

Approval of E-Rate and Other Technology Purchases

04/20/2020 Modesto City Schools Regular School Board Meeting



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Background:

Due to COVID-19 remote work has become instrumental in the success of the K12 Distance Learning Environment. To continue the levels of existing and new demands of service the following purchases are needed.

Goal Alignment:

Goal Three: Provide a safe, welcoming, and respectful learning environment for every member of the school community while ensuring effective district-wide communication for students, staff, families, and community partners.

3.5 Improve operational efficiencies through the use of technology and improved network infrastructure.

Goal Four: Ensure the District is fiscally and operationally sound.

4.3 Invest in school facilities and infrastructure for safe and clean facilities.

4.4 Plan and implement short and long-term strategies to decrease declining enrollment.

Issue:

- A. Due to COVID-10 several students and teachers do not have access to reliable internet access. The purchase of Kajeet Remote Access Devices will ensure internet access for all students during this crisis. With a mobile hotspot, you have the entire connection to yourself, in remote locations or low-income households.
- B. Our current backup solution for our servers is 4+ years old. It's based on methods and processes that were developed before ransomware became an everyday occurrence. Rubrik provides a modern backup solution that is immutable to ransomware and with the ability to restore a server from backup in two to three minutes. Additionally, it provides the ability to archive backups directly to 'the cloud', ensuring that even in the event of a local disaster, our servers and data will be safe.
- C. A new Dell Server is needed for infrastructure upgrades outlined and approved at the February Board meeting (Cyber Security, increased efficiency, etc.)
- D. The District's current Cisco Firewall System is approximately 5+ years old and needs to be replaced. The current system is not a Next-Gen Firewall, which lacks the feature set to affectively prevent a Cyber Attack in our current industry climate. The Next Generation Firewall is better equipped to prevent unauthorized cyber activity. Next-Generation Firewalls allow organizations to achieve a robust network that reduces vulnerabilities, helps ensure a high level of security, and conserve network performance. Next-Generation Firewalls stop threats and prevent data leakage by providing policy-based visibility and control over applications, users and threats, unlike the traditional port-based method. Next-gen firewalls provide deep packet inspection (DPI) and intrusion prevention systems (IPS).

- E. Next Generation Cyber Security Protection for servers and Admin Devices is needed to prevent unauthorized access, exploitation, ransomware and other malware on our servers and devices.
- F. The district network cabinets are not deep enough to accommodate the many types of modern switches. These cabinets are needed to replace our 5+-year-old switches in the next E-rate application cycle. Also, most of the existing Patch cables, are not Cat6. (existing 5e). Better performance will be possible and take advantage of the upgraded cabling infrastructure.
- G. Currently, there are 30,000+ devices deployed in Modesto City Schools. To plan for replacement of older models, accidental damage or continued device support for students we will need to have a surplus of Chromebooks available for replacement purposes.sel
- H. In pursuit of increased enrollment and fiscal soundness ECE partnered with IETS have completed demos from 3 vendors for an on-line registration system. Registration Gateway Standard was chosen as the optimal software. Registration Gateway will take the MCS paper registration process and transform it into an online experience for both parents and staff. Online enrollment is one of many great benefits; such as integrated Student Information System data transfer, fee collection and appointment scheduling.

Proposal:

- A. Purchase 125 Kajeet Remote Access Devices to ensure internet access for Students during the COVID-19 closure (4-month term)
- B. Purchase Rubrik Backup System to ensure virtual servers are fully backed up and backups are immutable to ransomware.
- C. Purchase previously Board approved Dell Server to replace the existing older model.
- D. Purchase Palo Alto **Next-Gen Firewall** HA Pair.
- E. Purchase Palo Alto Prevent, Cyber Security Protection for servers and Admin Devices “Malware”
- F. Purchase Network Cabinets and Patch Cables.
- G. Purchase 7,500 Chromebook Device 4-year lease to ensure all students have devices during the COVID-19 Distance Learning event.
- H. Purchase On-line Registration system (Registration Gateway) to ensure that all incoming students can register with ease of use and continue to increase enrollment for the District

Financial Impact:

Consent Agenda Technology Budget items

Vendor	Description	Term of Purchase/Notes	Costs
Hardware/Software			
Kajeets	Internet Access for Students During COVID-19 Closure (4 months)	Infrastrcture-125 Hot Spots- Spring Semester	\$ 30,000.00
ePlus	Virtual Servers- Backup System-	Infrastructure- 3 year	\$ 120,000.00
CDW-G	New Server Replacement (part of the February Board Presentation)	Infrastructure- 5 years	\$ 175,000.00
CDW-G	Cyber Security System (Firewall) Palo Alto Systems-	Infrastructure- 5 years (E-rate Refund = \$130,000)	\$ 642,000.00
CDW-G	Cyber Security Protection for Servers and Admin Devices "Malware"	Infrastructure- 5 years	\$ 100,000.00
CDW-G	Cabinets/cabling for next Gen of Electronics (Total \$584,591.58 - 85% discount)	Infrastructure- 20 + years (Erate Refund = \$496,903)	\$ 584,592.00
CDW-G	7,500 Chrome Books (\$2,544,294)) Leasing \$687,214 per year for 4 years	Devices: 4 years	\$ 687,214.00
Gateway	Provide Parents an Online Registration system (until June 2023)	Access for Parents- 4 years	\$ 160,000.00
	Erate Discount for Firewall		\$ (130,000.00)
	Erate Discount for Cabling		(\$496,903.00)
	Total Purchase Request		\$ 1,871,903.00

Recommended Motion

It is recommended that the Board of Education approve the purchase of the Network Infrastructure, E-Rate and Other Technology Purchases as outlined above.