

Financial Management Practices Audit Report

Calvert County Public Schools

July 2016



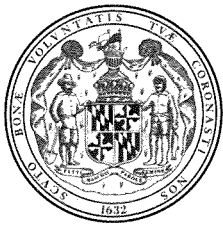
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MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

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July 20, 2016

Senator Guy J. Guzzone, Co-Chair, Joint Audit Committee
Delegate C. William Frick, Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

We conducted an audit of the financial management practices of the Calvert County Public Schools (CCPS) in accordance with the requirements of the State Government Article, Section 2-1220(e) of the Annotated Code of Maryland. The objectives of this audit were to evaluate whether CCPS procedures and controls were effective in accounting for and safeguarding its assets and whether its policies provided for the efficient use of financial resources.

Our audit disclosed that CCPS needs to enhance internal controls and accountability for a number of its financial operations including procurement, disbursements, payroll processing, information system security, and equipment inventory. For example, CCPS was not monitoring the access capabilities assigned to users on certain automated systems; consequently, certain employees could perform incompatible functions, thereby increasing the risk of unauthorized procurement and payroll transactions. CCPS should also improve security over its computer network by implementing strong password controls and better deploying its intrusion detection prevention system.

CCPS also needs to ensure the accuracy of payments for employee and retiree healthcare. For example, CCPS has not conducted reviews to verify the propriety of health care expenditures, including claims, administrative fees, and stop-loss insurance, which totaled \$31 million in fiscal year 2015.

CCPS needs to ensure its methodology for determining payments to bus contractors results in the best value. For certain payment components CCPS could not substantiate their reasonableness. For example, we estimated that for 122 buses being used to transport students during fiscal year 2015, which

included buses placed into service dating back to fiscal year 2005, CCPS would pay out approximately \$5 million more over the 12-year life of the buses because the rate established for a particular component was not based on market rates. CCPS also paid bus contractors for fuel, but did not exclude federal excise taxes, which the contractors are exempt from paying and may claim a credit on their income tax returns. For fiscal years 2013 and 2014, CCPS' fuel payments were \$247,500 higher than necessary.

The CCPS response to this audit is included as an Appendix to this report. We wish to acknowledge the cooperation extended to us during our audit by CCPS.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "TJ Barnickel III".

Thomas J. Barnickel III, CPA
Legislative Auditor

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Background Information

Statistical Overview

According to student enrollment records compiled by the Maryland State Department of Education (MSDE), Calvert County Public Schools (CCPS) ranks 13th in student enrollment among the 24 public school systems in Maryland. Fiscal year 2015 full-time student enrollment was 16,031 students. CCPS has 24 schools, consisting of 12 elementary, 6 middle schools, 4 high schools, a vocational school, and alternative school.

According to CCPS' audited financial statements, fiscal year 2015 revenues and expenditures totaled approximately \$235 million. According to MSDE records, during the 2014 - 2015 school year, CCPS had 2,118 full-time equivalent positions, which consisted of 1,457 instructional and 661 non-instructional employees.

Oversight

CCPS is governed by a local school board, consisting of five elected voting members and one non-voting student member. The State and the Calvert County government provide the vast majority of CCPS funding. In addition, MSDE exercises considerable oversight through the establishment and monitoring of various financial and academic policies and regulations, in accordance with certain provisions of the Annotated Code of Maryland. MSDE also works with CCPS to comply with the requirements and mandates of federal law. Calvert County government exercises authority over CCPS primarily through the review and approval of CCPS' annual operating and capital budgets.

External Audits

CCPS engages a certified public accounting firm to independently audit its annual financial statements. Additionally, the auditor conducts what is referred to as a Single Audit of CCPS federal grant programs (as required by federal regulations). We reviewed the resulting financial statement audit and Single Audit reports for fiscal years 2012 through 2015, and examined the related work papers for fiscal years 2013 (Single Audit) and 2014 (Financial Audit), which were the latest available at the time we performed our audit fieldwork.

The Independent Auditor Reports on Internal Control over Financial Reporting for fiscal years 2013, 2014, and 2015 each identified a significant deficiency. For example, capital asset additions and retirements from prior periods were not timely identified and recognized, resulting in net adjustments that decreased 2015 assets by \$763,000. CCPS agreed with the auditor's findings and recommendations from each year. The findings affected financial reporting requirements for the year in question, but did not affect our audit scope or objectives.

Also, the Single Audit report for fiscal year 2015 identified a significant deficiency related to grant accounting, which is commented on in the Federal Funds section of this report.

Due to similarities between the work of the independent certified public accounting firm that audited CCPS' financial statements and conducted the Single Audit, and the risks and scope of our audit in certain areas, we reduced the scope of our audit work related to state and local government revenues received via wire transfer, federal grant activity, and capital equipment.

Status of Findings From Preceding Audit Report

Based on our current audit assessment of significance and risk, our audit included a review to determine the status of 15 of the 19 findings contained in our preceding audit report dated July 1, 2009. We determined that CCPS did not satisfactorily address 5 of these 15 findings and, therefore, these findings are repeated in this report. We did not address the status of the remaining four preceding audit report findings.

Findings and Recommendations

Revenue and Billing Cycle

Background

Calvert County Public Schools (CCPS) revenues consist primarily of funds received from Calvert County, the State, and the federal government. According to the CCPS audited financial statements, revenues from all sources totaled \$235 million during fiscal year 2015. In addition to these revenue sources, schools collect funds for various purposes, such as student activities, clubs, and school publications. Because they are not considered school revenue, these school activity funds are accounted for separately by each school and reported in summary in the audited financial statements. Although this revenue is raised through student-related activities, CCPS has a fiduciary duty to safeguard these funds. For fiscal year 2015, school activity fund collections totaled \$7.8 million and the June 30, 2015 balance was \$1.7 million.

Reviews of School Activity Funds

The independent certified public accounting firm contracted by CCPS to perform its annual financial audit also conducts a limited review of the school activity funds (SAF). These reviews consist primarily of tests of SAF bank reconciliations, and receipt and disbursement transactions at selected schools. The firm's testing for fiscal year 2015 did not identify any improprieties or prevalent violations of CCPS policy.

Finding 1

Adequate accountability and control had not been established, as collections were not recorded and checks were not restrictively endorsed upon receipt, collections were not properly secured, and certain collections were not subject to independent deposit verification.

Analysis

CCPS had not established adequate accountability and control over cash receipts which according to its records, totaled \$16.3 million in fiscal year 2015, and consisted primarily of checks received through the mail from various government sources (such as the Maryland State Department of Education and individual CCPS schools). As a result, assurance was lacking that all collections were deposited.

- Several employees initially received collections, but the recordation of these collections and restrictive endorsement of checks was not

performed immediately upon receipt to establish initial accountability and control. Rather, they were not recorded and endorsed until the bank deposit was prepared the following day. The recordation of collections was performed by the employee who prepared and made the deposit, and there was no independent verification to validated bank deposits to ensure all collections were properly deposited.

- Collections were not properly safeguarded, as collections were maintained in an unsecured room prior to deposit. We were advised that this room remained unlocked during the day allowing unrestricted access to 19 CCPS employees. Although locked after work hours, a key to the room was kept nearby in an unlocked desk drawer.
- For those collections received from CCPS billings, the employee that recorded the payment activity in the accounts receivable records also made the bank deposits. Further, no independent verifications were performed to ensure that credit postings to the accounts receivable records were supported by the bank deposits credited to CCPS. According to CCPS records, during fiscal year 2015, vendor billings totaled approximately \$1.3 million.

