

**APPROVED REVISION
06-15-2010**

District Technology Plan

July 2010 – June 2013



**Hillsborough County Public Schools
Tampa, Florida**

**Hillsborough County Public Schools
Tampa, Florida**

Mission

To provide an education that enables each student to excel as a successful and responsible citizen.

Vision

To become the nation's leader in developing successful students.

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David J. Steele, Ph.D., Chief Information & Technology Officer and Project Director,
Empowering Effective Teachers Grant
Information & Technology Staff
Technology Steering Committee

Contents

District Overview	4
Technology Plan Introduction	4
Role of Technology	6
Accomplishments and Lessons Learned	8
Standardization	8
System Capacity	8
End User Involvement	8
Student Accountability/Performance	8
Opportunities and Challenges	9
Best Practice	9
System Capacity	9
System Management	9
Data Accuracy	9
Student Accountability / Performance	9
Technology Support	10
Technology Literacy	10
Key Initiatives	11
System Capacity	11
Planning	12
Training	13
Support	14
Evaluation	14
Maximizing Resources through E-Rate Program	14
District Application Portfolio – Enterprise Level Software	15
Instructional	16
Transactional	16
Personal Productivity	16
Decision Support	17
Communication	17
Wide Area Network (WAN) – Infrastructure	20
Local Area Network (LAN) – Infrastructure	23
Major Projects	26
Project – Altiris Notification Server Console	27
Project – Symantec Endpoint Protection Management Console	28
Project – Equipment Replacement Plan and Hardware efficiency Initiative	29
Project – Develop Data Dashboards and Scorecards	30
Project – Lawson Talent Management Suite of Software	32
Project – Student Information System (SIS)	33
Project – System Capacity Upgrades	35
Project – FirstClass Upgrades	36
Information and Technology Division Goals and Objectives	37
Safety	37
Student Achievement	37
Human Resource Management	37
Financial Performance	37
Governance	38
Policies and Procedures	38
Summary	39
Appendix A: Wide Area Network Estimated Budget FY 2010-2011	40

District Overview

Hillsborough County Public Schools (HCPS), which serves the city of Tampa and the surrounding communities, is the 8th largest school district in the nation, with 192,000 students in over 248 schools. HCPS employs about 12,500 classroom teachers and 25,000 total staff, making HCPS the largest employer in the county. In recent years, the district has experienced explosive growth, opening six new schools a year for the past decade. The downturn in the economy and hard-hit real estate sector has also resulted in more children qualifying for the federal free and reduced-price meal program. Today that rate stands at over 50% of all HCPS students, which is well above Florida's average rate. HCPS is governed by a seven member elected School Board, which is charged with selecting the Superintendent. Unlike many large school districts, the district's senior leadership is notable for its longevity in their current positions.

Technology Plan Introduction

The Technology Plan is used to align district strategic goals and objectives to available technologies and resources. Information Technology is one of the underlying foundations of supporting the priorities set forth in the District Strategic Plan. Significant progress toward updating and integrating the district's technology is evident. We are now at a stage to review our progress, assimilate lessons learned, and explore future initiatives as we continue to align our technology resources to the district's current Strategic Plan.

The implementation of Lawson software with Finance, Procurement, Human Resources, Payroll, Benefits and Inventory applications was a major technology accomplishment. The district executed an audit that resulted in bringing experienced project management into the district to guide the process. While painful, the Lawson software implementation was successful, especially when measured against other implementations of this magnitude. Lessons learned about communication and management will be applied to future phases of the project.

As a result of the current technology plan, all classrooms are networked, training and support are readily available, and a computer refresh plan is in effect. Today, schools depend more heavily on technology. Driving that dependence is the power of the Internet, email, and the electronic conversion of many of our work processes such as the Individual Educational Plan (IEP) and the Instructional Planning Tool (IPT). The district is also providing students high quality resources such as the library databases, FCAT Explorer, Princeton Review SAT Prep, FastMath, I CAN Learn, Renaissance Place, Read180, Skills Tutor, and many more. Managing the cost of technology and the costs associated with support as it ages are big challenges to the district. Our ability to provide quality technology resources requires an extension of the current equipment replacement plan with funding sources identified.

The information and assessment data available on student performance become powerful instructional aides in shaping and driving instruction. Putting in place a robust electronic instructional planning tool for access by all schools at the classroom and administrator levels lends major support for achieving the district's Strategic Plan goals. An instructional planning tool provides real-time access to student data, improves

accuracy in tracking student performance, and emphasizes more accountability for making effective data-driven decisions. Collaboratively, all departments in the Information and Technology Division are reviewing previous efforts to ensure the complete success with this highly ranked project.

The success of many of the software applications is determined as much by training and implementation as it is by the carrying capacity of the district's local and wide area networks (LAN/WAN). Since additional software initiatives depend upon these environmental constraints it is necessary to plan for upgrades to the supporting infrastructure. Great care and planning are given to both internal and external communication efforts. The ability to contact the employees, students, and the public is increasingly impacted by the technology available. Encouraging participation through email, blogs, broadcasts, automated phone contacts and emergency alert systems requires the district to maintain appropriate LAN and WAN speed, a strong and current web presence, as well as the back-office technology to ensure security of the data and the network. All schools are required to have multiple dedicated internal and external phone line connections and the district makes use of cellular phone technology. The current plan detailed in the following sections shows the major applications the district has in place, the current infrastructure, the major initiatives, a budget summary and governance issues.

Role of Technology

Technology provides support for the district's core business, educating our students. As such, technology provides tools and resources that align with district goals. The following six tactics help to accomplish the critical success factors outlined in the District Strategic Plan.

Tactic 1

Technology is used to enhance and improve instruction. This includes tools that provide access to student data, such as electronic IEPs, as well as programs such as I Can Learn, FCAT Explorer, FastMath, Lightspan, Edutest, Princeton Review, Compass Learning, Accelerated Reader, Reading Counts, on-line databases, Waterford, Cybercat and others that support the instructional program. Data available from the state of Florida Innovates Survey, formerly the STAR Survey, provides technology indicators for monitoring success.

Tactic 2

Technology is used as a communication tool to send and receive information. The district's email services, web services, and broadcast services have contributed to improved access to information by staff, parents, students, and the community. The addition of the "First Class Groupwise" project will provide additional capacity to this communication tool.

Tactic 3

Modern technology is used to improve and extend learning, increase productivity, assure fiscal accountability, improve work processes, and provide increased access to information. Standardization of hardware and software, improved system capacity, remote diagnosis, remote software update, remote repair and patch deployment, as well as ongoing training are key factors for monitoring success.

Tactic 4

Technology is used to manage staff development activities, to ensure that activities are correlated to staff and student instructional needs, to monitor recruitment and retention, and to provide online training. Converting the district's staff development catalog and workshop registration from paper to electronic formats can now link these systems to student data and teacher professional development plans. Online employment applications, posting of vacancies on line and electronic registration for Teacher Interview Day improve recruitment efforts.

Tactic 5

Technology facilitates timely access to emergency procedures. Emergency alerts sent via email and beeper instead of by phone ensures alerts are immediately received almost simultaneously by all sites. Student arrest notifications to principals are monitored electronically. Technology is used to monitor student discipline, attendance, and tardiness. Technology is also used to monitor facilities and systems as well as the district's electronic assets.

Tactic 6

Technology is used to provide instruction through the use of online courses. These courses are currently providing instruction for teachers, non-instructional personnel, and students and will play an even more prominent role in the future. Through FirstClass Ed, Compass Learning, and the Hillsborough Virtual School franchise with Florida Virtual School the district is creating more diverse learning opportunities for both employees and students while reducing class sizes and travel to training.

Accomplishments and Lessons Learned

Standardization

Hardware and software standards are adopted. A five-year partnership agreement with HP is instituted to lower costs and bring added value through standardization. The Microsoft Operating System is the standard operating system for the district for both workstations and servers. Microsoft Office for productivity and Symantec End Point Protection antivirus are also established standards. The Altiris Client Management Suite is fully implemented to provide asset management, software deployment, and remote access for diagnosis and repair. FirstClass is implemented as the single email system for the district.

