



## Information Technology – Fiscal Year 2025 Budget Overview

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Director of Information Technology

### Key Areas of Budget Responsibility

- I. Providing computing hardware, software, and technical support to all staff members and students
- II. Ensuring that the district's network and telecommunications systems are reliable and secure
- III. Providing audio-visual hardware and support to facilitate classroom instruction and school events
- IV. Supporting physical security systems such as keycards and surveillance cameras
- V. Providing data systems and ensuring their availability and security

### Key Budget Investments for Fiscal Year 2025

Personnel

Key investments of \$235,000

Included in this category are:

- 1.0 FTE for IT Project Manager, as demands on IT Department for implementation of technology programs for education and operational purposes are beyond capacity of current personnel, estimated salary \$125,000
- 1.0 FTE for a second IT Network Manager, as cybersecurity and network maintenance to ensure continuity of IT services and to protect student and staff confidential records has become substantially more demanding, estimated salary \$110,000
- These two positions are included in the initial Superintendent's FY25 Budget Recommendation

Cybersecurity

Key investments of \$193,000

Included in this category are:

- \$123K for managed security detection response service, providing 24x7 security monitoring of our network, risk assessment, and staff cybersecurity education resources
- \$47K toward maintenance & support for main town firewalls and related security services
- \$23K for laptops for student teachers & interns to enhance protection of student data
- The first two items above are included in the initial Superintendent's FY25 Budget Recommendation

Important: The items listed in the remaining categories below are not included in the Superintendent's FY25 Budget Recommendation of a 4.25% increase in IT, which covers year-to-year expenses, including hardware (student iPad program, educator laptops, etc.), software (PowerSchool, ParentSquare, etc.), and the network. The district is working with our municipal and SELCO partners in an effort to use alternative funding sources for these additional needs – otherwise, funds for other IT needs will need to be shifted for funding, or some/all will need to be deferred beyond FY25

#### Needs for Replacement of Aging Hardware

Key investments of \$694,000

- \$402K for replacement of phone system due to go end-of-life in early 2026 (includes cloud-based phone service, new handset hardware, network switches to support new network-based phones, interface hardware for PA systems and existing phone system, and \$140K in wiring expenses for older school buildings). This cost could be spread across multiple years with SELCO if upfront funding is not available.
- \$85K for replacement of core network switches at Sherwood, Oak, and SHS due to lose vendor security support in October 2025. Some components of these switches have started to fail.
- \$80K for classroom projector replacements at Spring Street & Floral Street due to manufacturer no longer making replacement bulbs
- \$54K for replacement of SHS engineering computer lab, as computers in this lab will be 7 years old as of FY25, and new vocational programs may be relying on this lab
- \$40K for replacement of SHS mathematics computer lab, as computers in this lab will be 7 years old as of FY25 and hardware is starting to fail
- \$33K for replacement of various audio amplification systems in public spaces (gyms, auditoriums) across the district. These systems are more than 20 years old and are starting to show signs of failure

#### Recommended New Investments

Key investments of \$97,000

- \$50K for new Special Education IEP and 504 Plan records system to accommodate the state's new IEP forms and improve integration with PowerSchool Student Information System
- \$22K for absence/time off/substitute teacher management system
- \$25K to issue iPad cases with built-in keyboards to kindergarten students for use in grades K-4 to facilitate typing instruction

#### Recommended Changes to Existing Systems

Key investments of \$110,000

- \$34K for PowerSchool Student Information System hosting, as we currently host PowerSchool on our own servers. Given that PowerSchool is an Internet-facing system, there is a need to react quickly to new security vulnerabilities. Moving to a hosted solution for PowerSchool would allow us to take advantage of additional security protections that PowerSchool would have in place for its hosted customers. This would also reduce time spent by IT staff maintaining the system.
- \$18K to upgrade to "Google Workspace for Education Standard" edition, as we currently use the free "Education Fundamentals" edition of Google Workspace. Upgrading to the Education Standard edition would provide additional tools for managing email and data security.
- \$12K for enhancements to keycard security
- \$22K for repair of SHS electronic door lock systems
- \$24K for Wi-Fi authentication system (RADIUS) replacement to mitigate changes Microsoft is planning to make to the product we currently use for this purpose

### **Efficiencies Through Use of Grant or Alternative Funds in Fiscal Year 2025**

Grant or alternative funds used for Information Technology include:

- \$50K (40%) E-Rate reimbursement to the Town for Internet Access, Wide Area Network, and Wi-Fi maintenance costs
- \$80K in trade-ins of obsolete off-lease technology toward future lease payments

### **Other Examples of Efficiencies in Fiscal Year 2025**

Other Examples of Efficiencies for Information Technology include:

- Using Level Data service to automate data tasks, including account creation
- Using Clever service to automate population of student data into various systems and provide for streamlined and secure login



February 21, 2024

To: School Committee  
Re: FY2025 IT Budget Recommendation

As we know, the pandemic brought rapid change to the world of K-12 educational technology. While the daily use of Zoom in lieu of in-person instruction is no longer reality, educators became much more comfortable with the use of technology during remote learning, and the level of technology use remains high.

