

To: Dr. Mike Riggle Board of Education

From: Dr. R.J. Gravel Dr. Kimberly Ptak

Date: Monday, May 21, 2018

Re: Class of 2022 Chromebook Purchase

Recommendation

It is recommended that the Board of Education approve the purchase of 1,400 Lenovo 500e Chromebooks with the Google Chrome Management License from CDWG at a cost of \$409,416.

Background

For the past four years, the District has selected the most recent iteration of the Lenovo ThinkPad Yoga 11e Chromebook (11e). The 11e device has performed extremely well with regard to durability and functionality, as demonstrated by the claims and repair data presented on pages 3 and 4 of this document. At the end of March, the District learned that Lenovo would stop production of the 11e in May or June of this year. In place of the 11e, they have launched a new product, the Lenovo 500e Chromebook (500e). Our technology services team has reviewed the specifications between the devices, and has also performed a series of durability tests. Some key differences between the 11e and 500e include:

- The 11e has 1 USB 3.0 and 2 USB C ports and an SD card reader; the 500e has 2 USB 3.0 and 2 USB C ports and a Micros SD card reader
- The 500e has a digital stylus; the 11e does not
- The 500e has an additional "world facing" camera; the 11e does not
- The 11e weighs 3.3lbs; the 500e weighs 2.98lbs

Both devices feature spill-proof keyboards and touchpads, mechanically anchored keys, rubber bumpers around the LCD and base, Gorilla Glass, reinforced ports, corners and hinges. From a technical specification perspective, both devices include Intel Apollo Lake processors, 4GB of memory, 32GB of internal storage.

Recognizing the anticipated discontinuation of the 11e, the durability of the 500e, as well as the price difference (approximately a \$71 savings with the 500e) we have selected the 500e as the device for the incoming freshman Class of 2022. A formal bid was conducted and sent to ten vendors. Bids were opened on Monday, May 14, 2018 and three of the ten vendors submitted a bid.

	Lenovo 500e	Google Chrome Management License	Total
CDW	\$268.94	\$23.50	\$292.44
Computer Drive	\$281.78	\$23.50	\$305.28
РСМ	\$287.21	\$23.00	\$310.21

Chromebook Fee

The annual Chromebook fee is assessed to all students (up to a maximum of 4 years) for the use of a Chromebook during their high school career. After making the designated amount of payments, the Chromebook becomes property of the student. At the March 19, 2018 Board meeting, the 2018-19 fee of \$100 was approved. The current payment schedule for students as of the 2018-19 school year is as follows:

	Year 1	Year 2	Year 3	Year 4	4-Year Total
Class of 2019 Seniors	\$110	\$110	\$100	\$100	\$420
Class of 2020 Juniors	\$110	\$100	\$100	\$100	\$410
Class of 2021 Sophomores	\$100	\$100	\$100	\$100	\$400
Class of 2022 Freshmen	\$100	\$100	\$100		\$300

Because of the decreased cost of the Chromebook for the 500e, to be first used by the Class of 2022, it is recommended that the amount of payments for the Chromebook be reduced to (3) payments. A breakdown of the the Chromebook fee budget is presented in the following table:

	FY2016 Class of 2019 Seniors	FY2017 Class of 2020 Juniors	FY2018 Class of 2021 Sophomores	Est. FY2019 Class of 2022 Freshman
Device Cost	\$376	\$369	\$367	\$268.94
Extended Warranty	\$20			
Chrome Mgmt. License				
Subtotal	\$396	\$369	\$367	\$268.94
Self-Insurance Fund	\$22 \$11/Year 1 & 2 \$2 \$1/Year 3 & 4	\$17.75 Year 1 \$23.25 \$7.75/Year 2, 3 & 4	\$33 \$8.25/Year	\$31.06 \$7.77/Year
Total Cost to Student	\$420	\$410	\$400	\$300

In addition to ownership rights after four years of payment, students are provided with a comprehensive insurance program at no additional cost. Information regarding coverage is indicated on the attached *Chromebook Rights and Responsibilities* document. Balance in the self-insurance reserve is \$99,106.03; of which approximately 60% is a result of the early Samsung devices when the district bought third party insurance coverage and, due to the high number and cost of claims, the insurance company paid the district to fix the devices in-house.

A cost of this program not reflected in the table above is the cost of the loaner and replacement pool. 100 devices are typically purchased each year to serve as a loaner and replacement pool. The total cost for FY 18/19 is \$26,894 which equates to \$5.17/student per year.

The Lenovo Chromebook product line has performed extremely well with regard to durability and functionality. With over 5,100 devices currently in use, the expense of claims through April 1, 2018 was only \$9,219. A summary of the types of claims and repairs is summarized in the tables that follow:

Claim Events*	2016-17	2017-18	2018-19 (through April 1st)
Quantity of Devices	3,815	5,125	5,106
# of Warranty Claims (No Financial Impact)	79	91	108
% Inventory Resulting in a Warranty Claim	2%	1.7%	2%
# of Insurance Claims (Financial Impact)	153	210	242
% Inventory Resulting in an Insurance Claim	4%	4%	4.7%
Deductible Collected	\$9,525	\$13,950	\$14,875
Additional Cost of Claims **	\$7,744	\$9,566	\$9,219

Net Addition / Reduction of Pool Reserve+ \$1,781+ \$4,384+ \$5,656

* An individual claim event might include multiple repair tasks (ex. replaced charger port <u>and</u> battery are part of 1 claim, but are counted as 2 repairs below).

** The District's managed service agreement with Beck's Bookstores includes personnel to perform the actual repairs. The only additional claim expense is for repairs performed by a third-party (due to complexity), parts, and shipping expenses.

Repairs	2016-17	2017-18	2018-19 (through April 1st)
Quantity of Devices	3,815	5,125	5,106
Charger Port	10	15	24
Keyboard	20	18	12
Screen	56	56	43
Battery	84	92	75
OS or WiFi Damage	25	15	69
Stolen	5	0	0
Water Damage	16	9	5
Other	16	5	14
Total Repairs	232	210	242