Lessons Learned: A long-term partnership has been beneficial to the district in managing technology support and making technology installations more efficient, especially at new schools. Software standardization has improved training and support. An instructional software standardization plan is currently in Implementation.

System Capacity

Internal wiring of schools is being upgraded to cat 5e; improved bandwidth has been added to all sites with the option for schools to increase their capacity; enterprise level hardware has been installed to operate DB2 database and provide system backup. Windows and Linux servers have been consolidated within the Data Center using VMware server virtualization software.

Lessons Learned: Efforts to manage the ongoing demand for bandwidth continue, while at the same time, managing the associated costs. Server virtualization maximizes efficiency of emerging hardware capacities while simultaneously minimizing capital outlay and recurring costs. Staff continues to explore innovative solutions.

End User Involvement

Large system implementations, such as Lawson Finance, Procurement, Inventory, Human Resources, Payroll, and Benefits depend on end user involvement.

Lessons Learned: End user involvement, initial and ongoing training, and adequate resources and support are key success factors. Focus groups have yielded positive results from those involved.

Student Accountability/Performance

An electronic IEP was developed that is serving the needs of the ESE program.

Lessons Learned: Phased implementation and sufficient allocation of resources are key success factors.

Opportunities and Challenges

Best Practice

The district has met the requirements of required “best practices” based on OPPAGA’s review. This includes: developing technology training profiles for administrative and support staff, measuring the size and impact of technology support, formalizing procedures for controlling unconnected program level databases, and training the database users.

System Capacity

Demands for data at the school sites and access to more online curricular content require improved dependability and accessibility. Continuous monitoring of the rates of data transmission and the health of the district’s electronic assets stresses that review of system capacity is needed to make adjustments quickly.

System Management

The equipment replacement guidelines require updating and must be budgeted for 2010-13. The technology categorical, which provides \$1.6 million annually, is no longer funded by the State of Florida. To maintain the current guidelines for replacing only teacher computers, administrative computers, certain lab computers and peripherals, and media circulation computers will require approximately \$9.7 million over the next three years. A significant increase in funding would be required to replace student computers. Current plans are to remotely manage all switches, workstations, member servers, domain servers, and other appropriate devices. This practice needs to be the standard at all sites to reduce the total cost of ownership.

Data Accuracy

Data accuracy continues as a focus for the Information and Technology Division. Change control procedures will be reinforced with departments to better inform the Technology Call Center of system wide technology changes that impact end users. Training sessions will be conducted by area to provide principals information on database changes as communicated by the Florida DOE on subjects to include Class Size Reduction, Highly Qualified Teachers, ESE scheduling, ESOL, and FTE. Effectiveness will be measured by improvements in FTE reporting accuracy and Class Size Reduction compliance.

Student Accountability / Performance

Our district is developing the Instructional Planning Tool to provide data for the classroom. In partnership with the Bill and Melinda Gates Foundation, HCPS launched Empowering Effective Teachers initiative to support effective teaching and raise student achievement. Aligned with this initiative is HCPS’ participation in the Measures of Effective Teaching project which provides research data to develop reliable measures of effective teaching. Data driven accountability for student performance is foundational to both of these initiatives. In addition to data collection to support these initiatives, the district supports student performance through the Instructional Planning Tool which provides student assessment data

directly to classroom teachers, and through ongoing collection of data such as attendance, discipline, graduation rate, and school climate.

Technology Support

The addition of new testing and teaching initiatives over the next three-year cycle will further highlight the need for additional personnel in support roles for the district. Newer technology, which enables more productivity and thus greater efficiency for the end users, requires a faster response and skill set for support. Remote management of electronic assets dictates that our electronic highways remain well managed with the latest security, authentication, antivirus, and operating system software, and upgrades to hardware equipment. The addition of technology-based systems such as Lawson has stretched training resources. This will increase as we continue to move to an electronic environment.

Technology Literacy

The state expects that 8th grade students will exhibit proficiency with technology prior to entering 9th grade. The district has put appropriate curriculum experiences in place to guide students in obtaining technology mastery. Currently, teachers at elementary and middle schools are developing lesson plans to integrate technology into their curriculum. The lessons are based on the ISTE standards for students. Other opportunities in the next three years include adopting technology standards for administrators and providing them with training to meet these requirements. Students in grades 3, 5, 8, 10 are assessed on-line in reading comprehension and over the next two years additional end of course exams (EoC) will be required by the state as on-line final exams. This added technology implementation has stretched our present technology support even thinner with the addition of 300 high stakes testing labs. The Intel “Teach to the Future” classes will continue to train teachers in curriculum integration techniques.

Key Initiatives

Technology initiatives provide critical support for attaining the goals identified in the District Strategic Plan. Each initiative identified in the Technology Plan either expands the capabilities of a current application, service, process, or structure, or adds something new within one of these areas. The measurable goals of the District Strategic Plan are the benchmarks to use in developing technology tactics, operational plans, measures of critical success and planning steps to adjust ongoing project efforts.

Technology is highly integrated into all aspects of the school system. Initiatives identified here map ways to maintain current systems and improve future applications. The initiatives are grouped by application portfolio, system capacity, training, support, E-Rate, and planning. The tactical objective is to ensure support for achieving the district goals, maximizing resources, and helping the district to be more productive.

System Capacity

System capacity and infrastructure show elements that need to be managed and adjusted to accommodate more robust applications and increased access by users. The graphic shows the current state and future plans of the system's infrastructure.

a) Wide Area Network (WAN)

- Filtering
- Bandwidth
- Security

b) Local Area Network (LAN)

- Antivirus Protection
- Internal Connectivity – Cat 5e and fiber hardware
- Internal Connectivity – Wireless buildings / labs
- Internal Connection Speeds
- Security and authentication
- Switches and other electronics and upgrades to installed base
- Server configurations and thin client applications
- Server Operating Systems and upgrades to installed base
- Desktop Operating Systems and upgrades to installed base

Planning

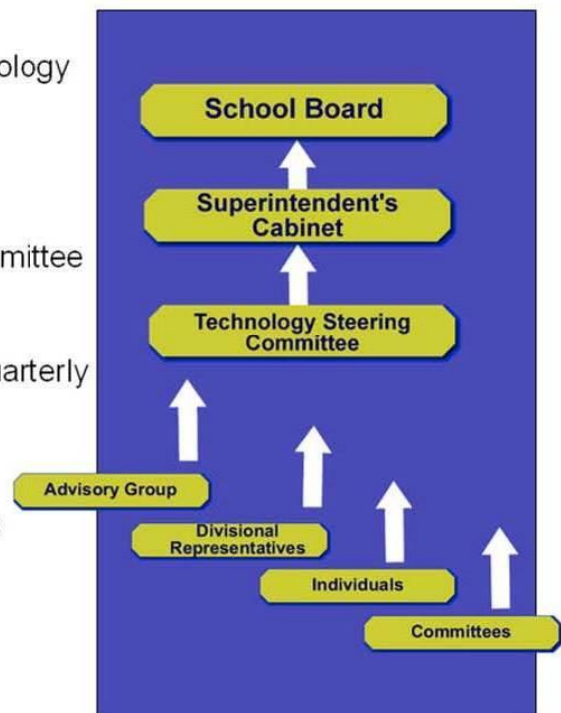
Stakeholder input is central to technology planning. Standing and ad hoc committees consist of representatives from employee groups, and when appropriate, parents, business members, and students. These groups provide direction on how best to utilize technology in meeting district needs. In addition to committees, input is gathered through individual suggestions, surveys, focus groups, and interviews.

The district technology steering committee meets every two weeks and is the main decision-making group prior to recommendations going forward to the superintendent's cabinet and the school board. The committee has representation from every division.

Governance for technology decisions flows from the committees to the superintendent's cabinet and then to the school board.