Recommendation 1

We recommend CCPS

- a. record collections and restrictively endorse all checks immediately upon receipt,**
- b. properly secure collections prior to deposit,**
- c. ensure that accounts receivable records are maintained by individuals independent of the cash receipts function, and**
- d. independently verify that all collections were subsequently deposited.**

We advised CCPS on accomplishing the necessary separation of duties using existing personnel.

Federal Funds

Background

CCPS receives funds pertaining to federal government programs that are generally restricted for use for a specific program (such as the School Lunch Program or Special Education). According to the audited Schedule of Expenditures of Federal Awards, fiscal year 2015 expenditures totaled \$9.5 million, not including federally funded fee for service programs such as Medicaid reimbursement for special education services.

Single Audit Reports Disclosed One Significant Deficiency But No Material Weaknesses Regarding Federal Grant Management

Due to work performed by the independent certified public accounting firm that conducted the Single Audit of CCPS federal grants and the objectives of our audit in this area, we relied on the auditor's work and results. Besides expressing an opinion on CCPS compliance with the terms of several grant programs, the auditor also considered the existing internal control structure's impact on compliance and audited the required Schedule of Federal Awards (which includes claimed and reported grant expenditures) for fiscal years 2012 through 2015. The related reports stated that CCPS complied, in all material respects, with the requirements applicable to its major federal programs. With respect to internal controls over compliance with, and the operation of, major federal programs, the auditors did identify a significant deficiency that was not considered a material weakness for fiscal year 2015. CCPS agreed to take corrective action to ensure that certain grant charges for employee salaries are supported by the time records.

Medicaid Funds Were Requested for Eligible Services

CCPS had established a procedure to identify children eligible for Medicaid-subsidized services and the services rendered. Medicaid is an entitlement program for which certain service costs can be reimbursed to CCPS. Medicaid activity is not covered by the Single Audit of federal grants. Our review disclosed that for eligible services, reimbursements were requested and verified against actual monies received. According to agency records, fiscal year 2015 federal reimbursement for Medicaid-subsidized services totaled approximately \$1.5 million.

Procurement and Disbursement Cycle

Background

According to the audited financial statements and CCPS records, non-payroll disbursements totaled \$38.8 million during fiscal year 2015. CCPS has a formal procurement policy and related procedures. The policy sets bidding requirements and specifies when Board approval is required. CCPS uses an automated system to process requisitions, purchase orders, invoices, and payments to vendors. Requisitions, which are created electronically in the CCPS procurement and accounts payable system, must receive at a minimum, two levels of electronic approvals; one being the school principal and the second being the Superintendent or an Assistant Superintendent. Approved requisitions are then converted to purchase orders on the system by authorized employees and the purchase orders are either printed or e-mailed with an approving facsimile signature. In addition to purchase order

preparation, a centralized purchasing department also processes contracts, solicitations, and bids. The centralized finance office's accounts payable unit processes payments after receipt of the goods and services is confirmed by the unit (for example, central CCPS warehouse, schools) that received those goods or services.

Finding 2

CCPS had not established a process to periodically assess the propriety of the capabilities assigned to users on its automated procurement and accounts payable system; consequently, nine employees had incompatible or unnecessary system capabilities.

Analysis

CCPS had not established adequate controls over its automated procurement and accounts payable functions. CCPS had not developed a formal process to periodically evaluate the compatibility of employee duties, determine the system capabilities needed to perform their duties, and appropriately restrict assigned capabilities.

Seven employees had been granted unnecessary access to critical system purchasing and receiving functions that were not needed to perform their assigned job duties. Additionally, five employees (including three of the seven cited above) were assigned system capabilities that allowed them to modify purchase orders (such as change quantities and unit prices, plus add new items and change delivery address) after the purchase orders had been approved. Four of these employees could also record the receipt of the items ordered, including two management employees who did not perform any procurement and receiving functions. Finally, two of the four employees had the ability to add or modify vendors in the automated system. The ability to make unauthorized changes to approved purchase orders, along with other incompatible system capabilities, could allow the processing of inappropriate transactions without timely detection, although our testing found no evidence of inappropriate transactions.

CCPS advised that certain processes were in place to compensate for the control weaknesses resulting from these user access problems, but those procedures were not sufficient. Although we were advised that schools were to be notified of changes that increased purchase orders by \$50 or more, a report of such changes was not periodically generated for independent supervisory review. Additionally, while a management employee performed a periodic post review of the support for vendor payments made on a test basis, it did not include a comparison of invoice details to related independently approved requisitions, and therefore would not detect changes made to the

purchase orders based on the aforementioned conditions. Furthermore, the management employee performing the review was one of the aforementioned five employees who could modify purchase orders and was therefore not independent.

Similar conditions regarding the failure to restrict access to critical system functions, segregate incompatible duties, and perform independent reviews of payments to supporting documentation were commented upon in our preceding audit report.

Recommendation 2

We recommend that CCPS strengthen its controls over the automated procurement and accounts payable system and processes. Specifically, we recommend that CCPS

- a. periodically generate reports of assigned user capabilities from the automated financial system and use them to evaluate the propriety of those capabilities;**
- b. restrict users' capabilities to those needed to perform their job duties, and eliminate the ability of users to perform incompatible duties (repeat); and**
- c. establish a process for the independent verification of disbursements (repeat) to appropriate supporting documentation (such as approved requisitions), at least on a test basis.**

Human Resources and Payroll

Background

Payroll expense represents the largest single cost component in the CCPS budget. According to CCPS records, fiscal year 2015 salary, wage, and benefit costs totaled approximately \$196 million, or 83 percent of the \$235 million total operating expenditures. According to Maryland State Department of Education reports, during the 2014 - 2015 school year, CCPS had 2,118 full-time positions, which consisted of 1,457 instructional and 661 non-instructional employees.

CCPS uses an automated integrated human resources (HR) and payroll system to maintain personnel information, record employee time, track leave usage, and to process and record payroll transactions. The system automatically generates semi-monthly time records and any adjustments are processed by central payroll personnel. The system interfaces with an imaging system to generate payroll checks and direct deposit advices. Payroll processing involves both automated processes (such as compiling leave and

running edit reports) and manual processes (such as data entry of new employee information).

Finding 3

Human resources and payroll system user access capabilities were not monitored. In addition, payroll transaction review procedures were inadequate, as certain necessary automated or manual controls to ensure the propriety of transactions processed were not in place.

Analysis

Human resources and payroll system user access capabilities were not monitored. In addition, payroll transaction review procedures were inadequate as necessary controls over transactions processed were not in place.

- Although CCPS had established a procedure for the supervisory approval for access and capabilities granted to new Human Resources and Payroll Department system users, CCPS does not perform periodic reviews of the propriety of users' existing capabilities. Specifically, CCPS did not generate periodic system reports, of employee capabilities, for supervisory review and confirmation of the need for such capabilities. Instead, CCPS relied on individual supervisors to notify Information Technology staff when capabilities or access needed to be modified.
- CCPS had not used available online approval requirements for personnel or payroll transactions processed on the integrated human resources and payroll system. Our review of user access capabilities disclosed that five users had unrestricted access to critical payroll functions that allowed them to unilaterally process changes to leave, overtime payments, and final payout amounts without any independent online approval. Further, for the transactions related to these functions there were no effective compensating manual review procedures in place. For example, a report was generated each bi-weekly pay period that listed the difference in gross and net pay for each employee for the current and previous pay period and differences over a certain amount were reviewed for propriety and support by one of two different payroll employees. However, these employees were also responsible for processing payroll transactions on the automated system (such as recording time worked by hourly employees eligible for overtime payments) that were the subject of the review, and were therefore not independent. Furthermore, adjustments to leave balances processed by these employees were not reviewed by independent supervisory personnel. Although we found no evidence of

unauthorized transactions for items tested, the above conditions could result in the processing of unauthorized payroll payments.

