

Computer Replacement Plan



Guilford
County Schools

Revised July 2009

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We envision an educational environment in which technology serves as a vital link between students and the mastery of a common core of knowledge necessary for active participation in a global society. All learners – students, educators, parents and the general community – should have equitable access to the technologies necessary for the development of lifelong learning skills.

Developed by the Guilford County Schools Technology Task Force in 1994

Technology is a priority for Guilford County Schools. Technology should be available to all students, teachers, administrators and support staff. Students should have adequate access to technology and ample opportunities to learn the computer skills they will need. They should also have equitable opportunities to use resources that enhance the curriculum such as multimedia software, the Internet and other online resources.

Technology must be integrated in the management of the classroom and the management of the district business functions. All computers need to be an integral part of the wide area network to provide efficient communication tools and better access to data for decision-making.

A standard base of hardware and software should be provided for all schools and central office sites. It should be reasonably up-to-date and have the capability to support new software solutions that support the administrative and instructional programs of the district.

During the fall of 2000, a technology planning committee comprised of board members, principals, media specialists, teachers and technology staff revised Guilford County Schools' Long-Range Technology Plan. An important goal of the 2000 Technology Plan was to implement a five-year replacement schedule for all computers.

This document outlines a computer replacement plan for all schools and central office sites. Guilford County Schools must replace approximately 5000 computers each year with an expected cost of more than \$5 million annually.

Implementation of this plan will depend on funding. Technology may be funded from a variety of sources – local funding, capital outlay, state technology funding, federal grants, Title I, ERate reimbursements, bond renovation projects and PTA assistance.

All hardware and software purchases must follow the standards as defined in the Guilford County Schools' Technology Policies, Procedures and Standards Manual and as approved by the Technology Applications Review Committee (TARC). The Technology Services Department will continue to adopt, review and update standards for the purchase of all hardware and software used in the district.

Hardware has been approved by the TARC based on the following criteria:

- Initial cost
- Impact on network and support
- Vendor economic strength, support, and expertise
- Product/technology maturity and availability
- Interoperability
- Use of industry-recommended design standards
- Documentation
- Security and internal control designs
- Learning curve and training requirement for end users
- Consistency with business and education strategies

Software is divided into two categories, standard software that is provided on all computers in a particular grade/area/department and approved software that may be purchased by schools or departments.

Standard management software, Internet access, email and other appropriate applications are loaded on all computers. In addition, age-appropriate instructional software that meets the goals of the district is installed on all classroom computers. An updated list of standard software is included on the Technology Services section of the Guilford County School's main web site.

In addition to the standard software that is provided to all sites, schools may purchase software to use by grade-level or department. This software must be approved by the TARC. A list of currently approved software is also listed on the web site.

Replacement Plan

2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Alamance Archer Bluford Foust Jamestown Oak Hill Shadybrook Southern Sumner Vandalia	Fairview Gillespie Hunter Jesse Wharton Jones Madison Murphy Oak Ridge Pilot Rankin Triangle Lake Washington	Brooks Colfax Irving Park Jefferson Joyner McLeansville Monticello Southwest Sternberger Summerfield	Falkener Florence Gibsonville Morehead Newcomers Oak View Peck Peeler Sedgefield Stokesdale	Alderman Allen Jay Brightwood Cone Frazier Gen Greene Guilford Montlieu Northern Northwood Pearce Reedy Fork Wiley	Bessemer Claxton Erwin Gateway Hampton Johnson Street Kirkman Park Lindley McIver Millis Road Nat Greene Parkview Pl. Garden Sedalia Union Hill

Replacement Strategy

This document outlines a computer replacement plan for all elementary schools. Implementation of this plan will depend on funding. Special projects, completion of bond renovations and grant funding may alter the scheduled replacement of equipment at individual sites. However, every effort will be made to follow the intent of this plan.

The replacement schedule has been developed to replace all computers in all elementary schools on a school-by-school basis in a five to six-year time frame. At that time, school-based application servers will be replaced.

School administration includes principals, assistant principals, office support staff, SROs, counselors, social workers, curriculum facilitators, SIMS operators and other positions supporting the operation of the school. Their computers will be replaced at the same time that the school's classroom computers are replaced. Refurbished equipment may be used in some of these installations.

