

To: Dr. Mike Riggle
Board of Education

From: Dr. R.J. Gravel
Mr. Ryan Manly
Dr. Kimberly Ptak

Date: Monday, May 20, 2019

Re: Award of Bid for the 2019-20 Workstation Replacement Process

Recommendation

It is recommended that the Board of Education:

1. Award the following bids for the 2019-20 workstation replacement:

Quantity	Device	Vendor	Unit Price	Total Amount
450	Apple MacBook Pro	Apple	\$1,399.00	\$629,550.00
122	Google Pixelbook	PCM	\$1,083.68	\$132,208.96
363	Lenovo ThinkPad X390 Yoga	Insight Technology	\$1,138.00	\$413,094.00
150	Lenovo M720 Desktop	CDW	\$788.46	\$118,269.00
				\$1,293,121.96

2. Finance the purchase with a 4 year, \$1 buy-out lease. Requests for quote have been distributed to five vendors and results will be shared at Monday's meeting. The estimated interest percent for a 4-year \$1 buy-out lease is 3.1% with four equal annual payments of \$338,693.

Background

During the April 29, 2019 meeting, the Board of Education approved the Technology Services Operating Budget for the 2019-20 fiscal year. As part of the budget, several larger projects were identified including the workstation replacement cycle for staff, or 1,085 workstations (updated count to reflect general use desktop workstations). A historical memo outlining the budget and the scope and background of this project has been attached for your reference.

Based on the feedback from the Classroom Technology and Devices Committee, the technology services team created the following device options for the 2019-20 staff workstation replacement cycle:

- Apple MacBook Pro
 - macOS
 - USB C to USB Adaptor
- Google Pixelbook
 - Chrome OS
 - Digital Pen

- Lenovo Yoga Thinkpad X390
 - Windows OS
 - Digital Pen
- Lenovo M720 Desktop
 - Windows OS

All staff that are eligible to receive a permanently assigned workstation were asked to complete a form indicating their selection. The tabulation of their selections, as well as an additional inventory for general use workstations, loan/repair fleet, student teacher/interns, long-term substitutes and future recruits are indicated in the table that follows.

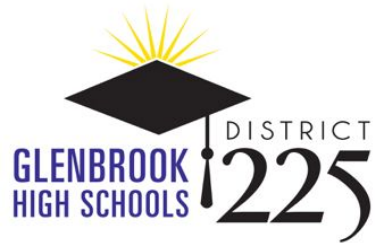
	Staff Assignment	Additional Inventory	Total Units
Apple MacBook Pro	350	100	450
Google Pixelbook	92	30	122
Lenovo ThinkPad X390 Yoga	263	100	363
Lenovo M720 Desktop	150		150
	855	230	1,085

In response to this project, a request for quotation was distributed to 7 vendors for the Google and Lenovo devices, and 6 bids were received. A separate quotation was distributed to Apple for the MacBook devices, as educational institutions can only purchase Apple equipment from Apple. A summary of the responses received are presented in the table that follows.

	Apple MacBook Pro	Google Pixelbook w/Chrome Console	Lenovo ThinkPad X390 Yoga	Lenovo M720 Desktop
Apple	\$629,550.00			
Arlington CP			\$422,903.60	\$120,504.00
CCB Technology		\$135,832.36	\$439,625.67	\$125,053.50
CDW-G		\$134,226.00	\$416,172.24	\$118,269.00
Computer Drive		\$138,714.00	\$419,991.00	\$123,136.50
Insight Technology		\$141,764.00	\$413,094.00	\$123,300.00
PCM		\$132,208.96	\$424,455.90	\$120,126.00

Financing

It is recommended that the purchase price of \$1,293,121.96 be financed through a 4-year, \$1 buy-out lease. A request for quote is being sent to five leasing/financing companies and results will be brought to Monday's board meeting. The estimated interest % for a 4-year \$1 buy-out lease is 3.1% with four equal annual payments of \$338,693.



To: Dr. Mike Riggle
Board of Education

HISTORICAL MEMO

From: Dr. R.J. Gravel
Mr. Zia Ahmed
Mr. Ryan Manly

Date: Monday, April 29, 2019

Re: Technology Services Operating Budget for 2019-20

Recommendation

It is recommended that the Board of Education approve the Technology Services operating budget in the amount of \$2,303,500 for the 2019-20 fiscal year.

Background

Each year the Technology Committee and the Board of Education review the technology services budget for the upcoming fiscal year. This budget includes expenses related to the maintaining 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 Technology Committee met on Wednesday, March 13, 2019 to discuss the budget and recommended projects for the 2019-20 fiscal year. At that time the committee recommended that a summary be provided to the full Board of Education, with an emphasis that the proposed budget represent a net 0% increase. An overview of the budget, and additional information regarding the department's operating expenses is included in the subsequent pages of this memo.

Operating Expenses Budget

In July 2018, the Board of Education approved a Technology Services Operating Budget in the amount of \$2,303,500. The Technology Services team has worked within budget parameters to maintain existing services, further streamline operations, and enhance the experiences of our students and staff. The proposed Technology Services budget for 2019-20 represents a net 0% increase as a result of additional new revenue. However, it should be noted that in order to do this, the department identified of additional revenue opportunities from federal and local sources.