At the same time, the pace, complexity, and severity of cybersecurity threats has increased dramatically. Reacting to these threats requires more frequent and timely responses than ever before. In addition to reacting to threats, we have necessarily become more proactive about taking time to vet the privacy and security of various technologies that teachers use with their students.

The expectation of reliable use of technology and the increased level of security threats has necessitated the addition of a number of increases to the IT budget request, for both personnel and services.

## **Personnel Requests**

While we have been fortunate to have been able to increase our frontline tech support staffing over the past few years, we have not kept pace in terms of increasing the capacity of the more specialized roles in the department.

### *IT Project Manager*

The day-to-day demands of “keeping the lights on” for our technology infrastructure and managing more staff members have impacted the capacity of the IT Director role to move projects forward in an effective way that maintains and improves the district’s effective use of technology.

There are a number of projects that we will need to implement, including (but not limited to):

- Transportation software management system replacement
- Phone system replacement
- New Special Education IEP & 504 Plan tracking system (federal and state mandated new IEP)

- Schoology standards-based grading integration
- Student-created app deployment
- Improved backup for staff computers
- Facility use scheduling improvements
- Security camera server refresh
- English Language Education (ELE) assessment software implementation
- RADIUS (Wi-Fi authentication) changes
- Staff laptop login method changes
- Electronic purchase orders
- Human capital management
- Absence management system

For these reasons, I am recommending the addition of an IT Project Manager position, which will be responsible for research, implementation, documentation, operationalization, and training for initiatives such as the above-listed projects.

The addition of this role would free time for the IT Director to focus on other responsibilities such as supervising staff, improving policies and procedures, maintaining technology inventory, budget development, long-term planning, and vetting of new technology requests.

### *Network Manager*

Our department runs a large, mission-critical network serving over 7,000 users on a daily basis. Given the day-to-day demands of resolving normal issues while responding to security threats that require quick responses, in addition to increasing numbers of off-hours events that use our network, it has become clear that we need to augment our existing Network Manager position with an additional similar position. This will allow for us to become more proactive in managing our network while becoming more resilient at this position and also allowing for a formal on-call rotation.

Typical routine cybersecurity tasks include (but are not limited to) evaluating and deploying regularly-scheduled vendor patches, evaluating the results of vulnerability scans, and evaluating and improving our overall security posture. However, each day can bring unexpected (and often more frequent) needs to quickly react to vendor-issued patches for zero-day vulnerabilities (vulnerabilities that were under exploitation before vendor patches were issued), large-scale phishing attempts against staff, and alerts from our security monitoring provider. These unplanned tasks take time away from efforts to improve our infrastructure and respond to non-security issues.

### **Non-Personnel Budget Request**

In addition to recommended personnel supports to address cybersecurity needs, we have engaged a managed security and detection response service to provide 24x7 monitoring for our network. Given that we are not a 24x7 operation and network security threats may often occur off hours (there has been some suggestion that malicious actors actually target holidays and weekends when IT departments may be less staffed), we feel this is an essential component of our cybersecurity strategy. An important component of this

monitoring service is the review of log data by skilled professionals, which reduces nuisance “false positive” alerts that can waste time. Costs for this service are included in the “Cybersecurity” section of the budget summary that precedes this memo. The reality is that a ransomware attack or the like could paralyze our systems for an unspecified period of time, with significant negative impact on our instructional program and our day-to-day operations. Further, school districts have been experiencing cyber threats related to accessing and exposing confidential student and staff data. Protecting highly confidential student, family, and staff records must be a priority.

Our district has been fortunate to have been able to make a number of large-scale investments in technology. These investments have resulted in a reliable, well-used technology infrastructure. As with any infrastructure, ongoing investment is required to ensure that it maintains its reliability and utility. We find ourselves with a need to replace aging technology in a number of areas of our infrastructure and end-user facing technology.