Schools located on college campuses or other facilities that are not owned by Guilford County Schools may have limited capabilities but are included in the replacement schedule.

Technologies such as PDAs, flat screen monitors, digital cameras, interactive boards, projectors, scanners, TVs or VCRs may be provided through bond or grant funding but are not addressed in this replacement plan.

Standard Base of Equipment

A standard base of equipment has been defined for all elementary schools. The standard outlines labs, classroom computers, media center equipment and school administration.

If a school does not meet the standard base of equipment when Technology Services begins the replacement, additional computers will be provided to move the school to that standard.

If a school has more computers than the standard, special consideration may be given to maintaining grant-provided or other additional computers that are relatively new and meet minimum network standards.

Desktop software will be installed at the current Guilford County Schools' approved standard versions (such as *Microsoft Windows XP, Office 2007, Internet Explorer 7.0*). It may not be updated throughout the schedule unless district initiatives or network operability necessitates.

If a school has purchased software, PDAs, or other devices that do not operate properly with the new equipment, it is the responsibility of that school to purchase the necessary upgrade or replacement.

The following table indicates which standard equipment is replaced for all elementary schools and lists the new standards for schools included in the Bond Renovations:

Standard Base of Equipment	Elem Schools	Elem Schools Included in Bond Renovations
Computer lab with 26-30 networked computers (depending on size of room) and laser printer	Yes	Yes
2nd computer lab for larger schools	No	No
One networked computer and printer in small classrooms or activity-type classes (PreK, Art, Music, Resource, ESL)	Yes	Yes
Two networked computers and one printer in resource classrooms	Yes	Yes
Three networked computers and one printer in all regular classrooms	Yes	Yes
Media automation system with circulation desk computer, two student workstations, one office computer and one laser printer	Yes	Yes
Mini-lab of five networked computers in media centers	Yes	Yes
Computer and printer for workrooms	No	Yes

Networked computer for every administrator's desktop with printer	Yes	Yes
Computers for cafeteria	No	Yes
Laser printer for treasurer and reception area	Yes	Yes
Standard age-appropriate software for all computers	Yes	Yes
Standard desktop operations, protection and productivity software for all computers	Yes	Yes
Internet access for all computers	Yes	Yes
Appropriate servers and networking switches	Yes	Yes
Network cabling (at least four network connections in all regular size permanent classrooms)	Yes	Yes
Network cabling or wireless connection in all mobile units	Yes	Yes
Network cabling (one connection in every office)	Yes	Yes
Laptops for checkout	No	Yes
Scanners and digital cameras for media centers and labs	No	Yes
Flat screen monitors	No	No
Interactive wireless pad in every classroom	No	Based on Funding
SmartBoard and projector	No	Based on Funding
Document camera in every classroom	No	Yes
DVD player in every classroom	No	Yes
Audio enhancement system in every full-sized classroom	No	Yes
Large screen monitor in every classroom with attachment to teacher's computer	No	Yes
TV distribution system with cable or satellite access	No	Yes
Voice mail and telephone in every classroom	No	Yes

Surplus Equipment

All older desktop computers will be removed. Support is improved if all computers at one location have the same capabilities. The equipment that is removed will be sorted into two categories – surplus and used inventory. Equipment that does not meet minimum networking standards will be designated as surplus. Equipment that meets minimum standards will become used inventory. It may be used to provide equipment for additional positions at other locations or by the repair center to replace older equipment in need of repair. It may also be used as repair parts to maintain older equipment in the district.

Equipment For Additional Positions

Throughout the schedule, Technology Services will make every effort to provide a computer and printer, similar to those currently installed in the school or department, for additional positions. That request can be made through the school's Technology Contact Person. Equipment may not be provided for all itinerant positions.

School Purchases

Schools are encouraged to purchase additional pre-approved computers, printers, laptops, software or other technologies such as projectors and digital cameras. School-purchased hardware and software should be selected with the consideration of compatibility with installed systems. Technology Services may not be able to upgrade operating systems or add memory throughout the schedule to accommodate the new devices nor replace them in the next rotation.

If a school is interested in purchasing any computer-related equipment, they should call Technology Services. Specifications and current quotes for computer hardware change frequently.

All hardware and software purchases must follow the standards as defined in the Guilford County Schools' Technology Policies, Procedures and Standards Manual ([link](#)) and approved by the Technology Applications Review Committee (TARC). A list of currently approved software is posted on the GCS web site.