- Stakeholder input is central to technology planning.
- Standing and ad hoc committees
- The district technology steering committee meets every two weeks.
- The district advisory group meets quarterly to discuss key technology issues.
- Governance for technology decisions flows from the committees to the superintendent's cabinet and then to the Board

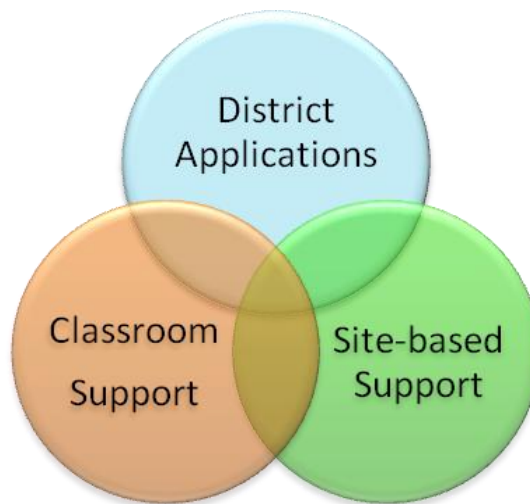
Planning



Training

Professional development is the foundation for the implementation of the district's mission, vision and District Strategic Plan to support the enhancement of student achievement. Training support is provided for the majority of the district's application portfolio. Strategies include support for new and existing applications, techniques for integrating technology in the classroom, and provision for on-going coaching with key areas like data processing. Training is delivered via on-line courses, face-to-face, coaching sessions, video, and CD.

Alignment of Training Initiatives



District Applications	Classroom Support	Site-Based Support
Communications		
Data Management		
Online, Face-to-Face, Blended Instruction		
Enterprise Resource Management (Finance, Procurement, HR, Payroll)	Technology Integration (Digital Storytelling, WebQuests, Interactive Whiteboards, Podcasting & Web design)	Resource Management (Assets & Textbooks)
Productivity Tools	Gradebook Applications	End-User Support
End-User Support	Testing and Evaluation	Attendance, Discipline & Site Check-in

Support

Providing support for the district's inventory of computers, servers, routers, and switches requires careful management of resources. As noted earlier, remote management tools, the centralized call center, and standardization of hardware and operating system software have reduced the demand on adding personnel. As shown in the graphic, each area office has two field techs and one trainer.

Evaluation

The actions necessary for monitoring success for each project are detailed in the corresponding Project Information Sheet. Continual monitoring and adjustments for changing developments or opportunities are essential for ensuring progress toward the identified goals. The status of the District Strategic Plan can be reviewed at the following link: www.sdhc.k12.fl.us/strategicplan.

Maximizing Resources through E-Rate Program

The Schools and Libraries Program of the Universal Service Fund, commonly known as "E-Rate," is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC), and provides discounts to assist most schools and libraries in the United States to obtain affordable telecommunications and Internet access. It is one of four support programs funded through a Universal Service fee charged to companies that provide interstate and/or international telecommunications services. The Schools and Libraries Program supports connectivity - the conduit or pipeline for communications using telecommunications services and/or the Internet. Funding is requested under four categories of service: telecommunications services, Internet access, internal connections, and basic maintenance of internal connections. Discounts for support depend on the level of poverty and the urban/rural status of the population served and range from 20% to 90% of the costs of eligible services. HCPS applies for eligible E-Rate discounts to assist with funding for Internet access, enhanced multiplex land-line telephone services, cellular phone services and cellular data-transmission, wide area network telecommunication services, internal connections, and maintenance.

District Application Portfolio – Enterprise Level Software

The district application portfolio shows applications that currently serve the various programs in the district and applications planned for future implementation.

Instructional

- I CAN Learn: Algebra I, Pre-algebra
- FCAT Explorer
- Follow the Leaders
 - ✓ Homeroom.com
 - ✓ Skills Tutor
- Earobics
- Edutest
- Princeton Review
- Compass Learning
- MediaCast
- Waterford Reading, Tune in to Reading
- Academy of Reading
- Hillsborough Virtual School
- DimensionM
- Fraction Nation
- FASTT Math Voyager Math
- Voyager Reading
- Academy of Reading
- Read 180
- Reading Counts
- Rosetta Stone (multiple languages)

Transactional

- Active Directory and authentication
- Altiris Client Management Suite
- Edline
- Lawson – Finance/Procurement/Inventory and Human Resources/Payroll/Benefits
- Sunrise – Library Automation
- CA eHealth– Infrastructure Performance Management
- Edulog – Transportation
- Faronics Insight –lab management software
- HCPS – Student Information System
- Right Now Technology: Technology Self-Help Database
- CA Service Desk – Maintenance Request System
- SharePoint Portal initiative
- Horizon – Food Service

Personal Productivity

- Adobe Digital School Collection
- Microsoft Office: Excel, PowerPoint, Word, Access, Publisher
- Microsoft Project and Visio
- Filemaker Pro

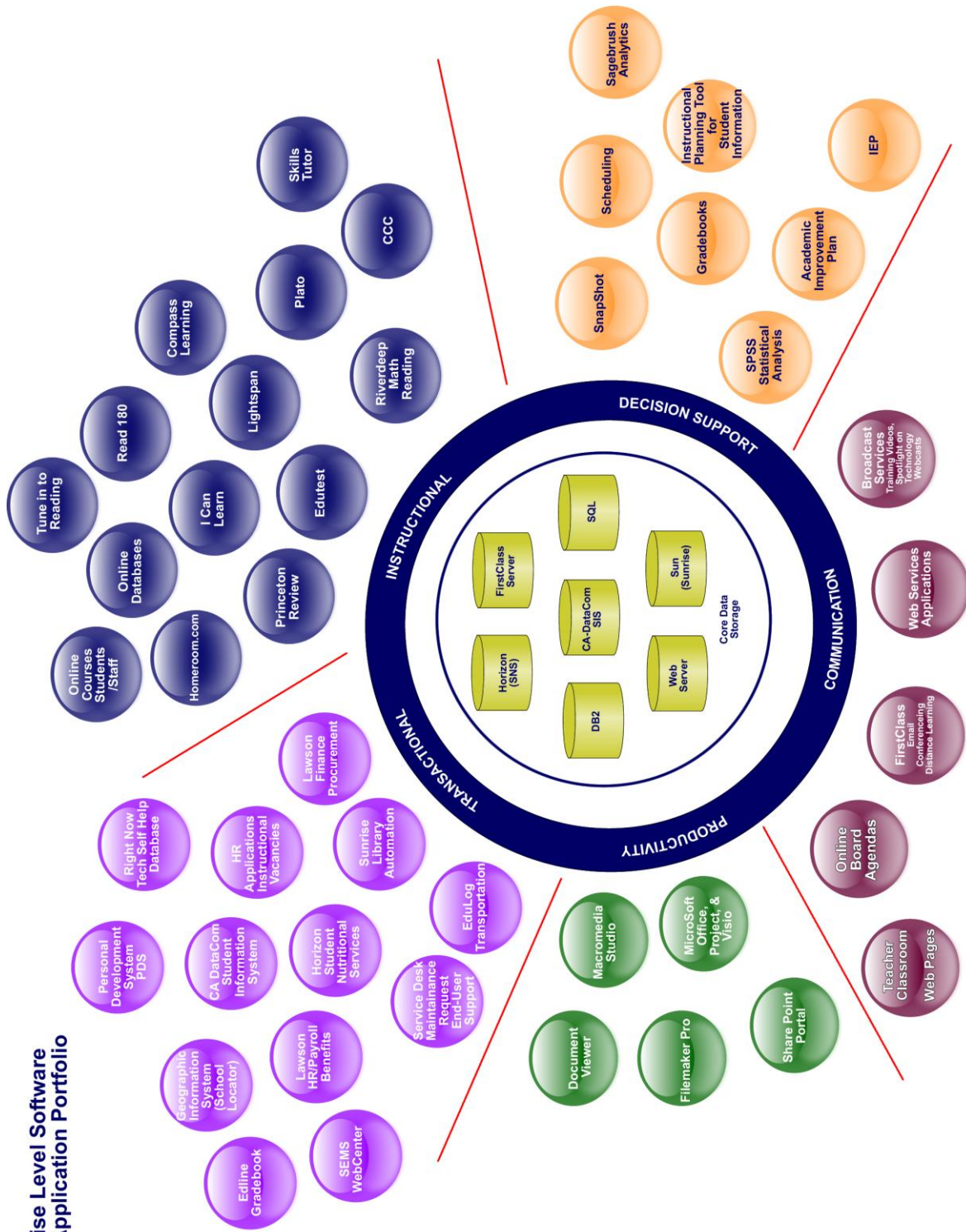
Decision Support

- Instructional Planning Support such as electronic Individual Education Plans and Academic Improvement Plans
- Statistical package for social sciences

