Deleting cache and changing your home page
- How to import images from the Internet into word documents and PowerPoint.
- Importing or saving text from the Internet
- Copyright regulations
- Schoolnotes.com and/or other similar programs
- How to download ShockWave
- How to add animated clipart to “living” documents
- Discuss
- Online reference sources such as World Book, etc.

The Extras

- Digital Cameras
- Flatbed Scanners
- OPEC

Recertification Classes offered for Graduate Credit

- **Integrating Technology into the Curriculum**

While most teachers are aware of the influx of technology into schools and everyday life, many are unprepared to use technology in their classrooms. "Integrating Technology into Instruction" is designed to guide classroom instructors in a direction that will move instruction into a more interactive community environment, using the tools that are available to them. In this course, concentration is placed on furthering technology skills, with teachers focusing on how to integrate word processing, spreadsheets, multimedia applications and internet websites into their classrooms. This course relates to the College of Charleston's conceptual framework and theme of making the teaching and learning connection by helping teachers learn how to use technology to create more stimulating lesson plans and classroom exercises. By learning how to use available technologies to interest students in the material, teachers will be able to more effectively engage the students in the learning process.

- **A Step SMARTer**

Participants in this course develop a "Best Practices" outline for the delivery of quality Notebook lessons in their classrooms. In addition to creating model lessons participants will learn and practice many advanced features of the SmartBoard and Smart Notebook tools. Advanced features include:

- using the video recorder and microphone to create "How To" screenshot movies
- using the Senteo (student response system) to create question sets
- working with TeacherTube and SchoolTube
- working with Audacity and Lame to include more sound
- working with the template and group features
- making and exporting folders in "My Content"
- importing PowerPoint presentations
- exporting as pdf, image file, or PowerPoint/import previously made PowerPoint slide shows so that prior work is utilized
- embedding Flash video files
- developing media rich lessons that incorporate best practices for digital/interactive media delivery
- working with Windows Movie Maker and Smart Recorder to make movies and edit United Streaming video

- **The SMART Way to Integrate Technology**

This is very much a hands on course that includes: the basic operation and maintenance of the SmartBoard, as well as an engaging and in-depth look at the tools of the SMART Board software including special elements such as the Smart Notebook, virtual keyboard, video player and recorder. Teachers will work on group and individual projects that are clearly outlined in the syllabus.

- **Technology Proficiency**

Teachers will learn the necessary techniques to make the computer an instructional tool in the classroom. Teachers will learn the basics of MSWord to word process, MSEXcel to create spreadsheets, and PowerPoint to create presentations. Teachers will produce handout materials, quizzes and tests, a computerized grade book, student progress reports, an electronic lesson presentation, and a classroom newsletter.

Three Hour Workshops Offered

- **Digital Story Telling through PhotoStory3**

Educators at all levels can use Digital Storytelling in many ways, from introducing new material to helping students learn to conduct research, synthesize large amounts of content and gain expertise in the use of digital communication and authoring tools. It also can help students organize these ideas as they learn to create stories for an audience, and present their ideas and knowledge in an individual and meaningful way.

Learn how to use PhotoStory3 to make stories that come alive with visuals and audio. Participants will see teacher-made samples and have the opportunity to create one of their own. A step-by-step format will be followed. Handouts will be provided. By the end of the workshop, participants should feel comfortable using PhotoStory3 with their students to create projects.

- **Teacher Toolbox**

This 3-hour, hands-on workshop presents the ins and outs of Teacher Toolbox. Learn how to effectively and efficiently:

Access the Assessment Relief Area and Standard-Based Content
Create Questions, Exams, Tests, and Quizzes
Share Files with Teachers throughout the District
Search What Others Have Shared

- **Smart Moves**

Geared toward Middle and High School teachers. Come with an idea, leave with a Notebook lesson. Explore interactive sites that work ideally with the Smart Interactive white board. BRING your favorite Power Point presentations, convert them to Notebook; add a few bells and whistles to create an effective interactive lesson to take back to your classroom.

- **Get SMART**

Learn the basic tools in Smart Notebook and create a Smart Notebook lesson that can be used in your classroom. Explore interactive sites that work ideally with the Smart Interactive white board.

- **SMART Response for the Classroom**

Learn how to use the SMART Response system in your classroom. Topics include:

- Paperless testing
- Exporting grades to excel
- Anonymous mode of operation
- Creating classes
- Importing questions from MSWord
- Question Wizard

- **Interactive Websites for the Classroom**

Use Thinkfinity to explore the many interactive activities aligned to the South Carolina curriculum. Activities can be searched using specific curriculum and grade level. Explore the many free resources available to the classroom teacher through the web.

Technology Proficiency Test

In lieu of the technology portfolio, teachers that claim technology proficiency and do not want to take technology classes will be required to come into a designated lab and complete a test. The participants will sign up to take the test in the spring of each year and must pass with a 90% mastery of each of the five course components listed. Testing will be done in-house to ensure that each designated individual completes the work. If a teacher achieves 90% in all sections of the test, the teacher will be deemed technology proficient by the district. If a teacher does not meet the 90% requirement, they will be required to sign up for and pass a technology course focusing on that particular deficiency.

Teacher Technology Proficiency

Successful integration of technology into the curriculum requires teacher proficiency with technology use. Development of user-friendly and easy-accessible means for teachers to develop skills and confidence for integrating technology into the curriculum is essential for the successful implementation of existing and future technologies.

Teachers who achieve a 200 average score on the Diagnostic Technology Assessment completed in the Fall, 2002 are considered proficient. New teachers to the District may complete the on-line assessment as they are employed.

Teachers Certified as Technology Competent in the Use of Technology in the Classroom by Year

Teachers Attaining Proficiency	Year
1292	2002-2003
287	2003-2004
171	2004-2005
189	2005-2006
228	2006-2007
334	2007-2008
208	2008-2009

Appendix 3: Acceptable Use Policy

Policy

Internet and Other Electronic Media and On-Line Connections

Technology is a vital part of education and the curriculum of the School District. In an effort to promote learning and expand educational resources for students, the District will make, or has made, arrangements to provide worldwide electronic on-line connection access to students and staff. While the Internet will be a primary on-line source, this Policy, and any implementing Administrative Rule, is intended to cover the use of the School District's computer-related electronic on-line connections, generally, as well as the District's computer hardware and software. Reference to "Internet" as used herein shall be construed as a term of convenience to cover the intended scope of this Policy. The District's goal in providing this service is to promote educational excellence by communication, innovation, and facilitation in sharing of teaching and learning resources. Access to such "electronic highways" connecting millions of computer users all over the world, will allow school District students and staff the opportunity to communicate with others on a global level and access educational materials worldwide. It will also enhance professional development for staff.