Middle/High Schools

Computer Replacement Plan

Replacement Plan

2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Allen Griffin HP Central NEMS	Br Summit M Dudley EGMS Guilford M NWMS Page SWMS Academy HPC HS Ahead Scales-GSO Twilight	Aycock Lincoln Kiser Kernodle Smith Gboro College GTCC-East GTCC-HP GTCC-James	Andrews Ferndale Hairston NEHS NGMS SGHS SWHS WGHS Welborn	Jackson Jamestown Mendenhall NGHS NWHS SEMS SGMS Academy-Smith Guilford Early	EGHS Grimsley Ragsdale SEHS Weaver A&T Bennett Scales-HP

Replacement Strategy

This document outlines a computer replacement plan for all middle and high schools. Implementation of this plan will depend on funding. Special projects, completion of bond renovations and grant funding may alter the scheduled replacement of equipment at individual sites. However, every effort will be made to follow the intent of this plan.

The replacement schedule has been developed to replace all computers in all middle and high schools on a school-by-school basis in a five to six-year time frame. At that time, school-based application servers will be replaced.

School administration includes principals, assistant principals, office support staff, SROs, counselors, social workers, curriculum facilitators, SIMS operators and other positions supporting the operation of the school. Their computers will be replaced at the same time that the school's classroom computers are replaced.

Schools located on college campuses or other facilities that are not owned by Guilford County Schools may have limited capabilities but are included in the replacement schedule.

Technologies such as PDAs, flat screen monitors, digital cameras, interactive boards, projectors, scanners, TVs or VCRs may be provided through bond or grant funding but are not addressed in this replacement plan. Equipment managed by the Career and Technical Education Department is not included in this plan.

Standard Base of Equipment

A standard base of equipment has been defined for all middle and high schools. The standard outlines labs, classroom computers, media center equipment and school administration.

If a school does not meet the standard base of equipment when Technology Services begins the replacement, additional computers will be provided to move the school to that standard.

If a school has more computers than the standard, special consideration may be given to maintaining grant-provided or other additional computers that are relatively new and meet minimum standards.

Desktop software will be installed at the current Guilford County Schools' approved standard versions (such as *Microsoft Windows XP, Office 2007, Internet Explorer 7.0*). It may not be updated throughout the schedule unless district initiatives or network operability necessitates.

If a school has purchased software, PDAs, or other devices that do not operate properly with the new equipment, it is the responsibility of that school to purchase the necessary upgrade or replacement.

The following table indicates which standard equipment is replaced for all middle schools and lists the new standards for schools included in the Bond Renovations:

Standard Base of Equipment for Middle Schools	Middle Schools	Middle Schools Included in Bond Renovations
Computer lab with 26-30 multimedia networked computers (depending on size of room) and laser printer	Yes	Yes
2 nd computer lab	Yes	Yes
One networked computer and printer in small classrooms or activity-type classes (Art, Music, PE, Resource, ESL, Vocational)	Yes	Yes
One networked computer and one printer in all regular classrooms in middle schools	Yes	Yes
Additional computers based on the number of core classrooms to use at their discretion	Yes	Yes
Vocational labs	No – Not included in this plan	No – Not included in this plan
Media automation system with circulation desk computer, four student workstations and two office computers and one laser printer	Yes	Yes
Mini-lab of five networked computers	Yes	Yes

in media centers		
Computer and printer for workrooms	No	Yes
Networked computer for every administrator's desktop with printer	Yes	Yes
Computers for cafeteria	No	Yes
Laser printer for treasurer and reception area	Yes	Yes
Laser printer for guidance area	Yes	Yes
Standard age-appropriate software for all computers	Yes	Yes
Standard desktop operations, protection and productivity software for all computers	Yes	Yes
Internet access for all computers	Yes	Yes
Appropriate servers and networking switches	Yes	Yes
Network cabling (middle schools have at least four connections in all regular size permanent classrooms)	Yes	Yes
Network cabling or wireless connection in all mobile units	Yes	Yes
Network cabling (one connection in every office)	Yes	Yes
Laptops for checkout	No	Yes
Scanners and digital cameras for media centers and labs	No	Yes
Flat screen monitors	No	No
Interactive wireless pad in every classroom	No	Based on Funding
SmartBoard and projector	No	Based on Funding
Document camera in every classroom	No	Yes
DVD player in every classroom	No	Yes
Audio enhancement system in every full size classroom	No	Yes
Large screen monitor in every classroom with attachment to teacher's computer	No	Yes
TV distribution system with cable or satellite access	No	Yes
Voice mail and telephone in every classroom	No	Yes