Communication

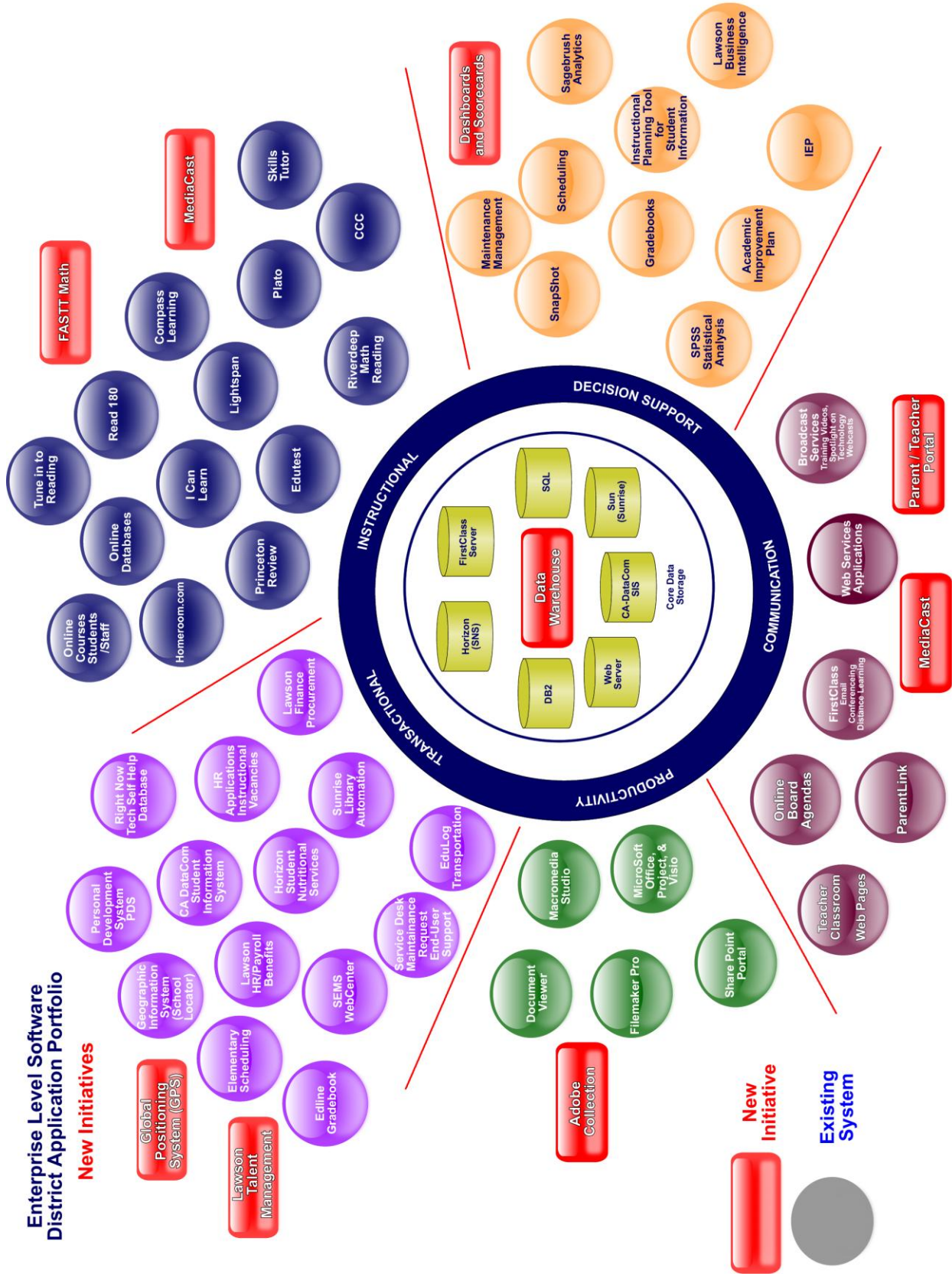
- FirstClass
- ParentLink
- Web Services Applications
- Broadcast Services Applications

Enterprise Level Software District Application Portfolio



Enterprise Level Software District Application Portfolio

New Initiatives



Wide Area Network (WAN) – Infrastructure

Starting July 1, 2010, the district plans to increase WAN bandwidth to high schools and middle schools from 20 Mbps to 100 Mbps while providing elementary schools and charter schools at 10 Mbps. Our district WAN consists of a central district administration office utilizing fiber connections contracted from Verizon Florida, Inc. to each of our schools and non-instructional facilities. The central administration office provides connectivity to the Internet and district enterprise applications.

Information Services staff members monitor the WAN bandwidth capacity demand to our schools and maintain the minimum bandwidth while providing adequate services to meet the goals set in the District Strategic Plan at the minimum cost. The Verizon Florida Inc. bid response for unmanaged telecommunication services was the lowest cost with bandwidths of 10 Mbps and 100 Mbps. The bandwidth utilization is continuously monitored by CA, Inc. e-Health software from the district's Data Center. If sustained bandwidth demand increases greater than 80% of the provided capacity at any individual location, that location will be reviewed for increases in capacity, providing budget and infrastructure are available.

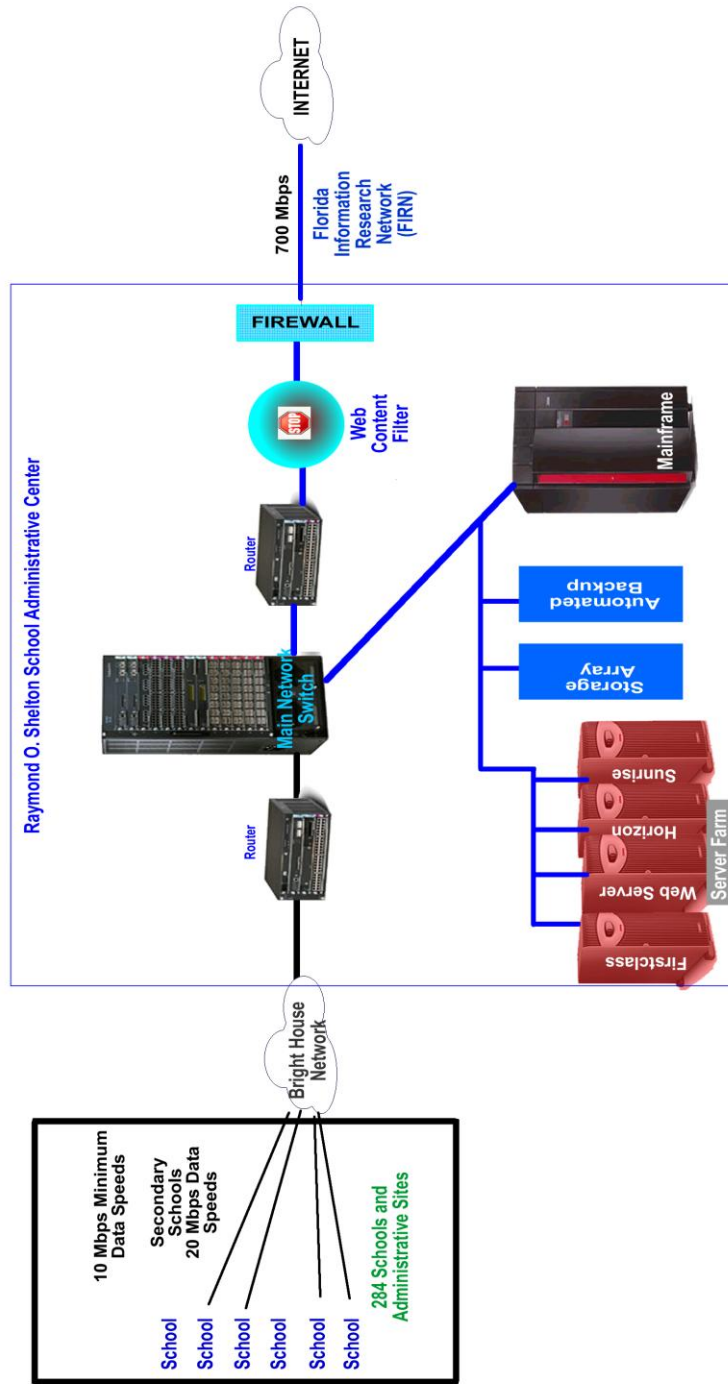
One of our objectives is to reduce the cost of the district's wide area network (WAN) while increasing the network capacity to the middle and high schools. Through the bid process it was determined that it was more cost effective to continue to manage our own network and procure replacement routers rather than use a managed service. Our existing Cisco 2621 routers were purchased on December 19, 2000 and are still in production. The Cisco 2621 model does not have the capacity to support 100 Mbps and must be replaced in order to increase our bandwidth. District staff continually monitors the WAN bandwidth capacity utilized to our schools to ensure the available capacity is meeting the goals set forth in this Technology Plan.