Access to the Internet is a privilege, not a right. With this privilege, there also is a responsibility to use the Internet solely for educational purposes and not to access inappropriate materials not suitable for students. To that end, the School District administration is directed to develop appropriate guidelines governing the use of District computers to access the Internet.

As part of the implementation of the administration's guidelines, students and staff must be instructed on the appropriate use of the Internet. In addition, parents must sign a permission form to allow students to access the Internet. Students also must sign a [form](#) acknowledging that they have read and understand the Acceptable Use Policy and [Administrative Rule](#), that they will comply with this Policy and Rule, and that they understand the consequences of violating this Policy or Rule. District staff must sign a similar [acknowledgment form](#) before they will be allowed to access the Internet. Inappropriate use by any person will not be tolerated.

Adopted: 11/12/96

Rules

Internet and Other Electronic Media and On-Line Connections

- I. Purpose and Scope
This Administrative Rule is adopted to implement the School District's Internet Acceptable Use Policy. While the Rule primarily addresses utilization of the Internet and other electronic on-line connection services, it also applies, where appropriate, to the general use of District-owned computer hardware and software.
- II. Terms and Conditions of Use
 - A. Acceptable Use
The purpose of the School District's decision to provide Internet access is to allow an expanded opportunity for education, research, and professional development by providing access to unique resources and the opportunity for collaborative work. All use of the Internet must be in support of education and research and consistent with the educational and staff development objectives of the School District. Use of any organizations' network or computing resources must comply with the rules appropriate for that network. Transmission of any material in violation of any federal or state laws or regulations is prohibited. This includes, but is not limited to, copyrighted material, threatening or obscene material, or material protected by trade secret. Violations will result in appropriate disciplinary action against the staff member or student involved.
 - B. Procedures for Use
 1. Employees may access the Internet for educational or work-related purposes at any time which is not disruptive and does not interfere with the performance of other responsibilities by the employee or other staff members.
 2. Students will be allowed to access the Internet only under the supervision of designated staff. No students may access the Internet without permission.
- III. Rules Governing Use
The following guidelines for acceptable use shall be applicable.
 - A. Users are expected to employ appropriate net etiquette; profanity, vulgarity, or abusive, inappropriate language is prohibited. Illegal activities are forbidden.
 - B. Users are not to reveal their personal address or phone number or that of other individuals, students, or colleagues.

- C. Users are not to use another school's or individual's account without written permission from that individual.
- D. Vandalism will not be tolerated. Vandalism includes, but is not limited to, malicious damage to hardware, harm or destruction of software or the data of another user, and creating, uploading or downloading computer viruses.
- E. Users should consider all communications and information accessible via the network to be private property. All quotes, references, and sources should be cited.
- F. Users are not to access inappropriate or restricted information or other information not directly related to the educational or staff use purposes for which access is being provided. Restricted information includes obscene, libelous, indecent, vulgar, profane, or lewd materials, advertisements for products or services not permitted to minors by law, insulting, fighting, and harassing words, and other materials which may cause a substantial disruption of the academic environment.
- G. Users should remain on the system only as long as necessary to complete their work, so that other individuals will have equal opportunities to access the Internet. Users are not to disrupt, harass, or annoy other users.
- H. The system is not to be utilized for financial or commercial gain or for personal use *other than professional activities*

IV. Penalties for Improper Use

An employee who violates the terms of this Administrative Rule will be subject to disciplinary action consistent with the nature of the offense, including suspension or cancellation of Internet privileges. Students who violate the terms of this Administrative Rule or who otherwise misuse their access to the Internet also will be subject to disciplinary action in accordance with the District's Code of Student Conduct. Violations of the laws of the United States or the State of South Carolina also may subject the user to criminal prosecution. If a user incurs unauthorized costs, the user, as well as the user's parents (if the user is a student) will be responsible for all such costs.

Adopted: 11/12/96 Board 1st Rdg 09/24/96; Board 2nd Rdg 11/12/96

Agreement

Staff Member Certification Form

I have read and understand the School District's [Internet Acceptable Use Policy](#) and [Administrative Rule](#). I understand and will abide by the conditions and rules set forth therein. I further understand that violations of these conditions and rules are unethical and also may constitute a criminal offense. Should I commit any violation, my access privileges may be suspended or canceled, disciplinary action may be taken, and appropriate legal action also may be instituted. I also agree to be responsible for any unauthorized costs incurred by my use of the Internet.

Staff Member

Date

Student/Parent Certification Form

As the Parent/Guardian of this student, I have read and understand the [Internet Acceptable Use Policy](#) and [Administrative Rule](#). I understand that this access is designed solely for educational purposes. I further understand that if my child violates these conditions and rules, his/her access privilege may be suspended or canceled and disciplinary action may be taken.

Parent/Guardian

Date

I have read and understand the School District's [Internet Acceptable Use Policy](#) and [Administrative Rule](#). I understand and will abide by the conditions and rules set forth therein. I further understand that violations of these conditions and rules are unethical and also may constitute a criminal offense. Should I commit any violation, my access privileges may be suspended or canceled, disciplinary action may be taken, and appropriate legal action also may be instituted.

Student

Date

To Board 9/24/96; 2nd Reading 11/12/96; Adopted 11/12/96

Appendix 4: How E-Rate Areas Have Been Addressed

1. The district technology plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education and library services.

See Section I of each Technology Dimension of the Technology Plan

2. The district technology plan must have a professional development strategy to ensure that staff members know how to use the new technologies to improve education.

See Appendix 2 of the Technology Plan

3. The district technology plan must include an assessment of the telecommunications services, hardware, software, and other services that will be needed to improve instruction.

See the District Needs Assessment and Appendix 6 of the Technology Plan

4. The district technology plan must provide for a sufficient budget to acquire and maintain the hardware, software, professional development, and other services that will be needed to implement the strategy for improved education. Specifically, how does the district intend to fund those items of equipment, software, services, and training *not* covered by the E-rate discount? It is recommended that a plan for hardware refreshment be built into the all district technology plans.

See Appendix 7 of the Technology Plan

5. The district technology plan must include an evaluation process that enables the district and its schools to monitor progress toward the specified goals and make midcourse corrections in response to new developments and opportunities as they arise.