The following table indicates which standard equipment is replaced for all high schools and lists the new standards for schools included in the Bond Renovations:

Standard Base of Equipment for High Schools	High Schools	High Schools Included in Bond Renovations
Computer lab with 26-30 multimedia networked computers (depending on size of room) and laser printer	Yes	Yes
2 nd computer lab	Yes	Yes
One networked computer and printer in small classrooms or activity-type classes (Art, Music, PE, Resource, ESL, Vocational)	Yes	Yes
One networked computer and one printer in all regular classrooms in middle schools	Yes	Yes
Additional allotment of computers based on the number of students enrolled to use at their discretion	Yes	Yes
Vocational labs	No – Not included in this plan	No – Not included in this plan
Media automation system with circulation desk computer, eight student workstations, two office computers and one laser printer	Yes	Yes
Mini-lab of ten networked computers in media centers	Yes	Yes
Computer and printer for workrooms	No	Yes
Networked computer for every administrator's desktop with printer	Yes	Yes
Computers for cafeteria	No	Yes
Laser printer for treasurer and reception area	Yes	Yes
Laser printer for guidance area	Yes	Yes
Standard age-appropriate software for all computers	Yes	Yes
Standard desktop operations, protection and productivity software for all computers	Yes	Yes
Internet access for all computers	Yes	Yes
Appropriate servers and networking switches	Yes	Yes
Network cabling (high schools have at least two network connections in all regular size permanent classrooms)	Yes	Yes
Network cabling or wireless connection in all mobile units	Yes	Yes
Network cabling (one connection in every office)	Yes	Yes
Laptops for checkout	No	Yes
Scanners and digital cameras for media centers and labs	No	Yes
Flat screen monitors	No	No

Interactive wireless pad in every classroom	No	Yes
SmartBoard and projector	No	No
Document camera in every classroom	No	Yes
DVD player in every classroom	No	Yes
Audio enhancement system in every full sized classroom	No	Yes
Large screen monitor in every classroom with attachment to teacher's computer	No	Yes
TV distribution system with cable or satellite access	No	Yes
Voice mail and telephone in every classroom	No	Yes

Surplus Equipment

All older desktop computers will be removed. Support is improved if all computers at one location have the same capabilities. The equipment that is removed will be sorted into two categories – surplus and used inventory. Equipment that does not meet minimum networking standards will be designated as surplus. Equipment that meets minimum standards will become used inventory. It may be used to provide equipment for additional positions at other locations or by the repair center to replace older equipment in need of repair. It may also be used as repair parts to maintain older equipment in the district.

Equipment For Additional Positions

Throughout the schedule, Technology Services will make every effort to provide a computer and printer, similar to those currently installed in the school or department, for additional positions. That request can be made through the school's Technology Contact Person. Equipment may not be provided for all itinerant positions.

School Purchases

Schools are encouraged to purchase additional pre-approved computers, printers, laptops, software or other technologies such as projectors and digital cameras. School-purchased hardware and software should be selected with the consideration of compatibility with installed systems. Technology Services may not be able to upgrade operating systems or add memory throughout the schedule to accommodate the new devices nor replace them in the next rotation.

If a school is interested in purchasing any computer-related equipment, they should call Technology Services. Specifications and current quotes for computer hardware change frequently.

All hardware and software purchases must follow the standards as defined in the Guilford County Schools' Technology Policies, Procedures and Standards Manual ([link](#)) and approved by the Technology Applications Review Committee (TARC). A list of currently approved software is posted on the GCS web site.

Replacement Plan

2009-10	2010-11	2011-12	2012-13	2013-14
	Crossroads Washington Street Washington St. Lab (1)	Eugene FRC Psych Services	Maintenance Transportation Washington St. Labs (2)	Franklin Blvd Grimes Lee's Chapel English Rd. Offices

Replacement Strategy

This document outlines a computer replacement plan for all central office administration. Implementation of this plan will depend on funding. Special projects, completion of bond renovations and grant funding may alter the scheduled replacement of equipment at individual sites. However, every effort will be made to follow the intent of this plan.