Beginning July 1, 2010, Internet access will be provided to the district through a 1 Gbps telecommunication service via TW Telecom Holdings, Inc. As the aggregate bandwidth for all the district locations increases, additional capacity will be added to meet the demands.

WAN bandwidth utilization can be monitored from the following link from within the district intranet:

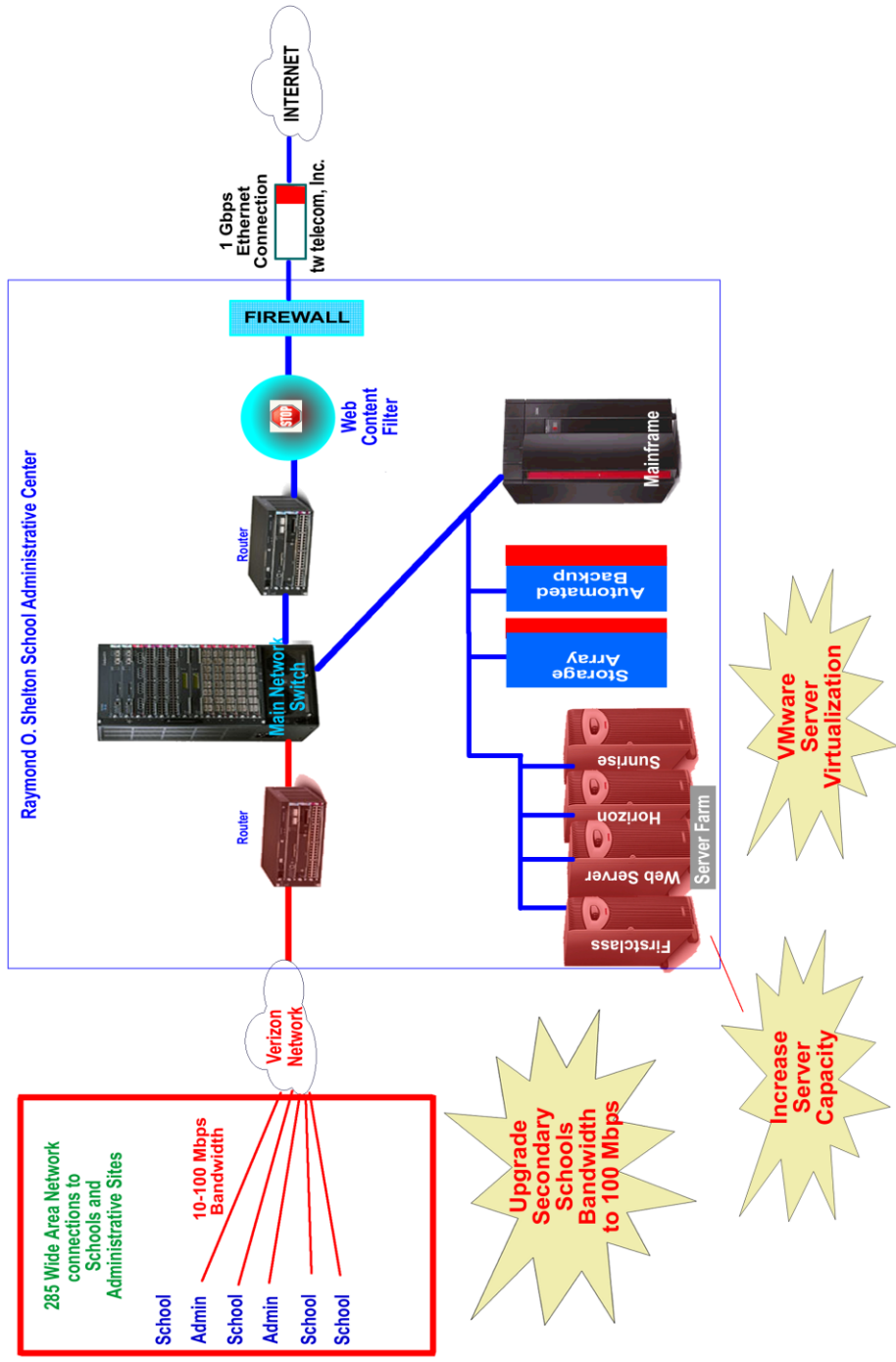
<http://wan.mysdhc.net>

School District Wide Area Network Infrastructure (As of June 2010)



School District Wide Area Network Infrastructure July 2010

**System
Capacity Upgrades**



Local Area Network (LAN) – Infrastructure

Network Infrastructure all sites:

Sites having networked Internet access or local area networks (LAN) access are constructed with the following general characteristics:

Main Cross Connect (MXC): 1

Intermediate Cross Connect (IXC): 1 or multiple

- Each IXC is attached to the MXC by fiber or GIG capable copper providing a GIG backbone to the local site network.
- Each IXC provides, through the switches, fast Ethernet to the end devices