See Section V of each Technology Dimension of the Technology Plan

**Appendix 5: Annual Goals
2007-2008 Annual Goals / Timeline**

Goals	Timeline
Implement TestView for district and MAP for all elementary and middle schools	Complete
Utilize Title I dollars to provide additional Wireless Carts in schools	Complete
Utilize Title I dollars to provide interactive white boards in schools	Complete
Investigate and upgrade district internet circuit from 50MB to 100MB	Complete
Provide cabling infrastructure for additional mobile units needed for classroom space	Complete
Implement Physical Education Software Program for district	Complete
Implement “iAM” Laptop Grant for all 9 th graders at Midland Valley High School	Complete
Investigate and implement adding additional Synergistics Lab in 1 middle school	Complete
Provide additional infrastructure for expansion of network to accommodate additional classroom workstations	Complete
Investigate server and switch replacements for schools and begin implementation of replacement program for these end of life hardware platforms	Complete
Install wireless overlay at Midland Valley High School (part of iAM Laptop Project)	Complete

2008-2009 Annual Goals / Timeline

Goals	Timeline
Implement MAP for all High Schools	Complete
Utilize Title I dollars to provide additional Wireless Carts in schools	Complete
Utilize Title I dollars to provide interactive white boards in schools	Complete
Provide cabling infrastructure for additional mobile units needed for classroom space as needed	On-going
Utilize available funds for PowerSchool Infrastructure and Implementation	Complete
Continue “iAM” Laptop Grant for new 9 th graders at Midland Valley High School	Complete
Provide additional infrastructure for interactive white boards and video projectors	On-going
Provide additional infrastructure for expansion of network to accommodate additional classroom workstations	On-going
Investigate server and switch replacements for schools and begin implementation of replacement program for these end of life hardware platforms	Complete
Implement GIS Student Locator System	Complete
Utilize available funds for Synergistic Computer Labs	Complete
Provide training for all users of PowerSchool	On-going
Investigate replacement of out of warranty switches in all schools	On-going
Investigate server migrations to VM Ware platform	Ongoing
Investigate and replace anti-virus solution for school district if deemed best solution	Complete
Serve as Proof of Concept district for PowerSchool	Complete
Begin conversion of SASI to PowerSchool (June 2009) and complete July 2009	Complete

2009-2010 Annual Goals / Timeline

Goals	Timeline
Creation of Instruction/Technology committee with on-going monthly meetings	Planning/Ongoing
Provide one thirty station mobile wireless laptop cart for each high school (E2T2 Grant)	2009-2010
Upgrade nine school file servers	2009-2010
Provided two synergistic labs at middle schools (AL Corbett and RSM Elem)	Complete
Investigate server migrations to VM Ware platform	Ongoing
Utilize available funds to cable mobiles as needed	Ongoing
Completed implementation of PowerSchool; specifically, PowerTeacher & Parent Portal	Complete
Upgrade four business education labs (Career and Technology Department)	Complete
Upgrade end of life networking switch infrastructure in one fourth of schools in district	2009-2010
Upgrade one fourth of older classroom computers if funds are available	Continuing
Utilize available funds to provide whiteboards and video projectors in classrooms	Continuing
Investigate feasibility of providing student email accounts	Planning
Upgrade out of warranty Server Infrastructure for Instructional Applications	2009-2010
Migrate to new file server infrastructure operating system (Planning, Phase-in Strategy)	2009-2012
Create two 21 st Century Classrooms	2010-2012
Investigate revision to Acceptable Use Policy for growth of new technologies	2009-2011
Implement alphabetical index for parents to all resources on the School District Web Page	2009-010

TimeLine

Description	2009-2010	2010-2011	2011-2012	2012-2013
<u>Upgrade ¼ of school end of life switching infrastructure</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>Install 30 station mobile carts-High Schools</u>	<u>X</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
<u>Upgrade district application servers in to virtual (VMWare Platform for Testview, Streaming Video, InfoCentre, etc</u>	<u>X</u>	<u>X</u>	<u>NA</u>	<u>NA</u>
<u>Begin Migration of school servers to new OS platform</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>Investigate Renewal of filtering software for District and Schools</u>	<u>X</u>	<u>X</u>		
<u>Upgrade 4 Business Education Labs</u>	<u>X</u>			
<u>Provide 2 new synergistic labs in 2 middle schools</u>	<u>X</u>			
<u>Plan two 21st Century Classrooms</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>Install Wireless Connectivity in Media Centers</u>		<u>X</u>		
<u>As additional funds become available, continue install interactive white board technology solution in all school classrooms</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>If additional funds become available, establish re-furnished computer replacement program (1/4th to 1/5th of computers a year)</u>		<u>X</u>	<u>X</u>	<u>X</u>

Appendix 6: Report on Last Year's Progress towards Goals, Objectives, Strategies, Benchmarks, Actions, and Outcomes

Goals and Objectives	Status
Goal # 1 – Infrastructure <ul style="list-style-type: none"> ▪ To ensure all schools have a fully functioning Local Area Network ▪ To establish a Wide Area Network between all schools, area, and district ▪ To ensure appropriate and sufficient security is in place ▪ To provide all schools with access to the Internet 	<ul style="list-style-type: none"> ▪ Met ▪ Met ▪ Met ▪ Met
Goal # 2 – Funding <ul style="list-style-type: none"> ▪ To secure a multi-area commitment ▪ To consider all funding options in meeting technology objectives 	<ul style="list-style-type: none"> ▪ Met ▪ Met
Goal # 3 – Hardware <ul style="list-style-type: none"> ▪ To ensure security of hardware ▪ To establish basic and realistic standards of the district technology plan 	<ul style="list-style-type: none"> ▪ Met ▪ Met
Goal # 4 – Equity <ul style="list-style-type: none"> ▪ To achieve equity of access to technology for all students ▪ To achieve fair and equitable distribution of technology among schools within the district while at the same time not penalizing schools for their own entrepreneurial initiatives 	<ul style="list-style-type: none"> ▪ Ongoing ▪ Ongoing
Goal # 5 – Assessment <ul style="list-style-type: none"> ▪ To continually evaluate and assess the district technology plan on a regular basis 	<ul style="list-style-type: none"> ▪ Ongoing
Goal # 6 – Access <ul style="list-style-type: none"> ▪ To ensure students, teachers, and all school/district staff will have access to all resources at the time and place of need 	<ul style="list-style-type: none"> ▪ Ongoing
Goal # 7 – Maintenance <ul style="list-style-type: none"> ▪ To maintain and upgrade equipment and infrastructure in order to ensure maximum use by all 	<ul style="list-style-type: none"> ▪ Ongoing
Goal # 8 – Staff Development <ul style="list-style-type: none"> ▪ To place a strong emphasis on Professional Development regarding the use of technology (computers, software, etc.) in the curriculum and instruction 	<ul style="list-style-type: none"> ▪ Ongoing
Goal # 9 – Curriculum and Instruction <ul style="list-style-type: none"> ▪ To use technological resources appropriately in all instructional activities ▪ To provide a means of using technology for student achievement progress and reporting (PowerSchool, MAP, Plato, Destination Success, TestView) ▪ To integrate the learning outcomes of using technology into the school curriculum 	<ul style="list-style-type: none"> ▪ Ongoing ▪ Ongoing ▪ Ongoing
Goal # 10 – Support <ul style="list-style-type: none"> ▪ To fund additional personnel to provide the necessary support of the technologies ▪ To provide funding for contracted services for large-scale project implementations 	<ul style="list-style-type: none"> ▪ Ongoing ▪ Ongoing