Similar conditions regarding the lack of an independent review of assigned system functions and capabilities and payroll transactions were commented upon in our preceding audit report.

Recommendation 3

We recommend that CCPS

- a. perform a periodic documented review of users' accesses and capabilities to ensure that assigned functions and capabilities are consistent with employee job duties (repeat);**
- b. ensure that HR and payroll transaction processing and review responsibilities are properly segregated; and**
- c. establish online approval requirements for HR and payroll transactions processed, which also requires approvers to review documentation to ensure the transactions are properly authorized and supported (repeat).**

Finding 4

Personal service contracts that provided unique employment benefits to five executives valued at \$500,000 were executed without Board approval as required by State law.

Analysis

Personal service contracts that provided unique employment benefit packages for five executive employees were approved by the former CCPS Superintendent without Board approval. Although the succeeding Superintendent, along with the CCPS Board, took action to rectify this situation, certain matters remain unresolved due to pending legal and administrative proceedings.

Between fiscal years 2009 to 2013, 18 one-year personal service contracts were entered into between the former Superintendent (who left CCPS following the 2013 school year) and five members of his executive staff. These contracts provided the employees with significant benefits in addition to their regular salaries (for example, performance bonuses, additional cash-out allowances for unused leave, reimbursement of employee-paid retirement contributions and health insurance premiums, and additional CCPS funded retirement contributions), yet none were officially submitted by the prior Superintendent to the Board for review and approval. We determined that the value of the employee benefit packages these five employees received in addition to their salaries between fiscal years 2009 and 2013 totaled a

combined \$500,000. According to State law, the salaries and benefits of all school personnel are to be set by the local Board of Education.

When a new interim Superintendent took office at the beginning of the 2014 school year, she advised the four existing executive team members that their salaries and benefits would remain in place for that year, but then after, their pay would be reduced to that of other administrators in accordance with existing union agreements. Additionally, they would not be able to exercise their rights under the terms of the prior contracts to negotiate the sale of unused sick leave or cash out unused annual leave. Additionally, she reassigned three of the employees to new positions effective September 2013, upon which one of the three retired.

The three employees that had been reassigned disputed these actions and brought their case before the local Board of Education, which upheld the CCPS decision in January 2014. At that time the fourth employee had resigned and was not a party to the suit. However, the local Board's ruling was appealed to the Maryland State Department of Education (MSDE), which ruled against the local Board's decision and finding in favor of the employees. CCPS filed suit in the Circuit Court for Calvert County, appealing the State Board outcome. The Circuit Court ultimately reversed the State Board decision and remanded the case back to the State Board of Education and the Office of Administrative Hearings for resolution. The case was heard before the Office of Administrative Hearings and sent back to MSDE for a final ruling. As of February 2016, MSDE had not yet issued a final decision in this matter.

Recommendation 4

We recommend that CCPS institute a process that ensures Board approval is obtained for all employee compensation (salaries and benefits), as required by law.

Inventory Control and Accountability

Background

According to CCPS audited financial statements, the un-depreciated value of its capital equipment inventory totaled \$9.7 million as of June 30, 2015. CCPS uses automated records to track its capital equipment inventory, which are items valued at \$5,000 and above. Non-Capital computer related sensitive items (for example, laptop computers) are identified in a separate database, but only those connected to the CCPS network.

Finding 5

CCPS equipment policies were not comprehensive because they did not address requirements for tagging equipment, specify the frequency of physical inventories, and account for all non-capitalized sensitive equipment. CCPS could not substantiate it had recently completed a physical inventory.

Analysis

CCPS lacked comprehensive policies and procedures to govern the accountability and control of its equipment, including non-capitalized sensitive equipment items prone to theft. CCPS' current policy sets the threshold for equipment to be capitalized for financial statement purposes at \$5,000 or greater, and delegates the responsibility for accounting for sensitive equipment to the individual departments and schools within CCPS.

- CCPS' equipment policy did not establish system-wide standards to adequately control and account for its capitalized equipment. Specifically, requirements were not established for tagging equipment, the frequency with which physical inventories of capital equipment should be performed, or for reporting lost and stolen items. In addition, we were advised by CCPS management that the most recent physical inventory of capital equipment was conducted in June of 2010; however, CCPS could not provide documentation of the inventory.
- CCPS lacked a policy to control non-capitalized sensitive equipment items costing below the \$5,000 capitalization threshold, which carry a greater risk of theft (such as laptop computers, tablets, digital cameras, and other electronic items) and the procedures in place were not sufficient. The majority of these items is computer equipment (for example, laptop computers) maintained by the Department of Information Technology, which were identified in a separate database, but only when the items were connected to the CCPS network. In addition, a comprehensive set of inventory records for these items was not maintained, as the Department database did not assign an inventory number, an acquisition date, or the related item cost, or indicate to whom the items were assigned. Finally, physical inventories of non-sensitive capital equipment were not conducted. The Government Finance Officers Association recommends that an entity establish controls over non-capitalized equipment items that are marketable and susceptible to theft.

Similar conditions were commented upon in our preceding audit report regarding CCPS equipment policies failing to address the tagging of capitalized equipment and the inventorying of sensitive equipment, as well as

inadequate record keeping practices for non-capitalized sensitive equipment items.

Recommendation 5

We recommend CCPS establish policies and procedures, to ensure accountability and control over its equipment inventories, which address the following

- a. tagging of all capitalized equipment items (repeat);**
- b. the frequency and documentation of required periodic physical inventories of capital equipment items;**
- c. the investigation and reporting of missing items; and**
- d. the physical inventory and record keeping requirements of sensitive items, including the data to be maintained in the records for each item (repeat).**

Information Technology

Background

The CCPS Department of Information Technology maintains and administers the CCPS' computer network and computer operations and supports major information system applications. CCPS operates a wide area network, with Internet connectivity, which connects the individual schools' local networks to the computer resources located at the CCPS headquarters. The Department maintains a computer room at the headquarters location in which numerous computer servers and network devices operate to support CCPS information system applications including its student information and financial management systems.

Finding 6

CCPS network domain account and password controls did not meet certain best practice standards and certain accounts unnecessarily had full access to the student information database. Security event monitoring over the database was insufficient.

Analysis

CCPS network domain account and password controls and controls over the student information database were not sufficient.

- Domain account and password controls did not meet the best practice standards identified in the State of Maryland's *Information Security Policy*. Specifically, domain password age, complexity, and account lockout were not enforced. In addition, password length and history did not meet the

minimum standards recommended by the aforementioned *Information Security Policy*. These conditions weakened the security over the entire CCPS network including all CCPS systems (such as the student information system) that use the domain's active directory system for user authentication.

