

Financial Management Practices Audit Report

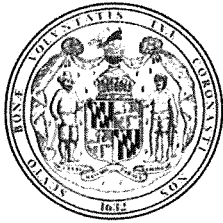
Carroll County Public Schools

March 2012



OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

Karl S. Aro
Executive Director

March 20, 2012

Bruce A. Myers, CPA
Legislative Auditor

Senator James C. Rosapepe, Co-Chair, Joint Audit Committee
Delegate Guy J. Guzzone, 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 Carroll 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 certain financial operations including recovery of costs related to Medicaid-eligible students, procurement and disbursements, information system security, and equipment control. For example, documentation regarding Medicaid-eligible services was not always provided by the schools that resulted in an estimated \$275,000 not being recovered for the period from August 2010 to February 2011. Also, CCPS' automated systems were not properly secured to mitigate risks from external sources.

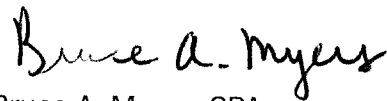
The audit also identified certain steps CCPS could take to improve cost effectiveness. For example, certain rates used to pay its bus contractors were not based on either actual costs or market conditions. In this regard, although CCPS paid contractors for the cost of the buses over a 12-year period, the depreciation component was calculated using 10 years resulting in the contractors being paid 120 percent of the cost of each bus over their life. We estimated that CCPS may pay \$2.3 million more for depreciation than if the payments were based on the actual 12-year life of the 129 buses placed in service from 2007 to 2011.

CCPS also should establish a comprehensive investment policy and periodically reevaluate the fee and investment earnings arrangement for the general checking account to select available terms that are the most advantageous to CCPS.

CCPS had established proper internal controls in a number of areas, such as human resources and payroll processing and bidding, awarding and monitoring construction projects. CCPS also took actions to address certain findings from our preceding audit report. For example, CCPS developed a detailed Procurement Card User Guide to better control the use of corporate purchasing cards.

An executive summary of our findings can be found on page 5 of this report. 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 that reads "Bruce A. Myers". The signature is written in a cursive, flowing style.

Bruce A. Myers, CPA
Legislative Auditor

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* Denotes item repeated in full or part from preceding audit report

Executive Summary

Legislative Audit Report on the Carroll County Public Schools (CCPS) March 2012

According to data compiled by the Maryland State Department of Education, CCPS ranks 9th in student enrollment among the 24 public school systems in Maryland. In fiscal year 2010, CCPS had a total full-time regular and special education pupil population of 27,721 at its 44 schools. CCPS' operating and capital expenditures totaled \$398.5 million during that year.

The Office of Legislative Audits has conducted its second audit of CCPS' financial management practices. The results of the first audit were issued in a report dated January 5, 2007. Our current audit identified a number of opportunities for CCPS to improve internal controls, to adopt more cost-effective processes, and to enhance policy direction.

CCPS Needs To Improve Internal Controls and Accountability in Certain Financial Areas

Although proper internal controls had been established in certain financial areas, such as human resources and payroll processing and bidding, awarding and monitoring construction projects, CCPS needs to improve internal controls and accountability in certain other financial areas. For example, CCPS did not ensure that all reimbursable services provided to Medicaid-eligible students were subsequently billed. Specifically, staff responsible for submitting such billings for federal reimbursement often did not receive documentation from the schools regarding eligible services that were provided to the students. We estimated that CCPS may have been able to recover up to an additional \$275,000 for the period from August 2010 to February 2011 if all services that were rendered had been subsequently billed.

Adequate security measures and monitoring procedures were not in place to protect CCPS' network and related critical devices from security risks. For example, firewall rules allowed numerous insecure and unnecessary connections to critical CCPS network devices. In addition, a number of network accounts had excessive or improper access to network resources including data files and programs.

CCPS Should Consider Implementing Certain Steps to Improve Cost Effectiveness

CCPS did not base certain elements used to pay its bus contractors on either market conditions or actual costs. For example, although CCPS pays

contractors an annual per vehicle allotment for 12 years, the related depreciation component uses a 10-year assumption. As a result, the contractors are paid 120 percent of the cost of each bus over the bus' lifetime. We estimated that CCPS may pay approximately \$2.3 million more for depreciation than if the payments were based on the actual 12-year life of the buses obtained since 2007.

CCPS did not independently verify the contractor reported energy savings related to an energy conservation contract. Costs under the contract over its 15-year period will total \$19.5 million, including financing costs. These costs include certain capital improvements to CCPS facilities and software and monitoring services. As of July 1, 2011 CCPS owed \$4.2 million for the remainder of the services portion of the contract (contract years 8 through 15). The contract guarantees savings of \$10.8 million over the life of the contract.