Appendix 7: Current Status of Infrastructure and Computer Access in Aiken County Public Schools

LANs – There is a total of thirty-nine Local Area Networks (LANs) providing network connectivity for all Aiken County Public Schools facilities. 100% of Aiken County Public Schools classrooms, offices, and media centers are wired with CAT5E, CAT6, or fiber with the ability to connect approximately eight thousand computers and/or network devices. Media centers are currently wired for 8 to 30 network devices in addition to wiring at circulation desks. The standard for new construction or renovation wiring since the 2000 school year consists of a minimum of five computer drops to each classroom and fiber backbones between wiring closets with sufficient switch port space to accommodate necessary network devices in the school. Aiken County Public Schools networking infrastructure is a total switched network. Cisco switches are being configured with trunk ports and switches are being segmented. A Cisco EMI switch is installed in each MDF to connect to the MetroEthernet Network supplied by the State Department of Education. All IDF's are connected to the MDF via 1 GB fiber and 1000Base-SX shorthaul or longhaul GBIC's.

Switches – All IDF's and MDF's are comprised of Cisco 2900 series and/or 3500 series switches. Additional Cisco switches are added during any school year to accommodate additional computer hardware that needs networking.

WAN – 100% of Aiken County Public School facilities including all schools, the Central Office, the Operations Center, maintenance offices, area offices, Freedman Parenting Center, Pinecrest, and the ETV center form the Aiken County Public Schools Wide Area Network (WAN). In the fall of 2004 the District entered Phase 1 for upgrading WAN access to all schools. Each elementary and middle school in Areas 1, 2, 3, and 5, Pinecrest, Freedman Parenting Center, and the Operations Center were upgraded from T1 data communication lines to a current 10 MB Ethernet Circuit. Each high school in areas 1, 2, 3, and 5 were upgraded from a T1 data communications line to a 100 MB Ethernet Circuit. Phase 2 is to upgrade Area 4 schools and Jackson Middle School to high speed wireless connections ranging from 10 MB to 45 MB circuits back to the district office in the 2005-2006 school year. Phase 3 is to upgrade existing 10 MB circuits to 100 MB circuits in Area 1, 2, 3, and 5 schools during February, 2006.

As of November, 2007, the districts WAN has a 50MB circuit to the Internet and the private-side WAN includes 100 mb metro Ethernet circuits to all schools except Area 4 schools and Jackson Middle. Area 4 schools and Jackson Middle are connected on the private-side to the districts WAN by wireless tower connections ranging from 10 MB to 45 MB circuits.

Fileservers – Currently, all school locations consist of at least two file servers. All school file servers as well as the Technology Office servers (BOE), and Groupwise servers were upgraded to Novell 6.5 during the 2004-2005 school year. All servers connect to Cisco switches via 100 MB copper ports. We also support ten Windows 2000/2003 servers.

Web server - Aiken County Public Schools houses its own Web Server located at <http://www.aiken.k12.sc.us> and all school web pages are stored on the districts web server.

E-mail server – All staff members have a Groupwise 6.5 email account and are able to check email from any computer on the WAN using the Groupwise client or at home using web access.

Spam Filter – Aiken County Public Schools currently uses Lightspeeds Total Traffic Control to filter out the majority of spam email.

Pix Firewall – A Cisco 515R PIX firewall was installed in 1996 and since been upgraded to a 525 PIX to help secure the Aiken County Public School District WAN.

Video Conferencing – The Distance Education Program provides the hardware, software, and technical support necessary to offer courses among the seven high schools, two middle schools, the Aiken County Career Center, and Aiken Technical College. The H.320 video services currently provided by BellSouth on state contract expires on May 16, 2006.

The district currently utilizes provides H.323 (IP) video conferencing services over the Districts WAN for video conferencing.

Internet Filtering – Lightspeeds Total Traffic Control Solution is used to filter all Internet activity. Aiken County Public Schools are CIPA compliant.

Computers – Approximately 8,288 computers and 1528 laptops are connected to the school's LAN and district's WAN. The standard configuration is now the Windows XP platform.

Peripherals – All staff and students have access to networked laser printers, digital cameras, scanners, telephones, VCR's and DVD players, and learning tools. Interactive White Boards are being implemented for classroom instruction. Approximately 538 interactive whiteboards and video projectors are currently in Aiken County Public Schools.

Management Software – Aiken County Public Schools uses PowerSchool for student records provided by the State Department of Education. Destiny and InfoCentre are used for media centers. Aiken County Public Schools will be upgrading from Excent to Enrich in the Fall of 20010 for special education.

Appendix 8: Budgets for Supporting Infrastructure/Hardware and Software 2009-2010

Item	Amount
Maintenance (Software and Hardware)	71,640
Technology and Software	200,000
Hardware for E2T2 Grant Award	175,000
Infrastructure Upgrades/Replacements for end of life networking switches and end or warranty option for school file servers	200,000

The above information only reflects the Technology Budget and those funds spent for supporting and maintaining schools/district infrastructure, hardware, and software. There are other funds spent for Professional Development and Instructional software and hardware for CCC, Plato, Riverdeep, Maps and Testview, Vocational Equipment, Title I monies, Individual School Improvement Plans, fund raisers, and PTO's/PTA's.

Appendix 8: (Continued) Expenditures for Hardware and Software.

Dollar amounts spent, encumbered, or projected during the current fiscal year, and projected in 2010-2011 and 2011-2012 fiscal years.