- A default administrative database account unnecessarily had full access to the student information database, which contains sensitive personally identifiable information, grades, and medical information. Since this account includes local server administrators by default, all local administrators on the server hosting this database had full administrative access to the database. Also, anyone able to achieve local administrator privileges would automatically have full administrative access to this database and could perform unauthorized modifications to critical data. Because of these conditions, we noted that 10 accounts had unnecessary full administrative access to the student information database. Best practices identified in the aforementioned *Information Security Policy*, recommend that access to information be strictly controlled, audited, and that it supports the concepts of "least possible privileges" and "need-to-know."
- Security event monitoring over the student information database was not sufficient. Most security and audit event activity (for example grant/revoke and deny access) was not logged. In addition, we were advised that for events that were logged, logs were only reviewed on an infrequent basis, and that these reviews were not documented. The aforementioned *Information Security Policy* states that procedures must be developed to routinely review audit records for indications of unusual activity and report findings to appropriate officials for prompt resolution.

Recommendation 6

We recommend that CCPS

- a. implement strong controls over domain passwords and accounts in accordance with best practices identified in the aforementioned *Information Security Policy*;**
- b. limit access to critical databases to personnel whose job duties require such access; and**
- c. log all critical security and audit events, review these logs on a regular basis with appropriate investigation of unusual activity, document these reviews and retain the documentation for future reference.**

Finding 7

The CCPS intrusion detection prevention system was not used to scan all appropriate network traffic. In addition, 20 publicly accessible servers were improperly located in the internal network.

Analysis

The CCPS computer network was not adequately secured.

- CCPS did not use its intrusion detection prevention system (IDPS) to scan traffic entering its network from the Internet. Because of this condition, the CCPS network had no IDPS protection relative to Internet traffic. The absence of IDPS coverage for Internet traffic created network security risk for the entire CCPS network. In addition, best practices identified in the aforementioned State of Maryland *Information Security Policy* require protection against malicious code and attacks by using IDPS to monitor system events, detect attacks, and identify unauthorized use of information systems and/or confidential information.
- Although the network-based IDPS utilized by CCPS had the capability to decrypt and analyze encrypted network traffic received, this feature was not enabled. Furthermore, we determined that host-based intrusion protection systems (HIPS) were not in use on 14 of 24 servers that processed encrypted traffic. The absence of IDPS coverage for such encrypted traffic created a network security risk as such traffic could contain malicious exploits that are not detected or dropped. Complete IDPS coverage includes either the use of a properly configured, network-based IDPS that analyzes encrypted traffic, or the use of a HIPS on all critical servers, to aid significantly in the detection and prevention of, and response to, potential network security breaches and attacks.
- Twenty publicly accessible servers were located in the CCPS internal network rather than isolating these servers in a separate protected network zone. These 20 servers, if compromised, could expose the internal network to attack from external sources. Recommended security procedures, per the National Institute of Standards and Technology *Guidelines on Firewalls and Firewall Policy*, include placing publicly accessible servers in an external protected zone to protect those servers as well as the entity's internal network.

Recommendation 7

We recommend that CCPS

- a. perform a documented review and assessment of its network security risks from Internet traffic and encrypted network traffic to its critical devices and identify how such traffic should be subject to IDPS. Based on this review and assessment, we recommend that CCPS implement IDPS coverage as necessary; and
- b. relocate all publicly accessible servers to a separate neutral network zone to limit security exposures to the internal network segment.

Finding 8

Workstations and servers were not sufficiently protected against malware.

Analysis

Workstations and servers were not sufficiently protected against malware.

- Approximately 1,500 of CCPS' 9,100 computers did not have malware protection software installed. Per CCPS personnel, a software problem prevented these 1,500 computers from accessing the available malware protection software for installation. Consequently, these 1,500 computers were subject to increased risk of malware infection and compromise.
- Six of eight workstations tested were improperly configured with users having administrator rights. Administrator rights are the highest permission level that can be granted to users and it allows users to install software and change configuration settings. As a result, if these workstations were infected with malware, the malware would run with administrative rights and expose these workstations to a greater risk of compromise than if the workstations' user accounts operated with only user rights. In addition, because of the administrator rights assigned, these six users had the ability to disable the malware protection software on their workstations.

The aforementioned State of Maryland *Information Security Policy* states that institutions must "protect against malicious code (viruses, worms, Trojan horses) by implementing protections (anti-virus, anti-malware) that, to the extent possible, include a capability for automatic updates." It also states institutions "using a risk-based approach, implement and document processes that minimize provisioning of local administrative rights so that only those employees who require it are given those rights."

Recommendation 8

We recommend that CCPS

- a. ensure that the current versions of malware protection software are installed and running properly on all workstations and servers, and
- b. ensure that administrative privileges on workstations are properly restricted.

Facilities Construction, Renovation, and Maintenance

Background

CCPS employs a staff of 222 employees to maintain its 24 schools and other administrative and support facilities. According to the fiscal year 2015 audited financial statements, capital outlays for construction, major renovations, and systemic improvements to CCPS facilities cost \$5.9 million.

CCPS Contracts and Expenditures for Capital Projects Were Proper

Our review of four construction-related procurements during fiscal years 2013 and 2014 totaling \$24 million disclosed that CCPS had used appropriate processes to procure all four contracts, including obtaining Board approval. In addition, our test of invoices totaling \$6 million for these contracts disclosed that the invoices were properly reviewed and approved and the amounts invoiced were in accordance with the related contract terms.

Transportation Services

Background

CCPS has approximately 15,600 students eligible to receive student transportation services. These students were transported on 143 contractor-owned buses. According to CCPS audited financial statements, fiscal year 2015 transportation costs totaled \$14 million, with \$12.7 million (91 percent) representing payments for contracted services. Payments to bus contractors consist of amounts for the purchase of a bus (known as a per vehicle allotment or PVA, which consists of a reimbursement for the cost of the bus through annual depreciation reimbursement and an annual rate of return on funds used to buy the bus) and for operating costs (such as fuel use, maintenance costs, and certain administrative costs).

Finding 9

Certain elements used to determine payments to bus contractors did not consider market conditions, actual costs, or available discounts, resulting in higher payments than necessary for student transportation services.

Analysis

The majority of the elements used to determine payment amounts to bus contractors did not reflect market conditions, actual costs, or available discounts. CCPS bus contracts are for an initial five years with annual renewals generally granted over the useful life of the bus, which could be up to 15 years. Our review of the contract payments disclosed the following conditions:

- CCPS pays contractors an annual PVA for each bus. In accordance with past studies, the PVA is intended to reimburse the bus contractor for the cost of the bus with depreciation payments spread over the useful life of the bus, and provide an annual return on investment (ROI) for using the bus contractor's funds to buy the bus. However, prior to fiscal year 2014, CCPS had not used the methodology and components developed in the studies to calculate their PVA, but merely increased the prior year's PVA by considering the annual purchase price increases for buses. While the bus cost is one component of the recommended PVA formula, the formula also requires information on bus life to determine the appropriate depreciation percentage and the allowed ROI percentage.

Beginning in fiscal year 2014, CCPS established a formula to calculate its PVA in an effort to establish a supportable basis for the PVA amounts being paid. The CCPS PVA formula includes an average borrowing rate (established by obtaining rates from a local bank) for the ROI rate, which for fiscal year 2014 was 6 percent, instead of an investment rate such as the prime rate. However, the PVA amount CCPS calculated was less than desired and thus an 'operations' cost element was created to add to the calculated PVA amount to increase the total to a level equal to the PVA amounts previously paid. Consequently, any savings from the reduction in PVA due to using the PVA formula was offset by the additional reimbursement for operation costs.