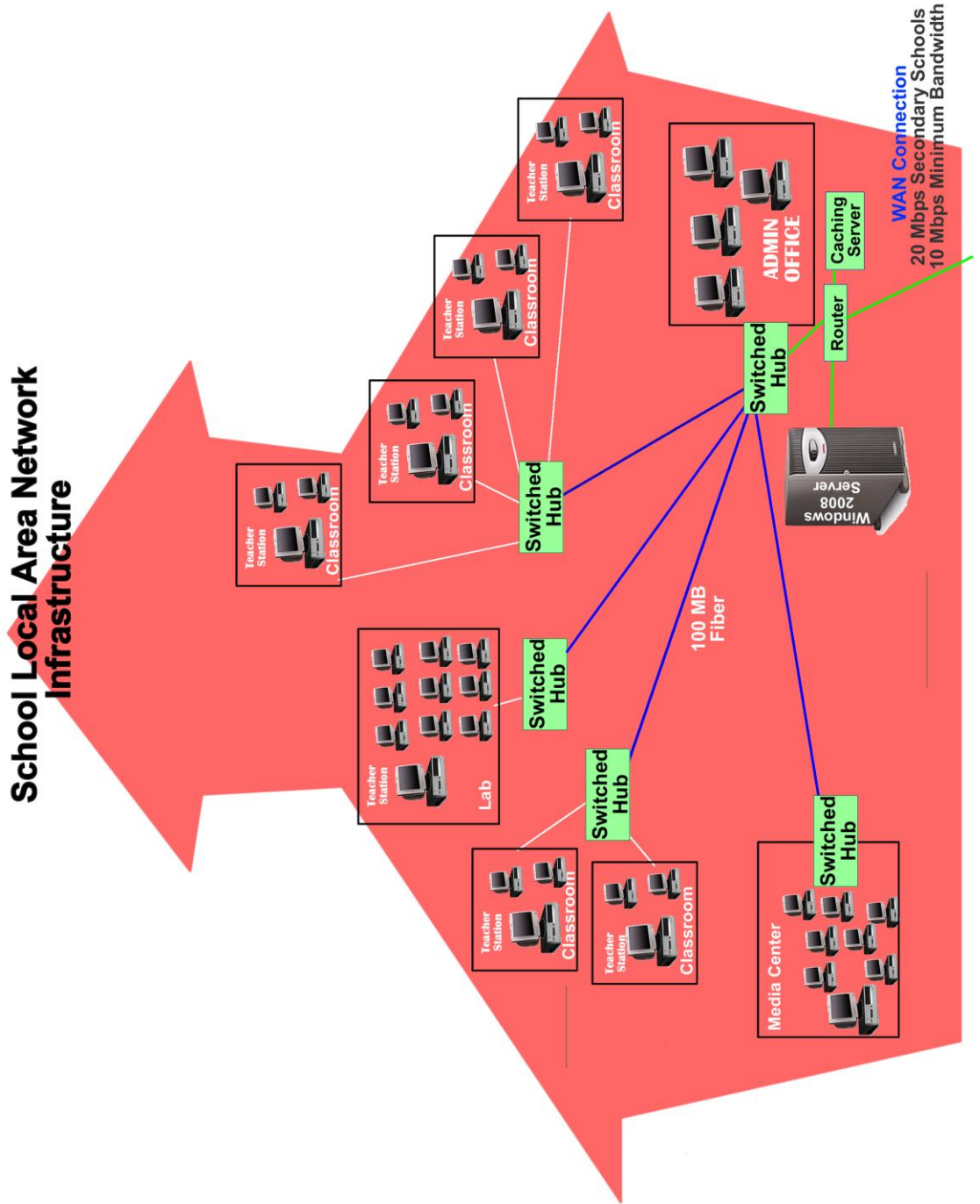
Wireless devices may authenticate through wireless access points located at various locations around a campus.

- Wireless security switches will be deployed across the district as part of this three year technology plan.
- Wireless access points are configured by district support staff for standardization and ease of monitoring.

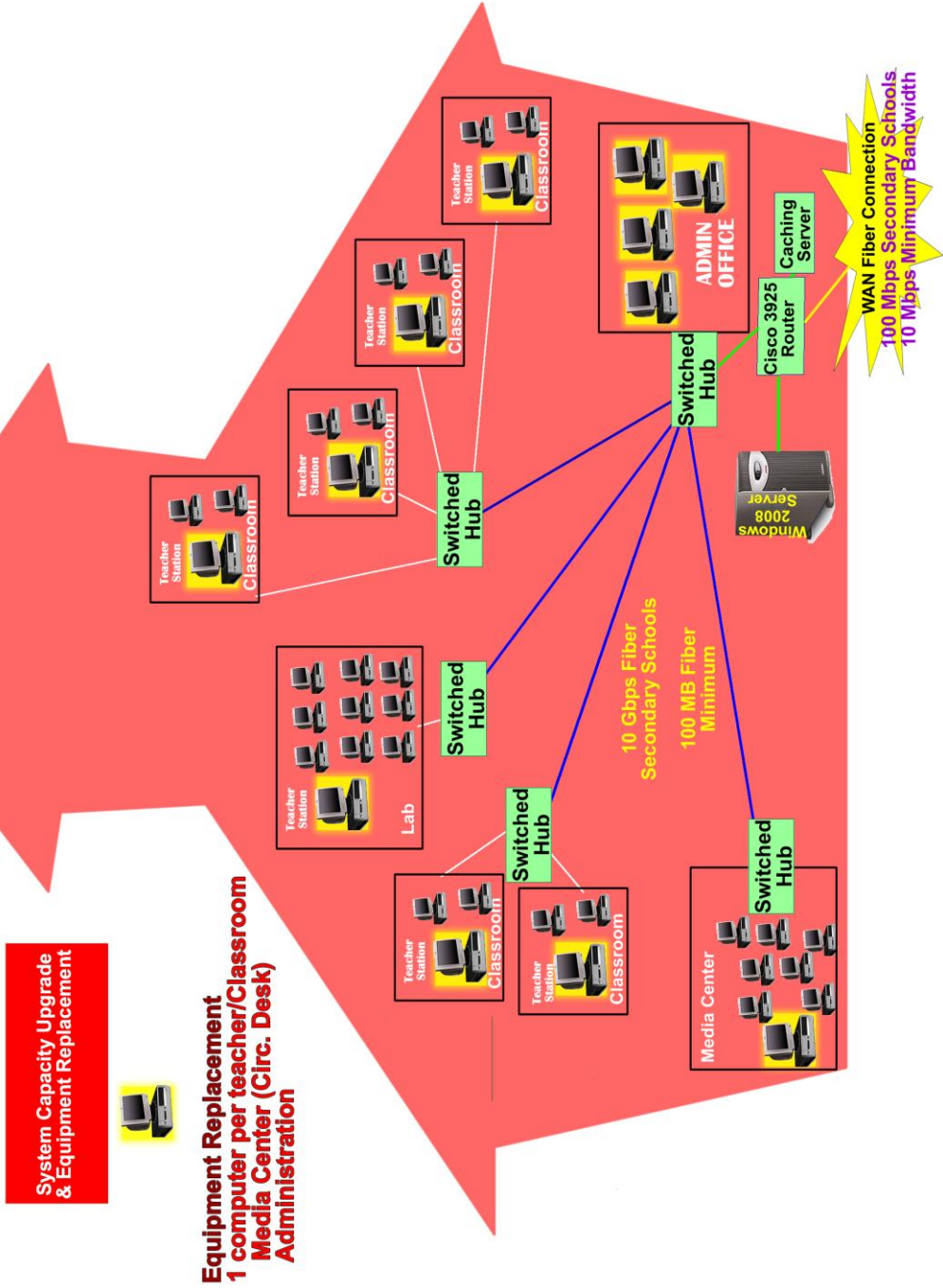
Servers, point of sale stations, wireless access points, and certain other devices, due to specific application requirements, carry hard coded IP addresses. All other devices exist in a dynamically applied IP environment.

All sites have domain controllers carrying the Active Directory global catalog and running DHCP and DNS services. In addition, these servers serve as notification servers for local distribution of software.

School Local Area Network Infrastructure



School Local Area Network Infrastructure



Major Projects

The major project section lists critical program areas for which there is an identified need. A work plan for each project includes a project title, initiative areas, description, objectives, phases/timelines, manpower, monitoring success, and estimated costs. The actual financial impact of each project will be determined through normal purchasing processes and individually brought before the school board for approval. In some instances, projects are funded through grants, and will only go forward if the grant is awarded to the district. The work plans are shown on the following pages.

Project Information Sheet

Project – Altiris Notification Server Console

Initiative Area – Support and Training, Infrastructure

Description – Implement Altiris Notification Server Console

Objectives –

- Provides an inventory database of all computer hardware devices, software applications, and user/computer associations.
- Allows for centralized software deployment to specific groups of computers based on inventory database information.
- The Software Portal allows for self-service software installs by the end-user.
- The Altiris console also allows for remote control assistance to all district computers from one console.

Phases / Timeline – A project timeline of three-years for full implementation at all sites is in outline form in planning with the Technology Training Department.

Manpower – The Customer Service and Support Department has assigned time that is distributed through the three existing technology specialist positions.

Monitoring Success – Diminished down time for reload of computer software on hard drive.

Estimated Costs

	Year 1	Year 2	Year 3
Computer Software			
Computer Hardware			
Salary/Fringe/Adjustments			
Contracted Services			
Travel, Supplies, and Other			
Total			

Project Information Sheet

Project – Symantec Endpoint Protection Management Console

Initiative Area – Support and Training, Infrastructure

Description – Protecting the district’s computing assets from virus infections that could damage or degrade the functioning of the equipment.

- Has centralized reporting of virus activity and network threats,
- Allows for district-wide Antivirus settings control,
- Provides the application and device control functionality that allows for better security, and limits the end user’s ability to accidentally inappropriately use computer devices.