ITEM	Expiration Date	2009-2010	2010-2011	2011-2012
I. Software				
a. Light Speed (Total Traffic Control) Web and Spam Filter	Annual	Pre-Paid Year 3	70,000- 100,000	70,000- 100,000
b. Sophos AntiVirus Software License	Annual	32,392	32,392	32,392
c. Metro Fiber Ethernet Telecommunications (Difference in State Alloc.)	Annual	21,168	21,168	21,168
d. Novell SLA (School License Agreement)	Annual	70,455	70,455	70,455
e. Follett and Spectrum Library Catalog Software License/Maintenance	Annual	29,087	29,087	29,087
f. Imaging System Software License/Maintenance	Annual	9,324	9,324	9,324
g. Desktop Management /IT Work Order Software Software Maintenance	Annual	12,841	12,841	12,841
h. PowerSchool Infrastructure Support	Annual	8,700	8,700	8,700
i. AlertNow Emergency Notification System	Annual	12,500	12,500	12,500
j. GIS Student Locator Software Maintenance Support	Annual	1,000	1,000	1,000
II. Hardware				
i. Network Electronics (Cisco Routers/Switches) Maintenance	Annual	21,325	21,325	21,325
j. School Servers Maintenance	Annual	14,321	14,321	14,321
j. Computer Spare Parts - No Warranty	N/A	15,000	15,000	15,000
k. VTEL Conferencing Center Maintenance and Support for (7 High Schools, 2 Middle Schools, and Career Center)	Annual	29,530	29,530	29,530
<u>l. Purchased Services - Cabling for New Mobiles, additions for renovated schools, and additional drops for media centers and Classrooms.</u>	N/A	75,000.00	75,000.00	75,000.00

The above information reflects the Technology Budget and those funds spent for hardware and software supporting and maintaining schools/district infrastructure, hardware, software, and technical support. There are other funds spent for Professional Development and Instructional software and hardware for CCC, Plato, Riverdeep, Testview, Maps, and CSI Financial Software.

Attachment 1a: Aiken County Schools Technology Summary - December 2009

WAN Legend:

W = Wireless

F = Fibre

School	# of Classrooms	# of Mobile Units	Classrooms w/Interactive Whiteboards	# of Drops	# of Drops/Classroom	Wireless Closets	WAN Overlay	Using VTEL	# of Workstations	# of Laptops	# of Wireless Laptop Carts	# of Media Center Computers	Other (Digital Cameras, Video Recorders, Graphing Calculators)
Aiken Elementary	54	4	54	181	1	6	F		174	86	5	22	191
Aiken High	76	18	10	483	1	16	F	Y	473	51	2	15	582
Aiken Middle	39	6	23	239	1	7	F		212	69	4	12	147
Chukker Creek Elem	51	0	48	231	2	6	F		151	35	2	13	20
East Aiken Elementary	39	2	19	225	5	4	F		149	72	4	12	125
JD Lever Elem	39	7	43	195	2	4	F		144	88	5	8	169
Kennedy Middle	48	9	19	241	1	5	F		218			10	142
Millbrook Elementary	37	3	36	223	2	7	F		150	39	2	8	69
North Aiken Elem	47	2	37	181	2	6	Y	F	135	88	5	8	88
Oakwood Windsor El	40		11	230	5	5	F		111	30	3	8	148
Schofield Middle	47		23	345	5	8	F		201	38	2	15	298
South Aiken High	65	4	18	378	1	12	F		342	10		33	184
Area 1 Totals	582	55	341	3,152	-	86			2,460	606	34	164	2,163
Belvedere Elem	38	2	40	142	1	6	F		157	34	2	12	84
Hammond Hill Elem	36	8	42	174	1	7	F		163	44	3	12	146
Mossy Creek Elem	42	4	41	275	5	5	F		160	38	2	8	140
North Augusta Elem	49		44	158	1	6	F		174	37	2	15	140
North Augusta High	73	9	21	366	1	15	F		338	23		15	662
North Augusta Middle	36	11	33	210	1	8	F		169	39	1	9	98
Paul Knox Middle	36	2	35	315	5	5	F		255	41	1	8	216
Area 2 Totals	310	36	256	1,640	-	52			1,416	256	11	79	1,486
Byrd Elem	41		44	285	5	5	F		148	42	4	11	65
Byrd LC				144	1	4	F		38	6			0
Career Center	16	4	5	185	1	6	Y	F	Y	167	74	2	71
Clearwater Elem	32	2	19	113	1	4	F		98	64	4	7	119

School	WAN Legend: W = Wireless F = Fibre													
	# of Classrooms	# of Mobile Units	Classrooms w/Interactive Whiteboards	# of Drops	# of Drops/Classroom	Wireless Closets	Wireless Overlay	WAN Connection	Using VTEL	# of Workstations	# of Laptops	# of Wireless Laptop Carts	# of Media Center Computers	Other (Digital Cameras, Video Recorders, Graphing Calculators)
Gloverville Elem	20	9	23	148	1	6		F		135	66	4	10	57
Jefferson Elem	40		30	260	5	7	Y	F		178	72	4	16	170
LBC Middle	33	2	28	250	5	6		F		215	34	1	27	105
Leavelle McCampbell	32		15	238	1	8		F		167	34	2	12	199
Midland Valley High	54	6	40	385	5	6	Y	F	Y	286	798	2	24	285
Warrenville Elem	34	4	29	200	5	6		F		109	77	3	9	194
Area 3 Totals	302	27	233	2,208	-	58				1,541	1,267	26	116	1,265
AL Corbett Middle	21	1	10	170	5	2		W	Y	142	88	4	16	270
Busbee Elementary	46		36	230	5	2	Y	W		196	60	4	12	175
Ridge Spring Elem	52	6	47	195	1	7	Y	W	Y	199	72	5	9	123
Ridge Spring High	23	4	3	182	1	5		W		149	2		6	122
Wagner Salley High	37		6	290	1	14		W	Y	194	40	2	17	190
Area 4 Totals	179	11	102	1,067	-	30				880	262	15	60	880
Freedman				4	1	1		F		10	1			0
Greendale El	26		24	175	5	3	Y	F		130	86	3	10	72
Jackson Middle	25		11	178	1	6		W		149	11	1	12	126
New Ellenton Middle	17		6	144	1	6		F		98	43	2	8	73
Pinecrest				105	1	6		F		79	6			0
Redcliffe Elem	58		40	198	1	6		F		138	65	3	10	121
Silver Bluff High	45	2	10	328	1	8		F		233	12		22	180
Area 5 Totals	171	2	91	1,132	-	36				837	224	9	62	572
Grand Totals:	1,544	##	1023	9,199	-	##				7,134	2,615	95	481	6,366

Attachment 1a: Technology Inventory and IT Skills Inventory-December 2009

School	Graphing Calculators	Digital Cameras/Recorders	Handheld Polling Devices	PDA's Instructional Devices	Document Viewers	TV's of sufficient size connected to computer for use in classroom	Tablet PC's	Document Scanners	LCD's	VHS Players	DVD Recorders not part of computer	Total Other
Aiken Elementary		23		1		54		55	56		2	191
Aiken High	406	23	1		2	21	6	12	17	60	34	582
Aiken Middle	50	14	2			4		4	26	22	25	147
Chukker Creek Elem		3				3		1	3		10	20
East Aiken Elementary		26	1			31		6	18	40	3	125
JD Lever Elem		5				39		39	45	39	2	169
Kennedy Middle		3				46		1	20	51	21	142
Millbrook Elementary		5				3		8	30	19	4	69
North Aiken Elem		5			2			8	36	20	17	88
Oakwood Windsor El		6				43		2	11	43	43	148
Schofield Middle	200	4	30			42		3	9		10	298
South Aiken High	108	14	35			5		1	10	6	5	184
Area 1 Totals	764	131	69	1	4	291	6	140	281	300	176	2,163
Belvedere Elem		4				9	30	8	2	30	1	84
Hammond Hill Elem		7	8		3	28	2	20	33	37	8	146
Mossy Creek Elem		8	10			40	13	10	40		19	140
North Augusta Elem		6	60				1	26	38	8	1	140
North Augusta High	454	4				31	1	4	31	96	41	662
North Augusta Middle	35	4	2			25			12		20	98

