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TO: Dr. Ushma Shah, Superintendent

FROM: Michael Arensdorff, Chief Technology Officer

Will Brackett, Director of IT Services

SUBJECT: Revised E-rate Memo

DATE: Original memo: February 13, 2024

Revised memo: March 19, 2024

Names of presenters: Michael Arensdorff

Type of report: E-rate

Report format: Informational report, with Q&A at board table

Preview of purpose and content of report: Included below is an overview of the bid process, bid summary and recommendation for the E-rate proposal

Budgetary impact: Impact is \$1,084,385.36 (one time cost) the wireless/switch/licensing infrastructure(\$1,032,969.36), one new firewall (\$46,184) and licensing renewal for second firewall (\$5,232). After the remaining eRate funds reimbursements the total district impact will be \$689,012.60

From our current budget, both costs have been planned for from a capital expense long term planning/budgeting with Dr. Sheila Johnson and Rob Grossi. This year we will not have a lease payment for our student/staff devices and that budgeted cost will cover the net cost of this recommendation.

In addition, we are working with a number of vendors to identify the value for all old hardware tied to this project. We will then leverage this revenue to go towards any non-eRate eligible items and/or services if they arise from the project of this magnitude.

Data to be presented: Presented on February 13, 2024, revised memo and seeking approval on March 19, 2024

Category 2

Network Infrastructure Switch E-rate Proposal/Recommendation

As we embarked on the rate process several years ago, our goal was to strategically plan and extend the life of our existing infrastructure and hardware to be the most cost effective, for consistency, and to align all for a full upgrade at one time. This approach allowed us to synchronize the upgrade of essential components, such as wireless access points, core switches, controllers, and access switches across all buildings. By consolidating these elements into a comprehensive bid proposal, we aimed to maximize competitive pricing and vendor responsiveness.

This coordinated effort also facilitated the alignment of our infrastructure with the devices used by students and staff, ensuring optimal compatibility and functionality. The recently conducted Request for Proposal (RFP) process included the following components:

- Design and release of RFP November 2023 and released on December 14, 2023
- Optional walk-through with vendor partners December 20, 2023
- Question and answer period Dec. 20-January 5, 2024
- RFP responses and documents due January 19, 2024
- Follow up questions to all vendors based on RFP Due Jan. 26, 2024
- Demonstrations/Presentations from all Vendors Jan. 29-Feb, 1, 2024
- D97 Reference Checks Jan. 30-Feb. 7, 2024
- Financial Review with Vendors Feb. 2-7, 2024
- D97 Evaluation Committee Review/Evaluation Feb. 8, 2024
- Recommendation to D97 Board of Education Feb. 13, 2024

The vendors who submitted proposals were CDWG (Juniper Mist solution), Qubit (Extreme solution), Scientel (Fortinet solution), SHI (Cisco Enterprise and Meraki solutions), and UrbanComm (Commscope Ruckus solution). For all of the vendors, we completed: virtual demonstrations, due diligence on financial reviews, reference checks with other districts/organizations, comparisons on design, review of technical specifications of each hardware and software item(s), and measured them all up to our project and district goals to ensure they align for now and the future.

As part of the process around the financial component we took all of the total prices of the for each vendor, as listed here:

- CDWG Juniper Mist \$1,048,509
- Qubit Extreme \$924,778.18
- Scientel Fortinet \$793,489.56

- SHI Cisco Enterprise 899,092
- SHI Cisco Meraki \$699,356
- UrbanComm Commscope Ruckus \$1,081,366

As part of the evaluation, our team looked at the specs of all the proposals to get as close to equal or comparison for pricing perspective. In order to do that there were some items that needed to be reviewed to normalize and get as close to a comparison. Those items were: years of licensing, quantity of APs and/or other hardware, and/or software that was or was not provided in the proposal. Following a thorough evaluation, considering cost (eligible and not eligible), completeness of proposal, prior experience in educational environments, and technical design/expertise, our evaluation team completed their individual evaluations. The evaluation team consisting of Will Brackett, Paul Duda and Michael Arensdorff, recommends the CDWG/Juniper Mist proposal at a cost of \$1,032,969.36. Of that cost \$979.698.13 is eRate eligible and \$66,030.22 that is not eRate eligible. The non-eligible costs are ones that include equipment in school buildings and do not directly support student learning (i.e. access points at district office and switches just for district office). We expect to receive a 40% reimbursement of \$391,879.25 for this project through eRate. That will leave \$3,493.42 of our available eRate reimbursement funds for the firewall recommendation below.