Objectives – To procure, maintain and continuously update the software that protects the computing equipment from unwanted and harmful virus programs
To upgrade existing antivirus software packages and scan drives
To discover all known infections and quarantine those infections
To inoculate computer equipment from future infection if possible

Phases / Timeline – continuing project.

Manpower – Included in continuing operation

Monitoring Success – Inclusion in Symantec antivirus software delivery server network and console monitoring for all workstations at a site.

Estimated Costs – Three-year authorizations with maintenance and upgrade included in the software product. New server equipment required as the number of serviced workstations rises.

Project Information Sheet

Project – Equipment Replacement Plan and Hardware efficiency Initiative

Initiative Area – Infrastructure, Support

Description – The plan is to replace teacher computers, administrative computers, certain lab computers and peripherals, and media circulation computers at all sites. This plan continues the replacement cycle already in place to ensure older equipment is phased out of the system on a systematic basis. Where feasible use the computing power of the modern computers to allow concomitant use by multiple individuals.

Objectives – To replace aged computers (6-7 years old) that are integral to the work processes of the district and make better use of the power of the purchased machines.

Phases / Timeline – Twenty percent of the schools scheduled annually so that all schools are “refreshed” by the end of the five-year cycle.

Manpower – The manager of the Customer Service and Support Department and the district resource teachers for elementary, middle, and high school administer the plan. The hardware partner provides installation services as a part of the equipment cost.

Monitoring Success – All schools are refreshed during a five-year cycle with an average of 20 percent of schools completed per year. Provide an annual status report to the school board.

Estimated Costs

	Year 1	Year 2	Year 3
Computer Software			
Computer Hardware	\$2,800,000	\$2,800,000	\$2,800,000
Salary/Fringe/Adjustments			
Contracted Services			
Travel, Supplies, and Other			
Total	\$2,800,000	\$2,800,000	\$2,800,000

Project Information Sheet

Project – Develop Data Dashboards and Scorecards

Initiative Area – Transactional, Support, Training

Description – Develop real-time data dashboards for principals and teachers: At the teacher level, the dashboard will combine student performance results with attendance, discipline, on-track indicators, and student demographic information to provide teachers with a more complete view of their students' performance. In a simplified one page view, teachers will see how different subgroups of students are performing relative to each other, to the school and to other schools with similar students. If there are any issues in the class, the one-page dashboard will identify them. Principals will be able to access each teacher's dashboard, but they will also have access to their own school-wide dashboard in order to manage school performance. Data on teacher performance by student subgroup will be provided along with discipline and attendance statistics, classroom observation information, student on-track indicators, and other school-wide information to help a principal better monitor student and teacher performance. The dashboard will provide comparisons relative to similar schools and the district as a whole. Many elements to be used in the data-dashboard are stored electronically, but in different locations. Student and teacher data are currently housed in over 10 different systems that have a limited capacity to communicate with each other. Through this initiative, HCPS will migrate all data storage into a single easily accessible location. The data warehouse system will be capable of integrating existing longitudinal district and state data for students, teachers, and principals into a single, secure, user-friendly interface that allows varying levels of access based on individuals' position in the district.

Objectives – To focus both district personnel and the broader community on the district's 5-year goals, the metrics and tools the district uses to manage district- and school-wide performance must be aligned with the outcomes we aim to achieve. In addition, we must supply principals and teachers with the data and tools they need to manage performance on a day-to-day basis. The district aims to redesign the district's performance management system by developing new district- and school-level scorecards that track progress against the district's chief objectives. In addition, HCPS will simplify the use of data through data dashboards, which will supply day-to-day information on both teacher and student performance such that principals and teachers can easily diagnose issues and develop solutions. Administrators and teachers will be trained on how to use the data-dashboard effectively.

Phases / Timeline –

- *August 2010:* Identify essential data that must be available to users for dashboards and scorecards.
- *January 2011:* Develop prescriptive professional development system aligned with evaluation data.
- *June 2011:* Data storage upgrade and consolidation of all relevant data elements into one Centralized system.

- *January 2012:* Pilot the use of a simplified data dashboard in ~30 schools; integrate feedback and make modifications.
- *June 2012:* All teachers and principals have a simplified data dashboard to be used for classroom and school level decision making.

Monitoring Success –

- 90% of teachers participate in online training.
- 80% of teachers will self-report that they use data effectively to modify classroom Instruction by June 2012.
- 80% of teachers will report that they believe value-added assessment system is an accurate gauge of teacher performance by Fall 2011.

Estimated Costs – Project plans and budgets are/will be in place for each phase of the project and will be managed by a project manager.

Project Information Sheet

Project – Lawson Talent Management Suite of Software

Initiative Area – Transactional, Support, Training

Description – The Lawson Talent Management Software Suite is a fully integrated strategic human capital management system. Lawson Talent Management (LTM) is made up of seven distinct, interrelated applications. The Global Human Resources application is the centerpiece of LTM with features including organizational structure, supervisory structure, jobs and positions, skill and competency repositories, and a global employee record. Talent Acquisition features include candidate search, registration and profile creation, links to networking tools, requisition management, and enhanced on-boarding support. Goal Management provides the ability to manage goals and objectives at all organizational levels, cascade goals down through the organization, and align goals upward. Performance Management is designed to help the organization evaluate and measure workforce performance, as well as recognize, retain, and reward top performers. Compensation Management provides the capability to manage employee's total compensation, including pay-for-performance, salary planning and administration, and reporting and analytics. Succession Management allows the set up of organizational plans to backfill vacancies, and receive alerts when employees are ready for progression, or at risk of leaving. Learning and Development provides for role-based training functionality for administrators, instructors, managers, and employees, employee development plans, which are linked to training and automated skill and competency achievement based on training results.

Objectives –

- Enable key Empowering Effective Teachers (EET) initiatives
- Support strategic district human capital management initiatives

Phases/Timeline – This is a multi-year, multi-phase project. The initial phase, beginning in the fall of 2010, will enable the revised EET teacher evaluation system utilizing the Performance Management module. Other modules will be rolled out as needed to support EET and other district initiatives.

Manpower Requirements – Existing Technical and Functional resources will be utilized, in addition to limited consulting resources from Lawson.

Monitoring Success – Project plans and budgets are/will be in place for each phase of the project and will be managed by a project manager.

Estimated Costs –

- Software Costs – \$832,000 for license, plus annual maintenance fee
- Hardware Costs - \$100,000 (Windows servers)
- Managed Services - \$250,000, 1 year only

Project Information Sheet

Project – Student Information System (SIS)

Initiative Area – Transactional, Support, Training

Description – Increasing demands for providing real-time access to student data by administrators and classroom teachers has driven the development and migration of the district's Student Information System (SIS) from a non-Windows system to a web based interactive information system. This district enterprise solution referred to as the Electronic Access to Student Information (EASI) is accessible through the district's WebSphere Portal Education Connection (EdConnect), the gateway to district enterprise applications. EASI includes JAVA based web applications, WebSphere Portal Technology, Enhanced system performance and response time, as well as an improved look and feel. New on-line SIS modules in EASI are:

Discipline Module

The EASI Discipline System is a new real-time web application for creating and processing incident and student discipline referrals, which eliminates the need for manual processing with referral forms. Through this application all school staff and bus drivers have online access to document an incident and generate a referral. The application has indicators to reflect the status of the action so both teachers and administrators at the school and district level can remain aware of the status and action taken.

Attendance Modules

The EASI Daily Attendance and Period by Period Attendance Systems are real-time web based automated attendance applications designed so teachers may electronically record student homeroom daily attendance and classroom period attendance, eliminating the need for paper attendance cards. Once a teacher submits and confirms the daily or period attendance, an attendance record is immediately created in the student information system. The Daily Attendance system provides attendance clerks and school administrators the ability to monitor when teachers submit daily attendance and it provides the option to print attendance class rosters for substitute teacher use. The Period Attendance system allows the tracking of students skipping class or students consistently tardy to class or out on school business. Future development includes importing student pictures that can be used for teachers to take attendance by seating charts.