The replacement schedule has been developed to replace all computers used by central office administrators on a building-by-building basis in a four-year time frame.

Central office administration includes those positions that need computer applications for their job functions and are assigned to central office buildings that are connected to the Guilford County Schools' wide area network. Buildings included in this plan are: Eugene St, Franklin Blvd, Maintenance, Transportation, Grimes St, Lee's Chapel, FRC, English Rd Offices and Psychological Services.

Employees located at facilities that are not owned by Guilford County Schools or facilities that house only a few employees may have limited capabilities and are not included in this replacement schedule.

Technologies such as PDAs, flat screen monitors, digital cameras, interactive boards, projectors, scanners, TVs or DVDs are not addressed in this replacement plan.

Executives or "power users" that have additional computer requirements may not follow this replacement plan.

District application servers will be managed and replaced by Technology Services. Servers that were purchased with department funds for specific applications will continue to be the responsibility of that department to replace.

Standard Base of Equipment

A standard base of equipment has been defined for all central office administrators. The standard outlines desktop computers, standard monitors and printers. Technology Services will make every effort to replace all networked computers on a one-to-one basis. Laptops will be replaced only if the unit is used as the employee's primary desktop computer. All other laptop replacements are the responsibility of the

department. Purchase of or replacement of flat-screen monitors, PDAs and personal laser printers are also the responsibility of each department.

The following table indicates which standard equipment is replaced for all central office departments:

Standard Base of Equipment	Central Office
Networked computer and standard monitor for every administrator's desktop	Yes
Standard desktop operations, protection and productivity software for all computers	Yes
Internet access for all computers	Yes
Appropriate servers and networking switches	Yes
VPN Access	Yes if access is job requirement
Network cabling (one connection in every office)	Yes
Laptops	No – Unless used as primary desktop
Voice mail and telephone	Yes
BlackBerry devices for email access	Yes if department provides funding

Desktop software will be installed at the current Guilford County Schools approved standard versions (such as *Microsoft Windows XP, Office 2007, Internet Explorer 6.0*). It is important that versions of software such as Office be compatible with school environments that may be three to five years old. Software may not be updated throughout the schedule unless district initiatives or network operability necessitates.

Remote access to Guilford County Schools' network is available through Virtual Private Networking (VPN) accounts. These accounts are available to all central office employees that are required to work remotely. VPNs can only be installed on computers that are owned by the district.

If a department has purchased software, PDAs, or other devices that do not operate properly with the new equipment, it is the responsibility of that department to purchase the necessary upgrade or replacement.

Surplus Equipment

All older desktop computers will be removed. Support is improved if all computers at one location have the same capabilities. The equipment that is removed will be sorted into two categories – surplus and used inventory. Equipment that does not meet minimum networking standards will be designated as surplus. Equipment that meets minimum standards will become used inventory. It may be used to provide equipment for additional positions at other locations or by the repair center to replace older

equipment in need of repair. It may also be used as repair parts to maintain older equipment in the district.

Equipment For Additional Positions

Throughout the schedule, Technology Services will make every effort to provide a computer and printer access, similar to those currently installed in the school or department, for additional positions. That request can be made through the department's Technology Contact Person. Equipment may not be provided for all itinerant positions.

Department Moves

Entire departments are often moved from one central office location to another. When this happens, users will be moved to the same type of equipment currently in use at their new location.

Department Purchases

Departments are encouraged to purchase additional pre-approved computers, color laser printers, laptops, software or other technologies such as projectors, digital cameras and PDAs. Department-purchased hardware and software should be selected with the consideration of compatibility with installed systems. Technology Services may not be able to upgrade operating systems or add memory throughout the schedule to accommodate the new devices nor replace them in the next rotation.

If a department is interested in purchasing any computer-related equipment, they should call Technology Services. Specifications and current quotes for computer hardware change frequently.

All hardware and software purchases must follow the standards as defined in the Guilford County Schools' Technology Policies, Procedures and Standards Manual ([link](#)) and approved by the Technology Applications Review Committee (TARC). A list of currently approved software is posted on the GCS web site.