Attachment 1a: Technology Inventory and IT Skills Inventory-December 2009

School	Graphing Calculators	Digital Cameras/Recorders	Handheld Polling Devices	PDA's Instructional Devices	Document Viewers	TV's of sufficient size connected to computer for use in classroom	Tablet PC's	Document Scanners	LCD's	VHS Players	DVD Recorders	Total Other		
Paul Knox Middle	30	7		30		30	30	4	35	30	20	216		
Area 2 Totals	519	40	80	30	3	163	77	72	##	##	##	1,486		
Byrd Elem		13	1					5	46			65		
Byrd LC												0		
Career Center		5		1	1		3	29	12	20		71		
Clearwater Elem		2	68					12	2	24	11	119		
Gloverville Elem		13	1		1	2		15		10	15	57		
Jefferson Elem	40	12				37		1	4	40	36	170		
LBC Middle	43	5	3			9		4	31	8	2	105		
Leavelle McCampbell	50	6	60			3		3	13	33	31	199		
Midland Valley High	164	9							35	75	2	285		
Warrenville Elem		16	48			13	31	14	30	30	12	194		
Area 3 Totals	297	81	##	1	2	64	34	83	##	##	##	1,265		
AL Corbett Middle	106	18	48		1	31		3	19	38	6	270		
Busbee Elementary		5	13			38		5	38	38	38	175		
Ridge Spring Elem	30	5	30		9	1			46		2	123		
Ridge Spring High	50	1		1	1	24	1		4	20	20	122		
Wagner Salley High	80	11	25			5		10	10	32	17	190		
Area 4 Totals	266	40	##	1	11	99	1	18	##	##	83	880		

Attachment 1a: Technology Inventory and IT Skills Inventory-December 2009

School	Graphing Calculators	Digital Cameras/Recorders	Handheld Polling Devices	PDA's Instructional Devices	Document Viewers	TV's of sufficient size connected to computer for use in classroom	Tablet PC's	Document Scanners	LCD's	VHS Players	DVD Recorders not part of computer	Total Other
Freedman												0
Greendale EI		4	36		1		21	2	5	3		72
Jackson Middle	62	5			10	11	4	17	15	2		126
New Ellenton Middle	25	5	1	6	8		1	11	8	8		73
Pinecrest												0
Redcliffe Elem		21					10	5	50	35		121
Silver Bluff High	125	1				3	3		45	3		180
Area 5 Totals	212	36	37	6	0	19	14	39	35	##	51	572
Grand Totals:	2,058	##	##	39	20	636	##	##	##	##	##	6,366

Attachment 1a: Aiken County Schools Labs Summary - December 2009




	Adult Ed.	Alternative School	Art	Business Ed	CAI	Credit Recovery	Foreign	Industrial Tech	Keyboarding	Marketing Lab	Math	Plato	Read 180	Science	Synergistic	Technology	Writing/Gen. Purp. Computer La	Totals
Aiken Elementary				1														1
Aiken High			5	1	1	1									1	2		11
Aiken Middle				2			1	1										4
Chukker Creek Elem				1				1										2
East Aiken Elementary				1														1
JD Lever Elem				1														1
Kennedy Middle				1				1							1			3
Millbrook Elementary				1														1
North Aiken Elem				1									1					2
Oakwood Windsor El				1														1
Schofield Middle				1				1						1		2		5
South Aiken High			4		1				1	1								7
Area 1 Totals	0	0	0	9	11	2	1	2	4	1	1	0	0	1	1	2	4	
Belvedere Elem				1											1			2
Hammond Hill Elem				1												1		2
Mossy Creek Elem				1				1										2
North Augusta Elem				1														1
North Augusta High			4		1	1	1			1								8
North Augusta Middle				1				1						1				3
Paul Knox Middle		1		1				1							1			4
Area 2 Totals	0	1	0	4	6	1	1	1	3	0	1	0	0	0	1	2	1	
Byrd Elem				1											1			2
Byrd LC	1																	1
Career Center							1								2			3
Clearwater Elem				1														1
Gloverville Elem				1											1			2
Jefferson Elem				1														1

	Adult Ed.	Alternative School	Art	Business Ed	CAI	Credit Recovery	Foreign	Industrial Tech	Keyboarding	Marketing Lab	Math	Plato	Read 180	Science	Synergistic	Technology	Writing/Gen. Purp. Computer La	Totals
LBC Middle				1				1						1		1		4
Leavelle McCampbell				1				1				1		1		1		5
Midland Valley High			1	3		1			1									6
Warrenville Elem				1														1
Area 3 Totals	1	0	1	3	7	1	0	1	2	1	0	0	1	0	2	4	2	
AL Corbett Middle				1				1						1				3
Busbee Elementary				1														1
Ridge Spring Elem				1				1						1				3
Ridge Spring High				2		1											2	5
Wagner Salley High				2		1											1	4
Area 4 Totals	0	0	0	4	3	2	0	0	2	0	0	0	0	0	2	0	3	
Freedman																		0
Greendale El				1														1
Jackson Middle				2	1													3
New Ellenton Middle				1	1													2
Pinecrest	1							1			1							3
Redcliffe Elem				1														1
Silver Bluff High		1		2		1		1										5
Area 5 Totals	1	1	0	5	4	1	0	1	1	0	0	1	0	0	0	0	0	
Grand Totals:	2	2	1	25	31	7	2	5	12	2	2	1	1	1	6	8	10	118




















Last Updated:
02/03/2010




















Attachment 2A External Network Diagram Aiken County Public Schools

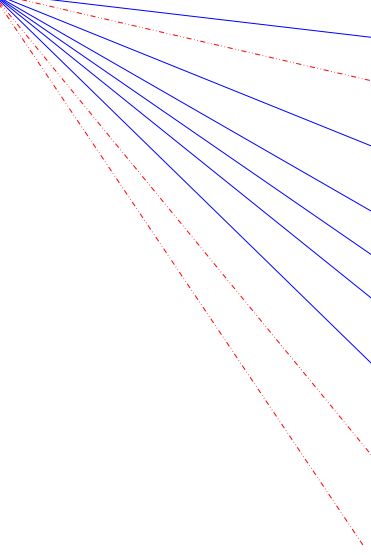
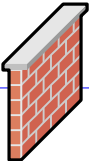
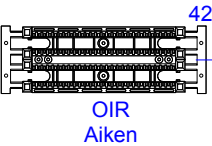
Legend