To estimate the financial impact of CCPS using an ROI based on a borrowing rate instead of an investment rate over the life of a bus, we calculated a PVA for the 122 primary buses being used to transport

students during fiscal year 2015¹, which included buses placed into service dating back to fiscal year 2005. Using the prime interest rate² and a 12-year estimated useful life in the PVA formula, we compared our PVA results to the CCPS PVA payments.³ This comparison showed that CCPS' annual PVA payments per bus were \$622 to \$6,380 higher than the payments would have been had the prevailing prime rate been used in the calculation. The effect is that, over the 12-year life of these 122 buses that were in service during fiscal year 2015, CCPS would pay out approximately \$5 million more than if a reasonable ROI had been used (\$2.8 million having already been paid and \$2.2 million to be paid over the remaining useful life). This analysis does not include the effects for any new bus purchases that were made after the beginning of the fiscal year 2015 school year (September 2014) and the lost interest income that could have been earned by CCPS on the excess amounts paid.

- As mentioned above, an 'operations' cost element was created to add to the calculated PVA amount to increase the total to an amount equal to the PVA amounts previously paid. CCPS could not document the reasonableness of payments for bus contractor operational costs, such as taxes, rent, utilities, insurance, substitutes, and management. Specifically, CCPS lacked evidence it had developed cost estimates for the individual components. For 24 buses first placed into service during fiscal years 2014 and 2015, the amount added to the PVA was \$5,100 per bus, per year. For fiscal years 2014 and 2015, payments for operation costs for these 24 buses totaled \$178,500. CCPS used 122 primary buses for student transportation; the total annual operations cost will increase as each of the remaining 98 buses are replaced.
- CCPS could not show that payments to reimburse bus contractors for maintenance costs were reasonable. For example, for fiscal year 2014, CCPS paid a \$0.89 per-mile fee to reimburse the contractors for bus maintenance costs, without determining the appropriateness of the rate based on independently derived estimates.

¹ We did not include in our calculation smaller buses (4-8 rows), buses older than 2005 but still in service, or substitute buses.

² The use of the prime interest rate was recommended in a November 1999 study commissioned by another Maryland school system. Also, in 1975 an MSDE study recommended the prime rate as a reasonable ROI interest rate. The prime rate is actually a lending rate that nearly always exceeds the available market investment rate: therefore, it is deemed to be reasonable for the ROI calculation.

³ Since CCPS began using its revised formula in fiscal year 2014, the fiscal year 2014 rate of 6 percent has been the lowest rate used by CCPS. Consequently, for conservatism, in our calculation we used 6 percent for the comparison to the prime interest rate.

- CCPS did not exclude the exempt portion of federal excise taxes from fuel payments to its bus contractors. CCPS pays contractors for fuel usage based on the average diesel fuel prices (as established by CCPS by calling local gas stations), divided by a miles per gallon rate established by CCPS. However, according to federal law, CCPS contractors are exempt from the \$0.244 per gallon excise tax on diesel fuel and may receive a credit on their income tax returns of \$0.243 per gallon purchased. As a result, CCPS' fuel payments were \$247,500 higher than necessary for fiscal years 2013 and 2014.

Recommendation 9

We recommend that CCPS

- a. use market investment rates as a basis for establishing contractor rates for the annual PVA,**
- b. develop supportable cost estimates as the basis for establishing reasonable contractor rates for operation costs and per mile maintenance costs, and**
- c. exclude federal fuel excise taxes from contractor payments.**

Food Services

Background

CCPS has a cooking cafeteria at each of its 24 schools. Food and related supplies are received at the 8 schools designated as base kitchens and are redistributed to each of the other schools. In fiscal year 2015, CCPS had 123 food service employees (comprised of 91 cafeteria positions and 32 administrative positions). According to the fiscal year 2015 audited financial statements, food service operation expenditures (\$5,315,536) exceeded revenues (\$5,288,542) by \$26,994.

Finding 10

Cashiers in school cafeterias could void transactions on their automated cash register systems without independent review and approval.

Analysis

CCPS had not established adequate controls over voided school cafeteria transactions. Specifically, cashiers in school cafeterias could void transactions on their automated cash register systems without an independent review and approval. Consequently, cashiers could void recorded sales and keep the money collected without detection.

A similar condition regarding the ability of school cafeteria cashiers to process voids without independent review or approval was commented upon in our preceding audit report. Subsequently, CCPS had prepared a written Protocol that required school cafeteria managers to review the daily register reports and contact its Child Nutrition Office to report instances where a cashier had 10 or more voids. Reported instances were to be recorded in a voids log, and cashiers were to be counseled, given additional training, or disciplined as appropriate. However, we were advised by CCPS food service officials that the Protocol was never formally adopted and implemented.

According to CCPS records, over 38,000 void transactions were processed during fiscal year 2015, which was significantly less than the 53,685 voids reported for fiscal year 2008 in our preceding audit report. The value of void transactions could not be readily determined.

Recommendation 10

We recommend that CCPS develop formal procedures that ensure that voided transactions are reviewed and approved by supervisors for propriety (repeat).

Finding 11

CCPS lacked documentation to substantiate that the cash register closeout process was subject to supervisory review.

Analysis

CCPS lacked documentation to substantiate that the cash register closeout process was jointly performed by the cashier and the cafeteria manager. Consequently, there was a lack of assurance that collections counted agreed with recorded sales.

Although we were advised that the cafeteria cashier and manager jointly counted the cash receipts in each cash register drawer, and reconciled it to the register activity control totals, the closing sheet was only signed by the cashier. The managers did not sign the closing sheet to document their participation in the process and approval of the amount of cash counted, and to be subsequently deposited. According to CCPS audited financial statements, food service revenue generated from charges for services totaled approximately \$3.2 million in fiscal year 2015.

Recommendation 11

We recommend that CCPS require both the cafeteria cashier and manager to sign the closing sheet for each cash register to document their verification and agreement of the cash receipts counted and related sales.

School Board Oversight

Background

The Board of Education of Calvert County (the Board) is composed of five elected members and one non-voting student representative. In its oversight responsibilities, the Board contracted with a certified public accounting firm for independent audits of the CCPS financial statements and federal programs. The Board has not established any special committees.

CCPS Adopted an Ethics Policy that Met the Requirements of State Law

In April 2012, the Board amended its detailed ethics policy, which conforms to State Law and includes provisions for conflicts of interest and financial disclosure. Provisions of this policy are applicable to Board members as well as all CCPS employees. CCPS established an Ethics Panel consisting of three members who are nominated by the Superintendent and appointed by a majority vote of the Board Members to interpret ethics policies and provide advice on policy implementation. The Panel also reviews and rules on any reported complaints of ethics violations. According to the ethics policy, annual financial disclosure and conflict-of-interest statements are required to be filed by Board members, candidates for the Board, the Superintendent, and a number of other administrators (such as the Chief of Fiscal Services and Human Resources and school principals) by April 30th of each year. Our review of the records for employees required to submit the aforementioned forms for calendar year 2014 disclosed that the forms were submitted as required.

Other Financial Controls

Healthcare Background

CCPS self-insured its employee and retiree healthcare costs up to a certain claim amount, which was \$250,000 per plan participant for plan year 2015. Claims exceeding that amount were covered by stop-loss insurance. CCPS contracts with a third-party administrator (TPA) for health care claims processing services for employee and retiree medical (including vision) costs for which it is self-insured, and dental and prescription insurance. CCPS also contracts with the TPA carrier for the stop-loss insurance coverage.

