



**To:** Dr. Charles Johns  
Board of Education

**From:** Dr. R.J. Gravel  
Mr. Ryan Manly

**Date:** Monday, April 13, 2020

**Re:** Technology Services Operating Budget for 2020-21

**Recommendation**

It is recommended that the Board of Education approve the Technology Services operating budget in the amount of \$2,256,031 for the 2020-21 fiscal year.

**Background**

Each year the Board of Education reviews the technology services budget, excluding full-time salary and benefit expenses for the upcoming fiscal year. This budget includes expenses related to the maintenance of our District's network and related hardware, enterprise database applications, desktop and mobile device inventory, software and device deployment technologies, and overall service and support for technology users throughout the school community.

The Finance Committee met on Thursday, April 9, 2020, to discuss the budget and recommended projects for the 2020-21 fiscal year. An overview of the budget and additional information regarding the department's operating expenses are included in the subsequent pages of this memo.

**Operating Expenses Budget**

In April 2019, the Board of Education approved a Technology Services Operating Budget in the amount of \$2,303,500. The Technology Services team has worked within current budget parameters to maintain existing services, further streamline operations, and enhance the experiences of our students and staff. The proposed Technology Services budget for 2020-21 represents a 2.1% decrease. A summary of the changes by account classification is summarized in the table that follows.

Object	Account Description	Operating Expenses		
		2019-20	2020-21	% Change
<b>1---</b>	<b>Personnel</b>			
1540	Hourly (Summer / Overtime) <i>E1</i>	\$65,000	\$80,000	23.1%
	<b>Subtotal</b>	<b>\$65,000</b>	<b>\$80,000</b>	<b>23.1%</b>
<b>3---</b>	<b>Purchased Services</b>			
3113	Testing Services	\$25,000	\$15,000	-40.0%
3120	Consultants	\$80,000	\$80,000	
3160	Software Maintenance/Renewal <i>E2</i>	\$560,000	\$600,000	7.1%
3165	Software License Agreement	\$15,000	\$15,000	
3190	Professional/Technical Services	\$75,000	\$75,000	
3230	Repairs/Maintenance Services	\$50,000	\$50,000	
3240	Printer/Copier Lease/Maintenance	\$0.00	\$10,000	100%
3320	Professional Development	\$40,000	\$40,000	
3322	Lease <i>E3</i>	\$710,000	\$651,031	-8.3%
3323	Mileage	\$5,000	\$5,000	
3430	Telecommunications <i>E4</i>	\$280,000	\$340,000	21.4%
	<b>Subtotal</b>	<b>\$1,840,000</b>	<b>\$1,881,031</b>	<b>2.2%</b>
<b>4---</b>	<b>Supplies and Materials</b>	<b>\$31,000</b>	<b>\$31,000</b>	
<b>5---</b>	<b>Capital Equipment</b> <i>E5</i>	<b>\$157,500</b>	<b>\$150,000</b>	<b>-4.8%</b>
<b>7---</b>	<b>Non-Capitalized Equipment</b>	<b>\$210,000</b>	<b>\$150,000</b>	
	<b>Grand Total</b>	<b>\$2,303,500</b>	<b>\$2,256,031</b>	<b>-2.1%</b>

*E1* Reflects an increase to the overtime budget for network management tasks, due to the elimination of an administrative position.

*E2* Reflects an increase in additional support agreements to manage the school district's new firewall.

*E3* Reflects a decrease in lease payments to account for the 2019-20 staff workstation replacement cycle (payment 2 of 4). The first year's payment was fulfilled through revenue from the sale of end-of-life devices.

*E4* Reflects an increase due to new agreements with a bandwidth service provider (bid through the federal E-rate 470 process), and the addition of 'always on' distributed denial of service (DDoS) protection on internet connections.

*E5* Budgetary placeholder for the 2020-21 workstation replacement cycle for students.

### Workstation Replacement Cycle for Students

The technology services team has identified 444 workstations to be replaced during the 2020-21 school year, as they reached their normal end-of-life schedule (e.g., 5 years). These workstations included the replacement of:

- All CTE shared laptops (enhanced graphics processor capability);
- Several carts of MacBook Pros and small labs of iMacs to support our broadcasting, journalism, and music programs.

The estimated cost of the CTE shared laptops (150) is \$1,800 per unit, whereas all of the other workstations average a unit cost of \$1,500 (294). Using these figures, we estimated a maximum purchase price of \$711,000, which would be paid through a 4-year lease with a payment not to exceed \$177,750.

Given the recent challenges associated with the coronavirus pandemic, our technology services, and instructional teams have been reevaluating this purchase plan. A focus of the reevaluation is the acknowledgment that our students would benefit from the ability to access these applications both inside and outside of the classroom. Currently, if a student is not in one of our classrooms with these resources, they are unable to access their work (e.g., files and projects) and specialized applications. To address this challenge, we have started to evaluate the implementation of a virtual desktop infrastructure (VDI) environment. This type of environment, which is estimated to cost no more than \$500,000, would enable students the ability to access a virtual desktop from any device with a web browser, with full access to all of their specialized applications including those offered by Adobe Creative Cloud and Autodesk.

Through the support of one of the school district's long term professional services providers, Storcom (Lombard, Illinois), we will be launching a very basic VDI environment for all of our students during the week of April 6th. Our technology services team will use this limited access environment as part of an evaluation process to determine if a VDI solution would be viable for implementation on a larger scale, in lieu of ongoing workstation replacements. We are working very closely with our Instructional Supervisors at both schools to gather feedback from both our students and teachers and will be meeting regularly to discuss the next steps as we look forward to the 2020-21 school year. We anticipate presenting a final purchase recommendation to the Board of Education during the month of May.