-  = 100 Mbs
-  = 10 Mbs
-  = 1 GB



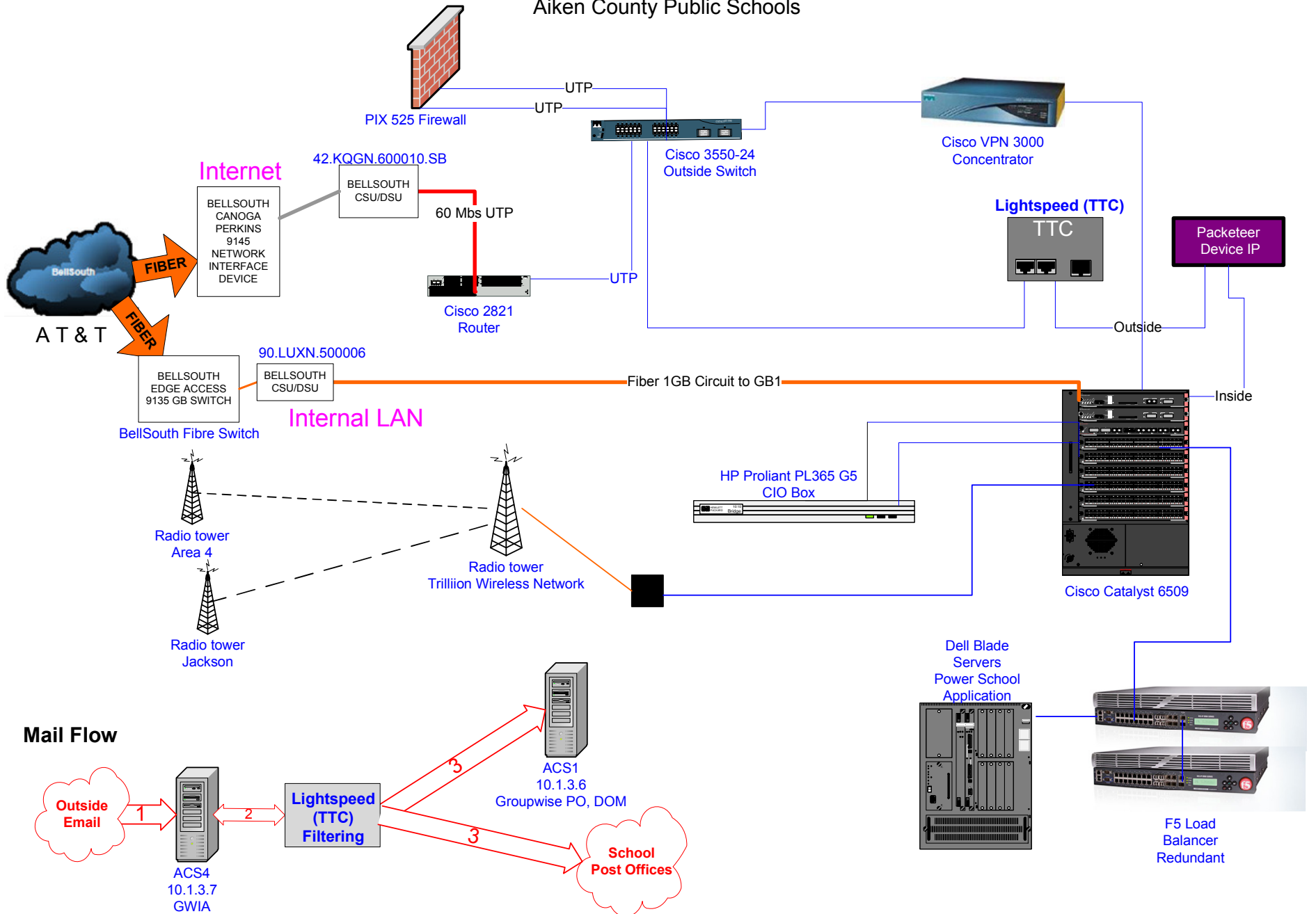
-  Aiken County CC 90.LOXN.501510
-  Aiken ES 90.LOXN.501504
-  Aiken HS 90.LVXN.500055
-  Aiken MS 90.LOXN.501505
-  Belvedere ES 90.LOXN.501506
-  Byrd ES 90.LVXN.500209
-  Byrd LC 90.LOXN.501507
-  Chukker Creek ES 90.LOXN.501508
-  Clearwater ES 90.LOXN.501509
-  East Aiken ES 90.LOXN.501503
-  Freedman 90.LOXN.502826
-  Gloverville ES 90.LOXN.501522
-  Greendale ES 90.LOXN.501512
-  Hammond Hill ES 90.LOXN.501513
-  J. D. Lever ES 90.LOXN.501514
-  Jefferson ES 90.LOXN.501515
-  Kennedy MS 90.LOXN.501518
-  LBC MS 90.LOXN.501517
-  Leavelle McCampbell MS 90.LOXN.505516