CCPS has experienced persistent deficits in its food service operations. From fiscal year 2007 to 2010, food service operation costs have exceeded related revenues by a total of over \$1 million. Based on our analysis of CCPS costs to those of four similarly-sized school systems, CCPS' cost per meal was higher than all four systems reviewed. Specifically, CCPS salary and wage costs per meal exceeded those of the four systems. Further, we found that over the same four year period, CCPS student participation in paid lunches decreased at a significantly higher rate than those of the four comparison systems.

CCPS Needs to Establish a Comprehensive Investment Policy

CCPS had not implemented a formal investment policy. Its current practice of forgoing interest earnings to avoid bank account fees may not represent the best investment choice.

Background Information

Statistical Overview

According to student enrollment records compiled by the Maryland State Department of Education (MSDE), Carroll County Public Schools (CCPS) ranks 9th in student enrollment among the 24 public school systems in Maryland. From fiscal year 2000 to 2010, the total full-time student population has increased 0.9 percent from 27,472 to 27,721 students. For the 2010-2011 school year, CCPS had 44 schools, consisting of 23 elementary, 9 middle, 8 high schools, and 4 alternative schools. According to CCPS' audited financial statements, operating and capital expenditures totaled \$398.5 million in fiscal year 2010. The largest expenditure category was salaries and wages, including benefits, which accounted for 80 percent of total operating expenditures during fiscal year 2010. According to MSDE records, during fiscal year 2010, CCPS had 3,594 full-time equivalent positions which consisted of 2,510 instructional and 1,084 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 Carroll 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. Carroll County government exercises authority over CCPS, primarily through review and approval of CCPS' annual operational and capital budgets.

External Audit of Fiscal Year 2010 Activity

CCPS engages a certified public accounting firm to independently audit its annual fiscal year-end financial statements. Additionally, the auditor conducts what is referred to as a Single Audit of CCPS federal grant programs (as required by federal regulations). The resulting financial statement and single audit reports for fiscal year 2010 were issued in September 2010 and

December 2010, respectively. Neither report disclosed deficiencies¹ in CCPS' record keeping, processes, and controls. However, the Report on Internal Control Over Financial Reporting and on Compliance and Other Matters issued in conjunction with the financial statement audit included a material weakness² related to CCPS' financial reporting and presentation of construction in progress. Specifically, additions to construction in progress were previously recorded based on budgeted amounts. This resulted in construction in progress being materially overstated as of June 30, 2009, thereby requiring an adjustment to correct the error.

Due to similarities between the work of the independent certified public accounting firm that audited CCPS' financial statements and the risks and scope of our audit in certain areas, we relied on the results of the independent audit of the fiscal year 2010 financial statements to reduce the scope of our audit work related to revenues, accounts receivable and federal grant activity.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of 15 of the 30 findings contained in our preceding audit report dated January 5, 2007 (the 30 findings resulted in 22 detailed recommendations in that report). We followed up on these 15 findings based on our current assessment of significance and risk relative to the audit objectives. We determined that CCPS satisfactorily addressed 9 of these findings. The remaining 6 findings are repeated in this report.

¹ A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. With respect to Single Audit, a deficiency is a control deficiency, or combination of control deficiencies, that does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct noncompliance with a type of compliance requirement of a federal program on a timely basis.

² A material weakness in internal control is a deficiency, or a combination of deficiencies, such that there is a reasonable possibility that a material misstatement of the Board's financial statements (or, with respect to Single Audit, material noncompliance with a type of compliance requirement of a federal program) will not be prevented or detected and corrected, on a timely basis.

Findings and Recommendations

Revenue and Billing Cycle

Background

Carroll County Public Schools (CCPS) revenues consist primarily of funds received from Carroll County, the State, and the federal government. According to the CCPS audited financial statements, revenues from all sources totaled \$401 million during fiscal year 2010. In addition, CCPS maintains school activity funds that are collected to operate various student activities, clubs, and school publications. Each school maintains detail records which separately account for the activity of each group or club. Each school also maintains its own separate bank account and, in accordance with policy, is responsible for transferring excess funds to CCPS' Central Office at least once a month. For fiscal year 2010, school activity fund collections totaled \$5.1 million and disbursements totaled \$5.4 million. The June 30, 2010 balance based on the audited financial statements totaled \$2.3 million.

External Audit Disclosed No Reportable Conditions Regarding Revenue Activities

Due to the similarities between the work of the independent certified public accounting firm that audited the CCPS financial statements and the objectives of our audit in this area, we placed significant reliance on the results of that audit for revenues and accounts receivable (for example, amounts due from other governments). The auditor's procedural review and testing disclosed no material weaknesses or deficiencies regarding significant revenue types or accounts receivable. Such testing included the most significant revenue types—the majority of which related to electronic fund transfers from other government entities.