The “Replacement of Aging Hardware” section of the budget summary that precedes this memo details the individual areas of our technology infrastructure that should be replaced soon. Some of the items listed are starting to fail and have required additional IT staff time to keep running. Other items are more proactive replacements or items (such as the phone system replacement) that will require large-scale projects to replace before their “end-of-life” date, after which time no additional vendor security updates will be issued.

The sum total of the items in the IT budget request (\$2,696,834) exceeds the available funding currently allocated in the initial FY25 Superintendent’s Budget Recommendation dated February 7, 2024 (\$1,520,403). However, we are pursuing one-time funding sources for a number of these items, and, based on initial conversations, we’re expecting outside funding to take care of items such as the phone system replacement.

In addition to the replacement of aging systems, we have identified a number of recommended improvements, including the addition of new systems to address district needs, and changes to existing systems to improve our operations and/or security posture. These are detailed in the “Recommend New Systems” and “Recommended Changes to Existing Systems” sections of the budget summary that precedes this memo. While some of these items are one-time purchases that may be included in one-time funding that we are pursuing, other items are recurring costs that would need to be funded within the appropriated budget if additional funding can be accessed for these recommendations. Otherwise, funding would need to be identified in the current fiscal year for some purchases, shifted from another cost within next year’s budget plan, or deferred beyond FY25.

### **Existing IT Costs Recommended for Continuation in FY25**

Aside from newly-requested items such as those referenced above, there are a number of ongoing costs to maintain our current level of service. These include:

#### *Hardware*

- \$100K for lease payments for staff laptops leased in prior years

- \$372K for lease payments for student iPads leased in prior years
- \$50K for initial lease payment for staff laptops to be leased in FY25
- \$155K for initial lease payment for student iPads to be leased in FY25
- \$29K for iPad cases for kindergarten students
- \$64K for iPad cases for grade 5 students
- \$62K for iPad cases for grade 9 students

#### *Existing Data Systems*

- \$28K for existing Special Education IEP/504 tracking software
- \$28K for Level Data data management service
- \$40K for PowerSchool Student Information System maintenance & support
- \$23K for PowerSchool Enrollment/Registration/Lottery management
- \$15K for August Schools nursing records software
- \$15K for Alexandria Library Catalog software
- \$1K for FileMaker for miscellaneous databases
- \$16K for Vector educator evaluation tracking system

#### *Existing User-Facing Services*

- \$33K for Schoology learning management system (grades 3-12)
- \$15K for Seesaw learning management system (grades PK-4)
- \$32K for ParentSquare communication system
- \$16K for SHS Language Lab renewal and support
- \$3K for Adobe Creative Cloud for SHS visual arts instruction
- \$3K for Carousel digital signage system
- \$9K for Swank Streaming platform
- \$5K for Typing Club typing instruction app (grades 3-6)
- \$13K for Freshservice IT ticketing system
- \$10K for video surveillance system maintenance & support
- \$4K for cloud fax service
- \$12K for website hosting, including ADA compliance monitoring
- \$26K for ThoughtExchange
- \$2K for Smore Newsletter service
- \$11K for ClearGov service
- \$29K for Zoom service
- \$3K for BoardMaker communication board service

#### *Existing Backend Services*

- \$8K for Apple Enterprise Support to assist with interoperability issues with third-party systems
- \$80K for mobile device management, antimalware, and Internet filtering
- \$1K for password management services
- \$83K for SELCO Internet access and WAN service

- \$12K for maintenance & support for SHS core switches
- \$7K for server virtualization software maintenance and support
- \$1K for Windows-based antimalware
- \$1K for SSL certificates
- \$1K for hosted DNS
- \$43K for Wi-Fi access point maintenance & support
- \$7K for network availability monitoring software
- \$9K for storage array maintenance & support
- \$3K for maintenance & support for authentication & remote VPN devices
- \$1K for server hardware maintenance & support
- \$1K for Wi-Fi troubleshooting tool maintenance & support
- \$9K for backup software & service maintenance & support
- \$3K for online payment fee tracking & maintenance

#### *Existing Supply Allocations*

- \$22K for miscellaneous supplies (examples include adapters, cables, labeling tape, asset tags, etc.)
- \$3K for Educational Television Studio supplies
- \$6K for AV & projector supplies

#### *Repair & Maintenance*

- \$5K for computer repairs
- \$5K for computer chargers

Thank you for taking the time to review this information regarding our Information Technology budget needs. I look forward to answering any questions you have at your meeting on February 28.