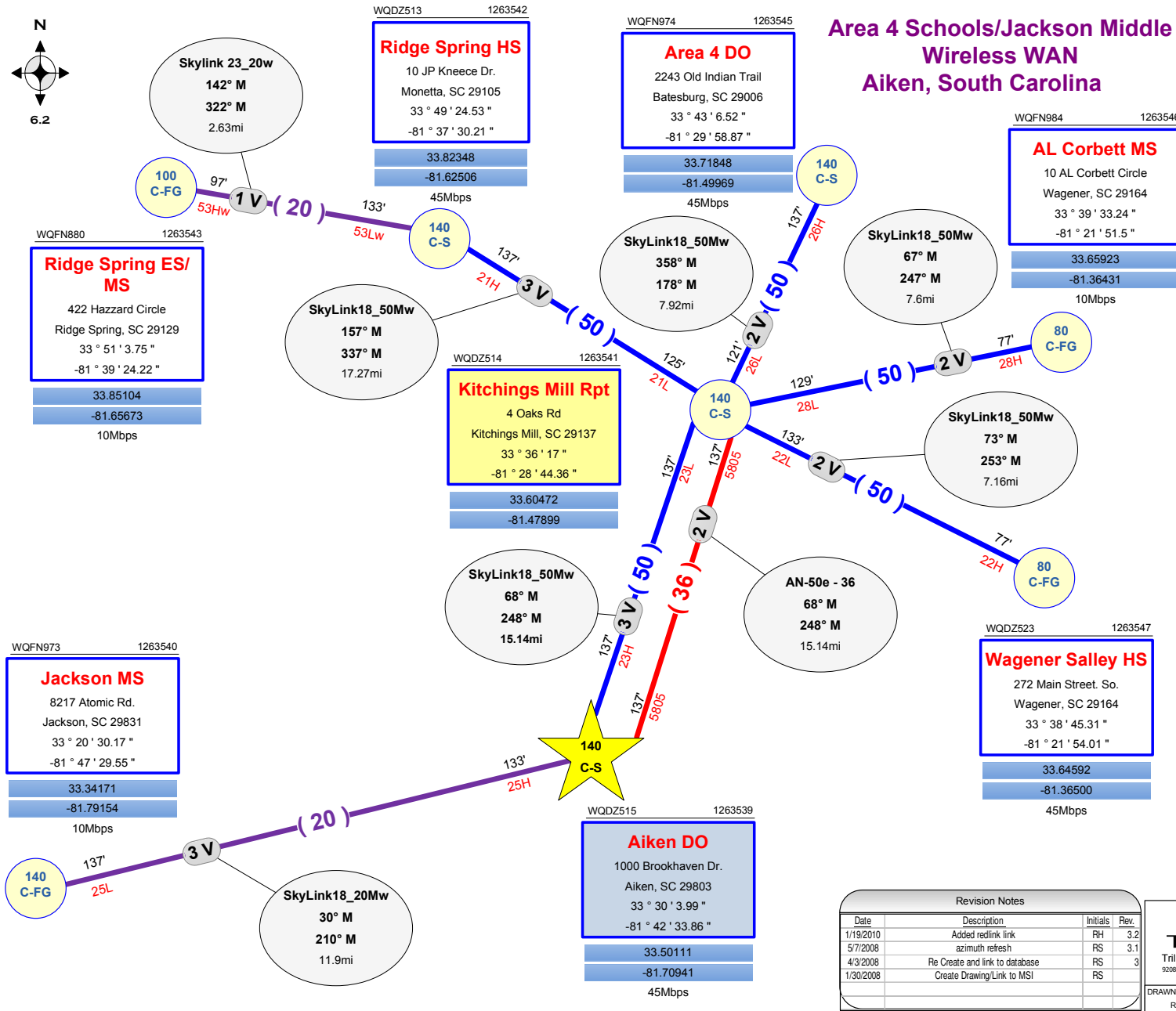
-  Midland Valley HS 90.LOXN.501519
-  Millbrook ES 90.LOXN.501502
-  Mossy Creek ES 90.LVXN.500155
-  New Ellenton MS 90.LOXN.501525
-  North Aiken ES 90.LOXN.501521
-  North Augusta ES 90.LOXN.501511
-  North Augusta HS 90.LVXN.500058
-  North Augusta MS 90.LOXN.501524
-  Oakwood/Windsor E 90.LOXN.501526
-  Old District Office 90.LOXN.502825
-  Paul Knox MS 90.LOXN.501528
-  Pinecrest AS 90.LOXN.500056
-  Redcliffe ES 90.LOXN.501529
-  Schofield MS 90.LOXN.501530
-  Silver Bluff HS 90.LVXN.500057
-  South Aiken HS 90.LVXN.500056
-  Warrenville ES 90.LOXN.501523
-  Midland Valley Charter
-  Lloyd Kennedy Charter



Last Updated:
02/03/2010

Attachment 2B Internal Network Diagram Aiken County Public Schools





Area 4 Schools/Jackson Middle Wireless WAN Aiken, South Carolina

23 Ghz				
Frq#1	Chan	Frq#2	Chan	Dist
21295	40L	22435	40H	
21295	41L	22435	41H	
21335	42L	22535	42H	
21385	43L	22585	43H	
21435	44L	22635	44H	
21485	45L	22685	45H	
21535	46L	22735	46H	
21585	47L	22785	47H	
21635	48L	22835	48H	
21685	49L	22885	49H	
21735	50L	22935	50H	
21785	51L	22985	51H	
21835	52L	23035	52H	
21885	53L	23085	53H	
21935	54L	23135	54H	
21985	55L	23185	55H	
22035	56L	23235	56H	
22085	57L	23285	57H	
22135	58L	23335	58H	
22185	59L	23385	59H	
22235	60L	23435	60H	
22285	61L	23485	61H	
22335	62L	23535	62H	
22385	63L	23585	63H	

18 Ghz				
Frq#1	Chan	Frq#2	Chan	Dist
17720	20L	19280	20H	
17760	21L	19320	21H	
17800	22L	19360	22H	
17840	23L	19400	23H	
17880	24L	19440	24H	
17920	25L	19480	25H	
17960	26L	19520	26H	
18000	27L	19560	27H	
18040	28L	19600	28H	
18080	29L	19640	29H	
18120	30L	19680	30H	
17755	20La	19315	20Ha	
17785	21La	19345	21Ha	
17815	22La	19375	22Ha	
17845	23La	19405	23Ha	
17875	24La	19435	24Ha	
17905	25La	19465	25Ha	
17935	26La	19495	26Ha	
17965	27La	19525	27Ha	
17995	28La	19555	28Ha	
18025	29La	19585	29Ha	
18055	30La	19615	30Ha	
18085	31La	19645	31Ha	
18115	32La	19675	32Ha	

Legend

- Site Name
- Site Name & Address
- City, ST, Zip
- Lat & Long (D.M.S)
- Lat & Long (Degrees)
- 50 Mbps BR
- Contour Bandwidth
- Repeater / Tower & Height
- Pole Height & Type
- Building Mount & Height
- Ground Halo
- Antenna Mounting Height
- Antenna Size & Polarity
- Link Bandwidth
- TX Frequency Channel
- Skylink 23_100w
- Ratio Type
- 150' M
- 330' M
- 0.13mi

Bandwidth Legend

- (36) 20 Mbps Licensed
- (20) 20 Mbps Licensed
- (50) 50 Mbps Licensed

Date	Description	Initials	Rev.
1/19/2010	Added redlink link	RH	3.2
5/7/2008	azimuth refresh	RS	3.1
4/3/2008	Re Create and link to database	RS	3
1/30/2008	Create Drawing/Link to MSI	RS	

Trillion Partners, Inc.
5208 Waterford Centre Blvd #1150
Austin, TX 78758

DATE February 3, 2010

Aiken County, SC

DRAWN BY RS

REV 3.2

FILENAME TRILLION WIRELESS FOR AREA4 AND JACKSON-CHANNEL DESIGN VSD