		Operating Expenses		
Object	Account Description	2018-19	2019-20	% Change
1---	Personnel			
1540	Hourly (Summer / Overtime)	\$65,000	\$65,000	0%
	Subtotal	\$65,000	\$65,000	0%
3---	Purchased Services			
3113	Testing Services	\$25,000	\$25,000	0%
3120	Consultants	\$80,000	\$80,000	0%
3160	Software Maintenance/Renewal	\$560,000	\$560,000	0%
3165	Software License Agreement	\$15,000	\$15,000	0%
3190	Professional/Technical Services	\$75,000	\$75,000	0%
3230	Repairs/Maintenance Services	\$50,000	\$50,000	0%
3240	Professional Development	\$40,000	\$40,000	0%
3322	Lease <i>E1</i>	\$360,000	\$710,000	97.2%
3323	Mileage	\$5,000	\$5,000	0%
3430	Telecommunications	\$280,000	\$280,000	0%
	Subtotal	\$1,490,000	\$1,840,000	23.5%
4---	Supplies and Materials	\$31,000	\$31,000	0%
5---	Capital Equipment <i>E2</i>	\$120,000	\$157,500	31.2%
7---	Non-Capitalized Equipment	\$280,000	\$210,000	-25.0%
	Grand Total	\$1,986,000	\$2,303,500	15.9%

		Operating Revenue		
Source	Account Description	2018-19	2019-20	% Change
1---	Local Sources			
1955	E-rate Reimbursement <i>R1</i>	\$0	\$80,000	100%
	Subtotal	\$0	\$80,000	
7---	Insert			
7230	Sale of Equipment - Non Capitalized <i>R2</i>	\$0	\$237,500	100%
	Subtotal	\$0	\$237,500	
	Grand Total	\$0	\$317,500	100%

Combined Expenditures and Revenues		
2018-19	2019-20	% Change
\$1,986,000	\$1,986,000	0%

E1 Reflects the lease payment for the workstation replacement cycle for staff discussed on page 3.

E2 Reflects the update of the Glenbrook North data center discussed on page 3.

R1 The district has been awarded \$80,000 in federal E-rate reimbursement for the Glenbrook North Data Center update. Funds will be received *after* the project has been completed.

R2 The technology committee discussed allowing employees to purchase equipment that will be removed from service as part of the workstation replacement cycle. It is estimated that each device will be sold for \$250, resulting in an additional one-time revenue stream to the school district.

Workstation Replacement Cycle for Staff

Teachers, instructional assistants, office support personnel, administrators and other designated staff members are provided their choice of a Mac or Windows-based workstation for use in their daily activities. The majority of workstations in use were purchased in June 2014, with an anticipated (3) year lifecycle. Utilizing enhanced reporting tools that were implemented in 2017, we have been able to monitor the health of batteries, the use of storage space, and a number of other data points for the entire fleet of workstations. Through use of this data, we formally adjusted the replacement cycle for staff workstations to (5) years. This resulted in our ability to defer the replacement of staff devices for (2) additional years.

In June 2019, the majority of workstations utilized by staff will have been in use for (5) years and are due for replacement. In partnership with the GEA, a working group of 34 teachers and administrators have come together to recommend the next generation of workstations for staff. As part of their review, the committee is evaluating:

- The current generation of Lenovo Yoga Windows laptops,
- The current generation of Macbook, Macbook Air, and Macbook Pro laptops,
- The Google Pixelbook running Chrome OS,
- The Microsoft Surface tablet running Windows, and
- The Apple iPad running iOS.

The committee anticipates making their recommendation near the end of April.

Estimated Budget

The budget per-workstation in 2014 averaged \$1,244 plus \$40 for an adaptor, for an all-in average of \$1,284. Unfortunately, unlike in the Chromebook segment of the market, the estimated cost of these replacements has increased to an average of \$1,409. While the average cost has increased, we anticipate minimizing this increase through a trade-in credit of \$250 for our current workstations. This will reduce the average to \$1,159.

To replace the entire fleet of workstations, we will need to purchase approximately 950 workstations. The total purchase is estimated to not exceed \$1,400,000. This final cost of this project would be reduced based on anticipated trade-in credits in the amount of \$237,500. Given the large expense of this project, we intend to structure a 4-year, \$1 buy-out lease. The annual lease payment would be approximately \$350,000, and has been built into the proposed technology services budget.

Update of the Glenbrook North Data Center Battery Backup and Cooling System

In the summer of 2017, the data center located in the basement of the Glenbrook Off-Campus/Evening High School facility was eliminated. At the same time, a new data center was installed on the 3rd Floor of the District Administration Building in the Technology Services suite. The design of the new data center featured an enclosed, all-in-one rack solution with integrated cooling modules and battery backup. Its streamlined data center design has enabled us to reduce annual operating expenses, increase efficiency, and has been cited by ComEd as one of the most energy efficient data centers they have seen in production.

This summer we are proposing the renovation of the existing Glenbrook North Data Center to mirror the current design of the District Administration Building's installation. The renovation will enable the team to substantially decrease the footprint of the data center and eliminate outdated equipment and inactive connections, while simultaneously reducing operating expenditures. This renovation would improve the stability of the Glenbrook North data connection, which enables the district's network to function without any service interruption even if the District Administration Building data center experiences an outage.

Estimated Budget

The total purchase is estimated not to exceed \$180,000. This final cost of this project would be reduced based on anticipated E-rate funding in the amount of \$80,000. The total cost of this project has been built into the proposed technology services budget.