In response to our prior audit report, in 2010 CCPS hired a consultant to verify the propriety of individuals that were covered as dependents under its health care plans, which identified 102 ineligible dependents. Subsequently, CCPS instituted a process to verify the eligibility of employee dependents prior to enrollment in the health care plans.

The TPA bills CCPS monthly subscription charges based on the number of participants and their medical coverage and medical providers submit claims to the TPA who pays them on behalf of CCPS. CCPS pays its TPA administrative fees for these services. In a year-end settlement process, the TPA nets the amount of medical claims they paid against the monthly subscription charges billed to and paid by CCPS throughout the year, to determine any excess amount due from or to be reimbursed to CCPS. According to the TPA's settlement document for the plan year ended June 30, 2015, CCPS healthcare expenditures totaled \$31 million, including administrative fees of \$1.5 million and stop loss insurance premiums of \$911,000.

During our audit fieldwork, CCPS procured the services of a consultant, to assist it with developing a request for proposal, to competitively bid its TPA-provided health services effective for plan year 2016. The consultant also assisted CCPS with analyzing and evaluating vendor bids received. CCPS received competitive bids from three vendors, and in consultation with the aforementioned consultant, awarded a one-year contract with unlimited one-year renewal options, to the incumbent TPA. CCPS management informed us that prior to this contract, its health services had not been competitively bid for at least 10 years.

Finding 12

CCPS did not ensure the propriety of employee and retiree health care claims paid, nor verify that stop-loss insurance was correctly applied and plan administrative fees were properly charged.

Analysis

CCPS lacked procedures and controls to ensure that amounts paid to the TPA were proper. Our review of CCPS' procedures and controls over payments for medical claims and administrative fees disclosed the following conditions:

- CCPS did not audit the propriety of the medical claims paid on its behalf by the TPA to ensure that the services were actually provided, covered by the health plans, appropriately priced, and accurately reported to CCPS. Furthermore, CCPS did not receive detailed claims data from the TPA to be used to verify the propriety of the aforementioned items and the correctness of the year-end settlement.
- CCPS did not verify that claims exceeding the stop-loss limit were reimbursed by the TPA under the stop-loss coverage. CCPS relies on the administrator to notify it of any payments above the stop-loss limit, which are only reported in total as part of the plan year-end settlement. The

amount computed by the administrator to be in excess of the stop loss amount reduces the expenditure amount for which CCPS is responsible. Since CCPS did not receive detailed documentation of all claims paid and stop-loss reductions are not provided for in detail, CCPS lacks assurance that it did not pay claims that should have been covered by the stop-loss insurance. According to the TPA, CCPS paid \$911,000 for stop-loss coverage and received \$88,000 for plan year 2015 claims that exceeded the stop loss limit.

- CCPS did not compare the number of plan participants billed against its own payroll records to ensure that fees and premiums paid by CCPS were for enrolled plan participants. Additionally, the monthly rates charged for the various coverage categories (medical, vision, dental, and prescription drug) and stop-loss insurance were not verified for agreement with the related contracts, as copies of the contracts for the related plan years were not maintained by CCPS.

The State of Maryland contracts with a private firm to audit TPAs of the State's health insurance, prescription drug, dental benefit, and mental health benefit plans, which includes conducting reviews to ensure the propriety of claims paid. A similar condition was commented upon in our preceding audit report regarding the lack of process to verify the propriety of related claims paid by health program administrators.

Recommendation 12

We recommend that CCPS establish procedures to verify the amounts paid for health insurance and TPA service fees. Specifically, we recommend CCPS

- a. obtain documentation to support actual claim payments, and ensure audits of the claims paid by the TPA are conducted (repeat);**
- b. use detailed claims payment data to ensure that claims paid above the stop-loss limit are reimbursed by the insurer (in this case the TPA);**
- c. compare its records of enrolled employees, retirees, and dependents to invoices from the TPA and determine the propriety of all fees and premiums billed (repeat); and**
- d. retain copies of all health care contracts.**

Audit Scope, Objectives, and Methodology

We conducted a performance audit to evaluate the effectiveness and efficiency of the financial management practices of the Calvert County Public Schools (CCPS). We conducted this audit under the authority of the State Government Article, Section 2-1220(e) of the Annotated Code of Maryland, and performed it in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We had two broad audit objectives:

1. Evaluate whether the CCPS procedures and controls were effective in accounting for and safeguarding its assets.
2. Evaluate whether the CCPS policies provided for the efficient use of financial resources.

In planning and conducting our audit of CCPS, we focused on 11 major financial-related areas of operations as approved on September 14, 2004 by the Joint Audit Committee of the Maryland General Assembly in accordance with the enabling legislation. The scope of the work performed in each of these areas was based on our assessments of significance and risk. Therefore, our follow-up on the status of findings included in our preceding audit report on CCPS dated July 1, 2009, was limited to those findings that were applicable to the current audit scope for each of the 11 areas.

The audit objectives excluded reviewing and assessing student achievement, curriculum, teacher performance, and other academic-related areas and functions. Also, we did not evaluate the CCPS Comprehensive Education Master Plan or related updates, and we did not review the activities, financial or other, of any parent teacher association, group, or funds not under the local board of education's direct control or management.

To accomplish our objectives, we reviewed applicable State laws and regulations pertaining to public elementary and secondary education, as well as policies and procedures issued and established by CCPS. We also interviewed personnel at CCPS and the Maryland State Department of Education (MSDE), and staff at other local school systems in Maryland (as appropriate). Our audit procedures included inspections of documents and

records, and observations of CCPS operations. We also tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives, generally for the period from July 1, 2012 through September 30, 2014. Generally, transactions were selected for testing based on auditor judgment, which primarily considers risk. Unless otherwise specifically indicated, neither statistical nor non-statistical audit sampling was used to select the transactions tested. Therefore, the results of the tests cannot be used to project those results to the entire population from which the test items were selected. For certain areas within the scope of the audit, we relied on the work performed by the independent accounting firm that annually audits CCPS' financial statements and conducts the federal Single Audit.

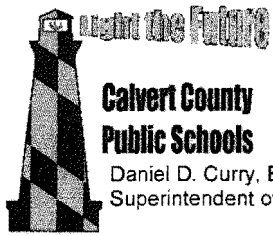
We used certain statistical data—including financial and operational—compiled by MSDE from various informational reports submitted by the Maryland local school systems. This information was used in this audit report for background or informational purposes, and was deemed reasonable.

We also extracted data from the CCPS automated financial management system for the purpose of testing expenditure and payroll transactions. We performed various audit procedures on the relevant data and determined the data were sufficiently reliable for the purposes the data were used during the audit.

CCPS' management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets, and compliance with applicable laws, rules, and regulations are achieved.

Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate. In addition to the conditions included in this report, other less significant findings were communicated to CCPS that did not warrant inclusion in this report.

We conducted our fieldwork from November 2014 to May 2015. The CCPS response to our findings and recommendations is included as an Appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise CCPS regarding the results of our review of its response.



