

Maine School Administrative District #75 Technology Types and Costs

“ . . . a description of the type and costs of technology to be acquired with Ed Tech funds, including provisions for interoperability of components.”

Introduction. This document provides a description of Technology services, hardware, software, and support staff required to support technology projects within the District. All District technology projects are planned and evaluated using a detailed planning process. The process ensures success by addressing all aspects of the new technology system. (See appendices [“Project Process”](#), [“Project Assessment Narrative”](#) and [“Project Assessment Checklist”](#))

E-rate Funds. E-Rate is a discount plan for telecommunications, Internet access, and internal connections for libraries and schools . It arises out of Universal Service provisions of the Telecommunications Act of 1996. Rules for implementation of discounts, ranging from 20% to 90% off the best regular price based on community economic conditions (measured by federal school lunch eligibility), are set up by the Federal Communication Commission. The District utilizes the E-Rate program to reduce costs associated with telecommunications, including telephone, ATM and Internet services. Future hardware and infrastructure initiatives may become part of E-Rate. This depends largely on the District’s eligibility for discounted services and E-Rate funding commitments. (See [Section “Coordinating With Other Resources”](#), and appendices [”Infrastructure Maintenance of Effort Pan Budget”](#), and [“MSAD75 IT Services”](#))

Discounted services allow the District to allocate financial resources to support network services in the form of network hardware, servers, information systems and advanced support staff. The most critical service E-Rate discounts allows us to provide is advanced telecommunications technical support staff. This is a critical service as it provides support to complex telecommunications systems requiring advanced training and experience to sustain. (See [Section Innovative Delivery Strategies](#))

1. **Fiscal Year 03-04.** The District utilized the savings from the E-Rate program to provide advanced network support position. This position is critical in developing and maintaining the district’s core infrastructure, maintaining an accurate inventory, and supporting the Total Cost of Ownership (TCO) project. The outcomes from this year’s program are significant including the development of a detailed Infrastructure Replacement plan and the documentation of existing equipment configurations.
2. **Fiscal Year 04-05.** The District will continue to utilize the savings from the E-Rate program to provide advanced network support. The position will continue to play a critical role in developing and maintaining the district’s core infrastructure, maintaining an accurate inventory, and supporting the TCO project. Additional goals for 04-05 will be the implementation of the first of the three-year Infrastructure Replacement plan. This will be a enormous task that will require the involvement of nearly every staff member at some level to adjust and or learn to access an entirely new system.
3. **Fiscal Year 05-06 through 06-07.** The District will continue to utilize the savings from the E-Rate program to provide advanced network support. The position will continue to play a critical role in developing and maintaining the district’s core

infrastructure, maintaining an accurate inventory, and supporting the TCO project. Additional goals for these two school years will be the implementation of the second and third year of the three-year Infrastructure Replacement plan. It will be critical during these two years to evaluate and make necessary modifications to the Infrastructure Replacement and develop a long-term Infrastructure Replacement and Maintenance plan.

Title IID. Title IID is part of the No Child Left Behind Act of 2001 - Part D--Enhancing Education Through Technology. Using Title IID resources, the District supports projects enhancing the research process, staff development and provides information delivery systems.

1. Fiscal Year 04-05 Grant – The Research Process: The Big6 Skills (See [Appendix “Title IID Application”](#))
2. Projects in future years will be selected based on the requirements of the technology plan and existing requirements of the district. (See section below – Future Technology Initiatives)

Title V. Using Title V resources, the District supports projects enhancing communications, staff development, hardware for instructional use, and provides information delivery systems.

1. Fiscal Year 04-05 Grant –Collaborative Staff Development for Technology (See [Appendix “Title V Application”](#))
2. Projects in future years will be selected based on the requirements of the technology plan and existing requirements of the district. (See section below – Future Technology Initiatives)

Future Technology Initiatives. This section describes the technology initiatives identified by the Technology Department as short-term needs.

1. Server/Services Upgrade Plan: We have identified a five-year replacement cycle for servers and have planned for future upgrades based on that assumption (see Appendix F1 – “Server Upgrade Schedule”). However, the current plan doesn’t factor in servers that are currently paid for by other departments or current projects that are not expected to be replaced due to their high price tag. Some services and their approximate costs are listed below.

Testing Lab

We currently don’t have a testing lab, so all major application upgrades will be performed in the production environment. A test lab would not only allow us to thoroughly test outside the production environment, but would allow us to have a server readily available if one of the production servers completely fails. This should ensure minimal downtime/loss of network services. Additionally, a test lab would also allow us to test potential new services and how those services would fit within our current framework.

Testing Lab Cost Worksheet:

One server, three workstations

\$5,700

Citrix Metaframe: Centralized Resources

A complete upgrade to our Citrix Metaframe infrastructure, coupled with general network renovations, would improve collaboration tools across the District and allow the District to provide more applications to disparate clients. As an example, some Mac workstations could potentially use Microsoft Office applications through Citrix, effectively reducing the costs to deliver standard applications. Also, Mac clients using scaled-down e-mail clients could access the full Windows-based client via Citrix, which would provide them with additional tools like task management, document management, and a familiar interface. In short, it’s likely that Citrix services will be lost if funds are not available.

