

Maine School Administrative District #75
Identify Necessary Technology & Coordinating with other Resources

“ . . . a description of how the applicant will coordinate activities funded through the Ed Tech program with technology related activities supported with funds from other sources.”

Introduction. This document provides a description of Telecommunication and Technology services, hardware, software, and support staff provided by the District that may be coordinated to support technology related activities. All technology related projects must be coordinated through the District Technology Department to ensure supportability with existing infrastructure and technology standards.

Technology Budget. The District supports a \$974,000 technology budget representing 3% of the overall district budget of \$32,000,000 (see [Appendix “District Technology Budget FY04-05”](#)). A detailed plan and budget is approved to support the network and information system infrastructure replacement. (See appendices “[Infrastructure Budget](#)” and “[Infrastructure Standards](#)”) A detailed plan and budget is approved to support the replacement of desktop computers across the district. (See appendices “[Computer Equity Plan](#)” and “[Computer Equity Plan Budget](#)”).

Telecommunication Services. The District purchases contracted support of its telephone services. Staff members utilize telecommunication services to communicate with parents, community members, and organizations affiliated with the District. Cell phone and pager services offer critical communications support ensuring fast emergency response times during crisis.

Technology Services. The District offers a variety of technology services (see [Appendix “District Technology Services”](#)) at an Enterprise level (services that are provided to all staff and students of the District), at a Site level (services that are provided specific to a school or activity), and at the Workstation level (services that are provided to individual computers). While some services are easily recognizable as necessary, others are required as background services that provide support.

Technology Hardware. The technology services are delivered by a variety of equipment (see [Appendix “Asset Counts”](#)) across a wide-area network that links the District Office, Buildings and Grounds, Transportation, and the eight schools that make up the District.

1. **Network Hardware.** The routers that guide the network traffic are Cisco Model 2514s which are no longer supported by Cisco and will be replaced as resources become available. The switches that distribute network traffic within each site are primarily Hewlett Packard ProCurve models, although there are a small collection of low-end, unreliable NetGear (provided by MLTI), Linksys, and D-Link models also (see [Appendix “Network Hardware Report”](#)) that are being phased out.
2. **Servers.** The servers represent a variety of makes and models, with efforts to standardize on Dell PowerEdge models as part of the Technology Department’s goal (see [Appendix “Server Report”](#)).
3. **Printers.** Printers are almost exclusively Hewlett Packard 4000 series network models that are distributed throughout each site to accommodate print requirements (see [Appendix “Printer Report”](#)).

4. **Workstations.** Workstations are a variety of Apple models mixed with a wide variety of PC-Compatible computers (see [Appendix "Workstation Report"](#)). Establishing workstation standard(s) are part of the Technology Department goals to facilitate repair and maintenance and to reduce training requirements on Technology staff.

Technology Software. The technology services are delivered by a variety of software applications. While not all-inclusive, the major systems are presented below:

1. **Server Operating Systems.** Novell NetWare provides the majority of services to the District, managing user login, private and shared data storage, printing, and workstation policies. Windows NT Server and 2000 Server provide additional services including domain control, SQL Database support, web support . . . Though not a true Server Operating System, there are a few Apple workstations operating as servers in support of specific applications like Winnebago. These "servers" are being phased out.
2. **Workstation Operating Systems.** All workstations are supported by various versions of either Apple or Windows Operating Systems. A goal of the Technology Department is to standardize on versions to facilitate training and reduce support overhead. The workstation Operating Systems provide additional functionality including Internet browsing and multi-media support.
3. **Server Security.** The district is using Border Manager, CyberPatrol, and various other industry standard security systems. Servers are patched to the current vendor supplied security updates.
4. **School Information Systems.** The District is currently supporting two systems to manage student and teacher information, Abante and SchoolMaster. Additionally, the Libraries use the software tool, Spectrum, to catalog and manage their library resources. (see [Appendix "Abante"](#))
5. **Desktop Productivity Suites.** The District is currently supporting multiple desktop productivity suites. AppleWorks is supported to provide compatibility with ClarisWorks (its predecessor) documents. Microsoft Office is supported with a pilot project evaluating the use of OpenOffice.
6. **Terminal Emulation.** Citrix Metaframe provides terminal emulation support for full-client e-mail access for Apple users, as well as fixed lab and library support for Internet access and Desktop Productivity software.

Technology Support Staff. This section covers the duties necessary to support the services, hardware, and software currently used in the District without respect to current resources.

1. **Director.** The role of the Technology Director is to serve as the chief advisor to the District Superintendent and the School Board in all technology matters concerning the District including policies and projects. The Director provides guidance for all technology projects sponsored by functional managers within the district. The position serves as the central manager of the technology staff, providing guidance and determining policy and procedures within department to direct efforts in support of District goals. The Director is responsible for planning and executing the Department's budget as well as providing recommendations on technology purchases initiated outside the Technology Department to ensure they meet with desired goals and are able to integrate with the existing infrastructure.

2. **Server Manager.** The Server Manager is responsible for the maintenance and configuration of all servers supporting the District. Responsibilities include backup and recovery, service integrity, post office support for the e-mail repository, and other activities that ensure daily operation of services.
3. **Network Manager.** The Network Manager is responsible for the maintenance and configuration of all District owned network hardware across the wide area network and communicates with the commercial service provider to re-establish failed links. The position also manages the static (fixed) Internet Protocol Addresses that are assigned to equipment as needed to avoid network address contention.
4. **Database Administrator.** The Database Administrator controls access to the data stored in various School Information Systems, designs and integrates systems as necessary, and ensures backups of data files and logs are maintained.
5. **Help Desk Manager.** This position is responsible for managing the automated Help Desk, assigning work to and supervising the Customer Support Technicians, and analyzing the data to identify training requirements for District staff and technicians.
6. **Customer Support Technicians.** The technicians respond to problems as they are submitted to the District HelpDesk system. They are responsible for resolving problems at the workstation and assisting with troubleshooting problems with the network or technology services. A goal of the Technology Department to provide equitable service across the District is to have a technician assigned to each site who can provide reliable, responsive support.

7. **Additional Positions.**
 - a. **MLTI Project Manager.** This is position necessary to manage the State initiative where there is a potential for deploying over 1800 laptops in support of one-to-one computing. Duties of this position include inventory management of the laptops, chargers, and batteries, as well as the wireless base stations and switches provided by the state, hard drive image configuration management as local requirements are added to the image provided from the state, and responding to student and teacher issues that are outside the scope of general support.
 - b. **District WebMaster.** Because the District sponsors publicly accessible web pages that are subject to Federal regulations it requires a position to manage the information published. Although the position is not required to be affiliated with the Technology Department, there are often benefits to their direct association. This position is responsible for ensuring compliance with the Section 508 regulations concerning handicap accessible web pages, pre-screening web pages for FERPA and Child Internet Protection Act violations before publication, and checking the content to ensure the documents are designed for efficiency and speed minimize their network bandwidth requirement.
 - c. **Technology Integrator.** Another necessary position that does not have to be associated with the technology department but is critical to support the technology goals is that of the Technology Integrator. This position would work with curriculum focus groups to define strategies for integrating technology into their curriculum and assist with effecting those goals. Additionally, the individual would serve as a mentor to provide training of the integration strategies and methods.