Daniel D. Curry, Ed.D.
Superintendent of Schools

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APPENDIX

July 19, 2016

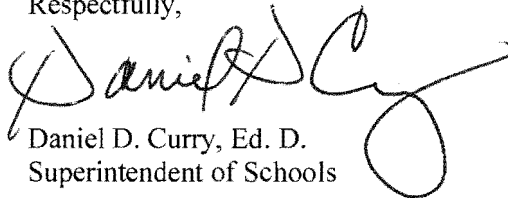
Mr. Thomas J. Barnickel III, CPA
Legislative Auditor
State of Maryland
Office of Legislative Audits
State Office Building, Room 1202
301 West Preston Street
Baltimore, Maryland 21201

Dear Mr. Barnickel:

Enclosed please find the responses to recommendations made in the Financial Management Practices Audit Report that was issued to Calvert County Public Schools in June 2016.

As requested, an electronic copy was sent to tsides@ola.state.md.us on July 19, 2016. Please do not hesitate to contact Ms. Edith Hutchins, Director of Finance, at 410-535-7274, if you have any questions or need additional information regarding this submission.

Respectfully,



Daniel D. Curry, Ed. D.
Superintendent of Schools

Enclosure

Legislative Audit

Recommendation 1

We recommend CCPS:

- a. Record collections and restrictively endorse all checks immediately upon receipt;
- b. Properly secure collections prior to deposit;
- c. ensure that accounts receivable records are maintained by individuals independent of the cash receipts function; and,
- d. independently verify that collections were subsequently deposited.

We advised CCPS on accomplishing the necessary separation of duties using existing personnel.

Management's Response

- a. We concur with the recommendation that collections be recorded and checks be restrictively endorsed immediately upon receipt. We will have a staff member immediately record money received on a cash receipts log prior to dropping the money in the safe. Checks will be restrictively endorsed upon receipt.
- b. We concur with the recommendation that collections be properly secured prior to deposit. We have installed a safe (which has a drop slot) in the vault which is located in the Finance Department. All receipts awaiting deposit will be stored in the safe instead of in the locked fireproof filing cabinet which is currently located in the vault.
- c. We concur with the recommendation that accounts receivable records be maintained by individuals who are independent of the cash receipts function. Specifically, the issue addressed here is that the employee who processes cash receipts and takes the deposits to the bank also stamps invoices generated by CCPS as paid. Henceforth, the invoices generated by CCPS will be stamped paid by someone other than the employee who handles the cash receipts.
- d. We concur with the recommendation that independent verification be made of collections which are recorded upon receipt and deposited. We will ensure that an employee independent of the cash receipts process trace transactions recorded on the cash receipts log to the bank deposit tickets. The employee who performs the verification will make identifying tick-marks on the documentation as well as initial and date the supporting documentation upon verifying the collections.

Recommendation 2

We recommend that CCPS strengthen its controls over the automated procurement and accounts payable system and processes. Specifically, we recommend that CCPS:

- a. periodically generate security reports from the automated financial system and use them to evaluate user capabilities;

- b. restrict users' capabilities to those needed to perform their job duties, and eliminate the ability of users to perform incompatible duties (repeat); and
- c. establish a process for the independent verification of all disbursements (repeat) to appropriate supporting documentation (such as approved requisitions), at least on a test basis.

Management's Response

- a. We concur with the recommendation that CCPS periodically generate security reports from the financial system and use them to evaluate user capabilities. CCPS will evaluate user capabilities using the system generated security reports at least annually.
- b. We concur with the recommendation that user capabilities should be restricted to those needed to perform their job duties and that the ability of users to perform incompatible duties should be eliminated. However, the financial software system utilized by CCPS is not designed to narrowly restrict user access. There are instances in which a user who needs access to a specific function/feature automatically gets access to another function/feature he/she does not need. We will make every effort to restrict user capabilities to those needed to perform their job duties to the extent allowed by the software security. We will identify instances in which unavoidable incompatible system capabilities exist, and where these capabilities exist for a user, we will establish mitigating controls to address this issue. Specifically, an independent employee will generate and review reports that show all transactions initiated by the employee in question and will compare the transactions to source documents to confirm the validity of the transactions.
- c. We concur with the recommendation that CCPS have a process for the independent verification of all disbursements to the approved requisitions. CCPS will have an employee independent of the accounts payable function regularly test accounts payable disbursements to ensure that disbursements agree to the related supporting documentation (which will include the purchase order and the originally approved purchase requisition).

Recommendation 3

We recommend that CCPS:

- a. perform a periodic documented review of users' accesses and capabilities to ensure that assigned functions and capabilities are consistent with employee job duties (repeat);
- b. Ensure that HR and payroll transaction processing and review responsibilities are properly segregated; and
- c. Establish online approval requirements for HR and payroll transactions processed, which also requires approvers to review documentation to ensure the transactions are properly authorized and supported (repeat).

Management's Response

- a. We concur with the recommendation that CCPS perform a periodic documented review of users' access and capabilities to ensure that assigned functions and capabilities are consistent with the employees' job duties and job duties are adequately segregated. The Finance Department has an established practice of cross-training of duties so that there are at least two employees in each area (accounting, accounts payable, and payroll) who have the ability to perform critical functions. It is essential to have proper backup so that all critical tasks are completed in the absence of the employee who is primarily responsible for specified tasks. CCPS will evaluate users' access and capabilities using system generated security reports at least annually to ensure that assigned functions and capabilities are consistent with the employees' job duties. We will also review job duties at least annually to ensure adequate segregation. CCPS will maintain documentation of the periodic reviews.
- b. We concur with the recommendation that HR and payroll transaction processing and review responsibilities are properly segregated. We will make every effort to properly segregate duties and will evaluate job functions to identify instances in which unavoidable incompatible job functions exist. Where such unavoidable incompatible job functions exist, we will establish manual controls that specifically address the incompatibility in an effort to offset risks. Specifically, an independent employee will generate and review reports that show all transactions initiated by the employee in question and will compare the transactions to source documents to confirm the validity of the transactions. CCPS will maintain documentation of the periodic reviews.
- c. We concur with the recommendation that CCPS establish online approval requirements for HR and payroll transactions processed. However, this is not an option because the financial reporting software used by CCPS does not have built-in capability for online approval of HR and payroll transactions. In lieu of online approvals, we have created an employee audit trail report in COGNOS which tracks all changes made by HR and payroll employees in the financial software system. The supervisors of HR and Finance will have restricted access to the system, thereby providing the needed independence. They will select transactions from the audit trail report on a monthly basis and review the documentation to ensure the transactions are properly authorized and supported. CCPS will maintain documentation related to the reviews.

Recommendation 4

We recommend that CCPS obtain Board approval for all employee compensation (salaries and benefits), as required by law.

Management's Response

We concur with the recommendation that Board approval for all employee compensation (salaries and benefits) be obtained as required by law. However, the matter of whether or not all members of the Board of Education of Calvert County had knowledge of and approved the contracts in question is in litigation and is currently pending a decision by the Maryland State Board of Education.

Recommendation 5

We recommend CCPS establish policies and procedures, to ensure accountability and control over its equipment inventories, which address the following:

- a. tagging of all capitalized equipment items (repeat);
- b. the frequency and documentation of required periodic physical inventories of capital equipment and sensitive items,
- c. the investigation and reporting of missing items; and,
- d. the physical inventory and record keeping requirements of sensitive items, including the data to be maintained in the records for each item (repeat).

Management's Response

We concur with the recommendation that CCPS establish policies and procedures to ensure accountability and control over its equipment inventories. The purchasing and receiving of the type of equipment addressed in this finding crosses many departments in Calvert County Public Schools. Although the most equipment is technology related, in our current purchasing structure, individual departments and schools order, receive, and inventory much of the equipment. This process is the case for both items on the approved purchasing list and school-based technology pilots. Because not all technology purchases flow through the Department of Information Technology, an interdepartmental committee will be formed to analyze the issue and develop the policies and procedures to ensure accountability and control over equipment inventories. To ensure consistency across our school system, this group will be led by the Director of Information Technology, Director of Finance, and the Director of Procurement, and will include the Supervisor of Information Technology and other members as determined by the group.