Citrix Cost Worksheet:

Based on the existing implementation of Citrix in the District, the cost to add 3 high-quality servers, including the operating system, licenses, and installation charges will be approximately **\$45,000.**

2. Infrastructure Upgrades: The District has been struggling with an outdated infrastructure, which has been especially apparent over the last year. There’s an unacceptable level of dropped connections, access issues, and infrastructure problems. District communications, in terms of collaboration and technical communications, has suffered because of the existing poor technology infrastructure. Some of the basic services (e.g., e-mail communications, Internet access) are intermittently poor or generally inaccessible. Significant improvements need to be made, but will extend beyond our current budget. Many of the remote sites need router upgrades, building wiring upgrades.

3. GWArchive: GWArchive, a product created by The Messaging Architects, is an enterprise-class solution for managing the archiving, retention, regulatory compliance, and retrieval of e-mail messages and documents electronically stored in the District’s GroupWise mailboxes. It will integrate seamlessly into our current GroupWise e-mail system since we currently use The Messaging Architects’ flagship product, GWGuardian+ AV to control Internet e-mail spam and viruses. GWArchive will also improve current GroupWise server performance, and will allow the District to enforce a corporate e-mail policy for regulatory and legal compliance.

Backing up e-mail on a daily basis does not meet certain regulatory statutes since some mail could technically be read, deleted, forwarded, or otherwise discarded prior to the nightly system backup. GWArchive would allow the District to retain all messages sent and received by the GroupWise e-mail system, including deleted mail. GWArchive isn’t an option, but it’s a necessity. We currently do not have funding for this project.

Cost Worksheet:

Software:	Unit	Extended (500 users)
FastTrack installation, config., and training	\$ 595.00	\$ 595.00
Export Manager w/ 1 yr. Support	\$2,995.00	\$ 2,995.00

Policy Manager per user (min. 200) w/ 1 yr. Support	\$ 10.00	\$ 5,000.00
Storage Manager w/ 1 yr. Support	\$4,995.00	\$ 4,995.00
Total Software Costs		<u><u>\$13,585.00</u></u>

Hardware:

Server for Export Manager and Policy Manager		\$ 3,900.00
Server for Storage Manager		\$ 3,900.00
PowerVault Network Attached Storage w/ fourteen 36GB drives (plus three 36GB drives on server for a total of 612GB storage)		\$ 8,954.00
		<u><u>\$16,754.00</u></u>

Total Initial Project Software-Hardware Costs		<u><u>\$30,339.00</u></u>
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Recurring Costs (Yearly)

Yearly recurring costs for software maintenance, upgrades, and technical support (based on the configuration above) will be **\$3,247.50**.

4. TreeCast Enterprise for GroupWise Collaboration: TreeCast Enterprise is a GroupWise add-on that will allow the District to provide “conference-like” or “bulletin-board-like” collaboration seamlessly. The current limitations of GroupWise force the District to share collaborative folders in workgroups, rather than across the enterprise. Therefore, enterprise-wide bulletins and notifications have to be sent to everyone’s mailbox. Unfortunately, many of these types of communications aren’t applicable to everyone, nor do all staff want to receive these messages or notices. For instance, the only way to announce certain events globally is to e-mail everyone in the post office – certainly, many staff don’t care to receive notices regarding high school faculty meetings or middle school events.

Currently, in order to create a specific folder to share across the enterprise, a designated administrator must set up the folder and share it with everyone in the post office, as well as maintain the authorized users list associated with that folder. In turn, all users must “accept” the newly created folder and place it in their GroupWise cabinet. Problems arise because some users are confused with this process, and someone has to actively manage the user list as employees are hired or leave the organization. In terms of the pure administration of adding and deleting users associated with a shared folder, it’s not feasible for a District with over 4,000 potential users.

TreeCast effectively eliminates the need for an active administrator by allowing the Technology Department to create an enterprise folder based on NetWare group permissions, and it also allows us to push those enterprise folders without end-user

interaction. No training is needed for the end user and it will not be necessary to continuously maintain the shared folder resource. Because we actively maintain the NetWare groups when we add or delete users from the system, those changes will automatically propagate to the TreeCast system – no additional user maintenance will be necessary.

Through direct communications with OpenNet, the creator of TreeCast Enterprise, we have been able to secure the product at a cost of [price omitted due to agreement with vendor] – this product, for K-12 environments, retails for [price omitted in online document].

Cost Worksheet:

TreeCast Enterprise Software [price omitted in online document]

Yearly Maintenance/Upgrade Protection [price omitted in online document]

5. Procurement of Continuing Technology Training: Our work environment changes almost annually with regards to technology. With the ongoing training needs of users and administrators, having adequate technology training materials is crucial. These can take several forms. For end users, having up to date print and online subscription training resources gives them the flexibility to learn at their convenience. For technology administration positions that manage central systems, continuing training is now considered a job requirement; and sometimes it requires specialized training offsite. With these crucial systems in particular, the department should work to minimize its workload by entering into support and training contracts with vendors whenever possible.

6. Electronic Portfolios: Develop and implement a plan, including hardware, software and training, for K12 Electronic Portfolios. The Electronic Portfolios will serve as an expanding, electronic history of the students learning, growth and competencies. Teachers, parents and the student, will all be involved in the assessment process. The portfolio can include digitized artwork, writing samples, audio files and multimedia presentations. It is easily updated and transported, and can contain an ongoing assessment, documenting finished work and achieved goals in learning.