



**To:** Dr. Mike Riggle  
Board of Education

**From:** Dr. R.J. Gravel

**Date:** Wednesday, May 18, 2016

**Re:** FY2018 Technology Capital Outlay

**Recommendation**

It is recommended that the Board of Education approve the technology capital outlay purchases in the amount of \$222,504.09.

**Background**

At the May 8, 2017 meeting, the Board of Education approved the FY2018 technology budget, which includes costs for three initiatives: workstation replacement cycle; WGBK-FM broadcast equipment refresh; elimination of the data center from the basement of the 1835 Landwehr facility. The total budget for these initiatives was projected to not exceed \$300,000, to be financed through a 5-year, \$1 buy-out lease. After issuing several requests for proposal, we are pleased to share that these initiatives can all be accomplished with a budget of \$222,504.

**Workstation Replacement Cycle**

This year's workstation replacement cycle includes upgraded computer lab and mobile devices for staff and students. In response to a request for quotations, we received 3 proposals for our Windows devices, and a single proposal for our Mac devices (only Apple, Inc. is permitted to sell their equipment to educational institutions):

CDW-G:	\$46,748.00	Apple, Inc.:	\$61,612.00
Computer Drive:	\$62,036.00		
PCM (Tiger Direct):	\$59,658.56		

Upon a review of the proposals, we have selected CDW-G as the vendor for our Windows devices, and Apple, Inc. as the vendor for our Mac devices.

**To be purchased from Apple, Inc.:**

Staff Devices				
Location/Purpose	Description	Qty	Unit Cost	Total Cost
GBA - Repair and New Employee Pool	MacBook Air 13"	12	\$1,149.00	\$13,788.00
GBA - Clerical Replacement Devices	MacBook Air 13"	2	\$1,149.00	\$ 2,298.00
				<b>\$16,086.00</b>
Student Devices				
Description	Description	Qty	Unit Cost	Total Cost
GBA - Repair Pool	iMac 21.5"	4	\$1,339.00	\$ 5,356.00
GBS - CTE Classroom Lab (141)	iMac 21.5"	30	\$1,339.00	\$40,170.00
				<b>\$45,526.00</b>
				<b>\$61,612.00</b>

**To be purchased from CDW-G:**

<b>Staff Devices</b>				
<b>Location/Purpose</b>	<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
GBA - Repair and New Employee Pool	Lenovo Yoga 260	15	\$899.00	\$13,485.00
GBA - Clerical Replacement Devices	Lenovo Yoga 260	7	\$899.00	\$ 6,293.00
				<b>\$19,778.00</b>
<b>Student Devices</b>				
<b>Description</b>	<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
GBN - Science Dept. Shared Cart	Lenovo Yoga 260	30	\$899.00	\$26,970.00
				<b>\$26,970.00</b>
				<b>\$46,748.00</b>

**WGBK-FM Broadcast Equipment Refresh**

Recently, it was determined that the station's antenna, located on the roof of the GBN CPA, needed to be replaced. After a review of the equipment by our station's contracted engineer (Mr. Jim Addie), it was determined that the antenna installed in 1999 had exceeded its usable life, and requires replacement. While evaluating a replacement plan, we recognized that the GBN CPA roof is scheduled to be replaced this summer and determined that it was an ideal time to relocate the transmission equipment from the pit area of the CPA, to a nearby networking closet in the band hallway of Glenbrook North.

Due to the nature of this equipment, and the scope of the project, we were unable to secure multiple bids for the entire project. It should be noted, however, that a formal bid process is not required by Illinois School Code for technology purchases. Alternatively, we secured quotations from a series of vendors to keep the cost of the project as low as possible. We feel confident that this purchase and reconfiguration will meet the needs of the current operation, and will ensure the performance of WGBK-FM for the next five years.

<b>Jampro Antennas, Inc.</b>			
<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
JAMPRO 2 Bay Medium Power FM Antenna	1	\$6,230.00	\$6,230.00
JAMPRO Custom Mounting Brackets	2	\$500.00	\$1,000.00
JAMPRO Parasitic Reflectors	2	\$550.00	\$1,100.00
JAMPRO Electrical De-icer Controller	1	\$1,040.00	\$1,040.00
Additional Parts	1	\$230.00	\$230.00
			<b>\$9,600.00</b>
<b>Installation Services, Inc.</b>			
<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
Labor for Removing Existing Tower for Roofing Work	1	\$3,500.00	\$3,500.00
Labor for Reinstalling Tower; Affixing New Antenna	1	\$5,000.00	\$5,000.00
			<b>\$8,500.00</b>
<b>Broadcasters General Store</b>			
<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
Intraplex IP Audio Codec for 1 Bi-Directional Stereo Signal	2	\$1,663.00	\$3,326.00
Intraplex IP Software License	1	\$381.00	\$381.00
Omnia One FRM Audio Processor	1	\$2,979.00	\$2,979.00
Cablewave Foam Coaxial Cable (per Foot)	400	\$2.02	\$808.00
Additional Parts	1	\$1,495.59	\$1,495.59
			<b>\$8,989.59</b>
			<b>\$27,089.59</b>

### Elimination of the Data Center at Glenbrook Off-Campus

This year, the network team has worked diligently to transfer the majority of the equipment from the data center located in the basement of the Off-Campus facility, to the Glenbrook North and South data centers. The remaining pieces of equipment, which include our primary data storage appliances, are scheduled to be relocated to the District Administration Building prior to the installation of new boilers in the Off-Campus facility this summer.

Prior to the equipment being relocated to the Technology Services suite (3rd floor) of the District Administration Building, we need to connect the new data center location to the building's existing generator (which has been verified as suitable for this purpose), install two new equipment racks with integrated power connections and battery packs, and install a small independent cooling system in the room.

This project was made available for proposal, and a single proposal was received from CDW-G.

In response to a request for quotations, we received 2 proposals:

CDW-G:	\$87,054.50
Schneider Electric:	\$97,763.17

Upon a review of the proposals, we have selected CDW-G as the vendor for the data center equipment.

<b>CDW-G</b>			
<b>Descriptions</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total Cost</b>
APC Integrated Data Center Rack System and Battery Backup Design	1	\$50,376.73	\$50,376.73
Mechanical Installation (Electrical, Generator Connection, HVAC Labor)	1	\$34,890.40	\$34,890.40
Delivery from Factory to 3rd Floor Technology Services Suite	1	\$1,787.37	\$1,787.37
			<b>\$87,054.50</b>
			<b>\$87,054.50</b>