We are confident that this recommendation aligns with our previous technology and infrastructure initiatives and goals of ensuring a solution that fits the current and future needs of our organization, while doing so in a cost effective, forward thinking way. This investment positions us to provide an optimal experience for our staff, students, and district as a whole. We anticipate this infrastructure will support our evolving needs for a decade or more, with potential renewal of licensing and minor hardware updates.

We appreciate your attention to these critical matters and look forward to discussing our recommendations further. Our team believes that these technological advancements will not only meet our current needs but also set the stage for continued innovation and support for the entire district.

Finally, as part of this project we believe that we will be able to complete all of the installation and services with our current staff. With that being said, if there are any issues that arise (i.e. timing for completion and/or services are needed or other building related needs with deployment/install), we will ensure any additional costs are covered in our technology operating budget. We will build in a 5% contingency funding in our operating budget.

Firewall Recommendations

In addition to the infrastructure upgrade, our team proposes a firewall replacement and license renewal. Originally purchased five years ago with a three-year contract, the firewalls have seen two license renewals to extend their lifespan. After careful consideration, and with our infrastructure needs in mind, we recommend upgrading one firewall and renewing the license for the second. This decision aligns with our commitment to maximizing efficiency and cost-effectiveness for District 97.

At the end of the 2023-2024 school year both of our firewall licenses will be expiring. As part of the eRate process we completed bids to seek renewal licensing for the existing firewalls, as well as, proposals for two new firewall models. Upon review of the pricing and specifications, we have decided that it is most cost effective and beneficial to the school district with the recommendation to the larger infrastructure is to get one new larger firewall and to renew the licensing for the second firewall. The higher capacity firewall will be critical with the increased bandwidth speed/capacity with the infrastructure upgrade we are also recommending at this time for D97. The cost of the firewall is \$46,184. We will be able to leverage the remaining \$3,493.42 of eRate reimbursement funds to slightly lower the net impact cost to D97. After these recommendations our total allotment of funds for the eRate 5 year period will be committed. That total for the 5 year span was \$1,000,163. These funds will reset in FY27. The cost of the license renewal is \$5,232 and with a total combined cost of \$51,416. After the small remailing reimbursement the total net cost will be \$47,922.58 Following the same process as above for the evaluations Will Brackett, Paul Duda and I independently evaluated the proposals and are recommending the award to CDWG.

Appendix

Category 1 - Internet Review

As a reminder we have three different segmented internet connections for our students, staff and personal/guest devices. For each of these connections, we are receiving either 100% covered costs or 40% reimbursement of costs. The breakdown for those three connections and cost and cost savings to the district on an annual basis are as follows:

- Main 10 GB Internet connection students covered 100% by the state DoIT contract and application we submitted/approved dating back to 2019-2020.
 - Annual cost if paying at the 60% rate \$68,400 savings per year
- Staff 2 GB Internet connection covered at a rate of 40% reimbursement as filled under D97 eRate.
 - Annual cost to the district at the 60% rate (after receiving 40% in reimbursements - \$9,720
 - Savings of \$6,480 per year through eRate
- Personal (BYOD)/Guest Device connection 2 GB covered 100% by the state DoIT contract and application we submitted/approved in 2023.
 - Annual cost if paying at the 60% rate estimated \$9,720 per year savings

Total Annual Savings for Internet services through eRate and more substantially through the DoIT state grant process is **\$84,600**.