Individual Education Plans (IEP)

The development of the IEP in EASI will provide school and district staff with the ability to provide all exceptional students with the opportunity to acquire the knowledge and skills necessary to realize their potential through the provision of individual specialized support.

Progress Report Creation Modification

The current procedure for creating Progress Reports for students in grades 6 – 12, includes the use of Attendance Gathering and Grade Gathering Documents in a manual intensive process using special multipart forms. The new process for gathering grades will eliminate the manual process and need for forms and transfer the grades electronically from the Edline gradebook package.

Objectives – To meet the growing needs for efficient access to Student data in the most cost effective means. The strategic direction is to continue the new development and migrations of the SIS to EASI and the EdConnect portal.

Phases / Timeline – Multi-year with continued progress until the SIS is migrated from CA, Inc. software to Java in the WebSphere Portal. Phases planned, prioritized and implemented based on input from district staff and school based users of the SIS.

Manpower – Existing district staff with potential for limited staff augmentation and vendor support.

Monitoring Success – Feedback from staff and SIS users involved in planning, software testing and training will guide the system migration and provide a measure of success.

Estimated Costs – Use of existing district manpower and software as resources for in-house development reduces the cost in comparison of purchasing a new SIS.

Project Information Sheet

Project – System Capacity Upgrades

Initiative Area – System Capacity

Description – The following initiatives respond to the increased demands for quicker response times and ability to monitor, scan, store, and backup more data.

1. Implement a solution for all district sites to provide higher access speeds.
2. Upgrade the district's wide area network routers.
3. Upgrade enterprise mass data storage.
4. Implement DB2 software tools to monitor and control district data.

Objectives

- Maintain sufficient backup storage for current systems and stabilize performance.
- Increase the district's enterprise storage capacity and performance.
- Provide bandwidth sufficient to meet the requirements and needs of the district. Capacity available for 10 Mbps scalable to higher capacities for WAN connections.

Phases / Timeline

- Expand storage as needed when current levels are close to maximum capacity.
- Bandwidth –
 - Fall 2009 – issue Request for Proposal (RFP) following E-Rate requirements for telecommunication services.
 - January 2010 – Award bid and implement pilot at selected sites.
 - July 2010 – Procure higher capacity routers for E-Rate eligible sites.
 - July 2010 – Implement remaining sites in district.

Manpower – The Data Center operations manager will use existing personnel and contracted services to complete the project.

Monitoring Success –

- Systems have adequate backup storage without any down time in meeting district needs.
- End users report performance improvements with high availability.
- Central monitoring of performance shows efficient provision of capacity to district sites.

Estimated Costs

	Year 1	Year 2	Year 3
Computer Software			
Computer Hardware	700,000	50,000	50,000
Salary/Fringe/Adjustments			
Telecommunication Services	2,000,000	2,000,000	2,000,000
Travel, Supplies, and Other			
Total			

Project Information Sheet

Project – FirstClass Upgrades

Initiative Area – Communications and Training

Description – FirstClass is a groupware system that provides e-mail, web, collaboration and telecommunications services.

Objectives

- To meet the district alignment with the Empowering Effective Teacher Grant as it relates to district communication
- To meet the district goals for internal and external communication

Phases / Timeline – Implement

- Year 1:
 - Purchase additional FirstClass software licensing.
 - Purchase additional storage capacity.
 - Purchase offsite system recovery/redundancy.
 - Renew yearly maintenance and support agreement
- Year 2:
 - Renew yearly maintenance and support agreement
- Year 3:
 - Renew yearly maintenance and support agreement

Manpower Requirements – The system is currently maintained by an assistant manager, one technology resource teacher and one clerk IV. The current staffing meets the current management needs.

Monitoring Success

- System down-time is minimal to zero

Estimated Costs

	Year 1	Year 2	Year 3
Computer Software	\$75,000	\$75,000	\$75,000
Computer Hardware			
Salaries and Fringe			
Contracted Services	\$50,000	\$50,000	\$50,000
Travel, Supplies, and Other			
Total			

Information and Technology Division Goals and Objectives

The Information and Technology Division departments have developed goals and objectives focused on safety, student achievement, human resource management, and financial performance. The documents detailing each department's goals and objectives are attached.

Following is a summary of our focus areas for our division. These focus areas will include all of our departments in the plans and programs designed to accomplish our goals and objectives.

Safety will be enhanced for students and staff through two new implementations:

1. Site sign-in system that will automate visitor sign-in at schools as well as replace the current manual process of collecting information on volunteer hours.
2. Internet safety training presentations will be provided for employees and families as part of our outreach program.

Student Achievement will be facilitated by two of our planned programs:

1. A formative assessment system will be implemented that will help teachers, principals, and district staff monitor student progress. This assessment system will interface with the Instructional Planning Tool to provide efficient access to information.
2. All departments will focus on maintaining system capacity to ensure that district-hosted educational resources are available 98% of the time from 8:00 AM to 10:00 PM Monday through Friday.

Human Resource Management will be enhanced:

1. Managers will increase activities to recruit and retain quality employees.
2. Cross-training and staff augmentation will be utilized to fill voids created by difficult-to-fill vacancies.
3. Effectiveness of the strategies will be measured by the number of vacant positions as a percentage of all positions.

Financial Performance will be measured in two primary focus areas:

1. Additional funding sources such as E-Rate and grant funding will be developed.
2. Expenses will be minimized while maximizing value through such measures as quarterly review of HP technology partnership

Governance

Policies and Procedures

A review of current board policies and procedures affecting technology is an ongoing responsibility. As access to information expands through the use of technology, policies and procedures require updating to be in compliance with state and federal guidelines and to specify best practices for the district. Many policies that govern activities for students, human resources, business services, or auxiliary services also serve as the policies for technology. The school board approved a contract with NEOLA, Inc. to assist district administration with a total revision of the District Policy Manual. Since that date, district divisions have reviewed current laws and policies to provide these revisions. Revisions were provided to and discussed by school board members during board workshops. The policies provided reflect the work completed during these meetings. Advertisements of these policies, as required by law, were published in the Florida Administrative Weekly, Florida Sentinel Bulletin, La Gaceta, St. Petersburg Times, and The Tampa Tribune and were available on our district website with opportunity for comments. Use the following link to connect to the resulting policies and procedures: <http://www.neola.com/hillsborough-fl/>

Summary

This plan establishes clear goals and strategies for using telecommunications and Information technology to improve education services. The district recognizes the need for professional development and maintains a training strategy to ensure that staff knows how to use technologies to improve education.

The primary objective of this plan is to support the initiatives specified in the District Strategic Plan. The District Strategic Plan provides an evaluation process that enables the district to monitor progress toward district goals and make adjustments in response to emerging technologies and opportunities as they arise.

Appendix A: Wide Area Network Estimated Budget FY 2010-2011

Service Description	Erate Eligible	Monthly Charge	Tax	Qty	Monthly Total	Eligible Erate Discount 70%
District Administration Building - ROSSAC						
Verizon 1 GB Increments host site - ROSSAC	Yes	\$1,590.00	\$71.55	2	\$3,323.10	\$2,326.17
Erate Eligible: Schools, Non-instructional Facilities						
Verizon 10 Mbps	Yes	\$370.00	\$16.65	144	\$55,677.60	\$38,974.32
Verizon 100 Mbps	Yes	\$564.00	\$25.68	91	\$53,660.88	\$37,562.62
Non-Erate Eligible						
Verizon 10 Mbps	No	\$370.00	\$16.65	46	\$17,785.90	
Verizon 100 Mbps	No	\$564.00	\$25.68	2	\$1,179.36	
District Internet Connection						
tw telecom 1 Gbps	Yes	\$10,718.00	Inc	1	\$10,718.00	\$7,502.60

WAN Monthly Total:

\$142,344.84 \$86,365.71

WAN Annual Total:

\$1,708,138.08 \$1,036,388.47

Estimated ERATE funding request for eligible sites:

\$1,036,388.47

Estimated WAN District Expense FY 2010-2011 >>>>>

\$671,749.61