The following will be addressed:

- a. classify/define types of equipment (capital, sensitive etc.);
- b. identify which equipment in CCPS will be tagged with bar codes;
- c. list who is responsible for tagging each type of equipment and the process they will use;
- d. decide which application (or method) will be used to collect essential information for the database;
- e. create the procedures for collecting and storing the inventory information;
- f. decide when and how often physical inventories of capital and sensitive equipment will be conducted;
- g. specify the data to be maintained in the records for each item; and
- h. define the process for investigating and reporting missing equipment.

Recommendation 6

We recommend that CCPS:

- a. implement strong controls over domain passwords and accounts in accordance with best practices identified in the aforementioned Information Security Policy;
- b. limit access to critical databases to personnel whose job duties require such access; and

- c. log all critical security and audit events, review these logs on a regular basis with appropriate investigation of unusual activity, document these reviews and retain the documentation for future reference.

Management's Response

We concur with the recommendation that CCPS implement strong controls over domain passwords and accounts in accordance with best practices identified in the Information Security Policy. CCPS implemented procedures in the spring of 2016 to allow CCPS to have strong controls over domain passwords and accounts as mentioned in the Information Security Policy.

We concur with the recommendation that CCPS limit access to critical databases to personnel whose job duties require such access. CCPS has completed the implementation of the recommended removal of this access.

We concur with the recommendation that CCPS log all critical security and audit events, review these logs on a regular basis with appropriate investigation of unusual activity, document these reviews and retain the appropriate documentation for future reference. DIT will conduct a weekly review of the database logs for that week, and will retain copies of these weekly logs in an audit directory for one year. These reviews will be documented and the documentation will be retained for future reference. If any logs that are reviewed result in red flags, they will be shared with the directors of DIT, Finance, and HR as appropriate.

Recommendation 7

We recommend that CCPS:

- a. perform a documented review and assessment of its network security risks from Internet traffic and encrypted network traffic to its critical devices and identify how such traffic should be subject to IDPS. Based on this review and assessment, we recommend that CCPS implement IDPS coverage as necessary; and
- b. relocate all publicly accessible servers to a separate neutral network zone to limit security exposures to the internal network segment.

Management's Response

We concur with the recommendation that CCPS perform a documented review and assessment of its network security risks from Internet traffic and encrypted network traffic to its critical devices and identify how such traffic should be subject to IDPS and that CCPS implement IDPS coverage as necessary based on this review and assessment. Calvert County Public Schools reviewed and assessed its network security risks on March 19, 2015 in concert with Skyline Technologies. CCPS has enabled IDPS/Vulnerability Protection on all inbound connections through our network firewall.

We concur with the recommendation that CCPS relocate all publicly accessible servers to a separate neutral network zone to limit security exposures to the internal network segment. Calvert County Public Schools reviewed and assessed its network security risks on March 19, 2015 in concert with Skyline Technologies. CCPS has enabled our network firewall to decrypt and analyzes all encrypted incoming traffic. The firewall will limit any security exposures.

Recommendation 8

We recommend that CCPS:

- a. ensure that the current versions of malware protection software are installed and running properly on all workstations and servers; and
- b. Ensure that administrative privileges on workstations are properly restricted.

Management's Response

We concur with the recommendation that CCPS ensure that the current versions of malware protection software are installed and running properly on all workstations and servers. When the legislative audit was conducted, CCPS had a known issue and fix for machines that are out of date as referenced in the IT section of the audit regarding malware protection. Those machines not receiving the updates had a corrupt cache of a software product agent. We applied the fix to all workstations after the spring PARCC testing window in May of 2015. Since that date, normal patch management occurs on a regular basis. Additionally, last year when a vendor announced that they would no longer support a workstation operating system, CCPS made a major push to move all systems to a supported operating system. Currently, all machines are running this supported operating system.

We concur with the recommendation that CCPS ensure that administrative privileges on workstations are properly restricted. As a practice, administrative privileges are restricted on many machines. However, many applications, including testing, require administrative privileges to the workstation. UAC control is recommended to be off or disabled during installation of some of these programs. A pop up cannot be allowed during testing. This will exit a student from the testing window.

Recommendation 9

We recommend that CCPS:

- a. use market investment rates as a basis for establishing contractor rates for the annual PVA;
- b. develop supportable cost estimates as the basis for establishing reasonable contractor rates for operation costs and per mile maintenance costs; and
- c. exclude federal fuel excise taxes from contractor payments.

Management's Response

- a. We concur with the recommendation that CCPS consider the use of market investment rates as a basis for establishing contractor rates for the annual PVA.
- b. We concur with the recommendation that CCPS consider developing supportable cost estimates as the basis for establishing reasonable contractor rates for operation costs and per mile maintenance costs.
- c. We concur with the recommendation that CCPS exclude federal fuel excise taxes from contractor payments. This exemption will be applied along with the recently legislated exemption from state motor fuel excise taxes for fuel purchased by bus contractors for use in school buses used to transport students on approved school system activities.

Recommendation 10

We recommend that CCPS develop formal procedures that ensure that voided transactions are reviewed and approved by supervisors for propriety (repeat).

Management's Response

We concur with the recommendation that CCPS utilize formal procedures to ensure that voided transactions are reviewed and approved by supervisors for propriety.

The cafeteria manager or designee will review voided transaction activity on a weekly basis.

Excessive voided transaction activity will now require staff to complete a manual void transaction log for a period of thirty (30) days to help provide more specific information regarding void activity and to assess whether or not these voids could have been prevented.

Recommendation 11

We recommend that CCPS require both the cafeteria cashier and manager to sign the closing sheet for each cash register to document their verification and agreement of the cash receipts counted and related sales.

Management's Response

We concur with the recommendation that CCPS require both the cafeteria cashier and manager to sign the closing sheet for each cash register to document their verification and agreement of the cash receipts.

In August of 2015, the Child Nutrition Department revised the form used to close out registers at the end of each day. This revised version of the closing form includes dual signature lines, one for the cashier and one for the certifier (manager or designee) of the funds to ensure that money is verified prior to being deposited. This form is now being utilized in all locations.

The completed forms are maintained at the school. This paperwork is reviewed by the Supervisor of Child Nutrition or designee throughout the school year.

Recommendation 12

We recommend that CCPS establish procedures to verify the amounts paid for health insurance and TPA service fees. Specifically, we recommend CCPS:

- a. obtain documentation to support actual claim payments, and ensure audits of the claims paid by the TPA are conducted (repeat);
- b. use detailed claims payment data to ensure that claims paid above the stop-loss limit are reimbursed by the insurer (in this case the TPA);
- c. compare its records of enrolled employees, retirees, and dependents to invoices from the TPA and determine the propriety of all fees and premiums billed (repeat); and
- d. Retain copies of all healthcare contracts.

Management's Response

We concur with the recommendation that CCPS establish procedures to verify the amounts paid for health insurance and TPA service fees. Given the magnitude of work involved with implementing the specifics of the aforementioned recommendation, CCPS will investigate the propriety of contracting with a consultant to perform said tasks in items a., b., and c. above. CCPS will retain copies of all healthcare contracts.

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