Accounting Manual for School Activity Funds Was Established and Related Disbursements Tested Were Proper

CCPS' Board of Education has a fiduciary responsibility to ensure that school activity funds are used only for intended purposes. In response to a recommendation in our preceding audit, CCPS developed a *Procedures Manual for School Funds* to establish a uniform method for reporting all receipts, expenditures, and balances related to school sponsored activities. The *Manual* states that school principals are responsible for maintaining internal controls over school funds. Each school has a dedicated financial secretary for school activity funds who is tasked with maintaining accounts, disbursing funds, and collecting funds in accordance with the *Manual*.

In addition, our test of fiscal year 2010 and 2011 disbursements from the checking accounts of two schools disclosed that the disbursements tested were properly supported and made for valid school purposes.

Finding 1

Schools did not always comply with the procedures established in the *Procedures Manual for School Funds* governing school activity funds nor ensure account activity was reviewed in a timely manner.

Analysis

Our review of fiscal year 2010 and 2011 school activity fund transactions at two schools disclosed that certain transactions were not processed as required by the *Procedures Manual for School Funds*. Also, we noted that account activity was not always reviewed in a timely manner. Specifically, we noted the following conditions:

- Our test of 10 receipts at one school, totaling \$87,700, disclosed that school personnel did not properly complete the required receipt documentation for 2 receipts totaling \$29,980. Specifically, the same employee received, counted, signed the receipt document as verifying the total collected, and made the related deposit. Furthermore, an independent verification was not performed to ensure all funds collected were deposited. The *Manual* requires that funds received be verified by someone other than the person receiving the funds. School activity fund receipts at this school totaled \$536,439 in fiscal year 2010.
- Our test of 10 receipts totaling \$109,000 at the other school disclosed that the school did not deposit receipts timely for 2 receipts tested totaling \$27,175. These receipts were deposited from 4 to 17 days after receipt. For example, for one test item, receipts were collected over several weeks prior to transferring the funds to the bookkeeper for recording and deposit. The *Manual* requires that funds be counted and turned into the bookkeeper no later than the end of the school day on which it was collected. The *Manual* further states that receipts must be deposited promptly, preferably on the same day for large amounts. School activity fund receipts at this school totaled \$481,677 in fiscal year 2010.
- Account advisors (CCPS staff assigned the responsibility to oversee student groups and activities) did not always review school activity fund account activity in a timely manner. According to a CCPS review of school fund accounts as of May 2011, many accounts were not reviewed in a timely manner, especially at the high schools. For example, at one high school with 122 listed accounts, 51 accounts (42 percent) were not

reviewed within the past 30 days and 6 accounts had not been verified by an advisor since the account's inception. To enhance controls over school activity fund accounts, CCPS developed an automated process that facilitates the review of all fund receipt and disbursement activity. Account advisors are required to periodically review all account activity and use an electronic signature to document this review.

Recommendation 1

We recommend that CCPS ensure that schools are properly administering student activity funds. Specifically, we recommend that CCPS

- a. ensure that schools properly control cash receipts, deposit funds timely and independently verify that all collections were deposited; and**
- b. ensure all accounts are reviewed in a timely manner.**

Federal Funds

Background

CCPS receives funds pertaining to federal government programs that are generally restricted for use for a specified program (such as the School Lunch Program or Special Education). According to the audited Schedule of Federal Awards, fiscal year 2010 expenditures of federal award funds totaled \$16 million.

Single Audit Report Disclosed No Reportable Conditions Regarding Federal Grant Management

Due to the work performed by the independent certified public accounting firm that conducted the Single Audit of the 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 fiscal year 2010 required Schedule of Federal Awards (which includes claimed and reported grant-related expenditures). The related report 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 not identify any material weaknesses or deficiencies.

Finding 2

CCPS did not ensure that all costs associated with Medicaid-subsidized services were recovered.

Analysis

Although CCPS had a process to track the submission of documentation used to recover Medicaid-subsidized costs for applicable students, CCPS did not ensure that its Medical Assistance billing staff received documentation for all services performed each month from the individual schools. In this regard, records generated by the CCPS Medical Assistance billing system identified students who received eligible services for which no subsequent billing was processed. Based on these records (which we tested and found sufficiently reliable), we estimated that CCPS may have recovered approximately \$275,000 less than it could have due to the failure to receive documentation from individual schools for the period from August 2010 to February 2011.

According to the fiscal year 2010 audited financial statements, reimbursement for Medicaid-subsidized services totaled \$875,000, and as of May 2011 according to CCPS records, approximately 900 students were eligible to receive Medicaid-subsidized services. A similar condition was commented upon in our preceding audit report.

Recommendation 2

We recommend that CCPS ensure that all eligible costs for Medicaid-subsidized services are properly documented and fully recovered (repeat).

Procurement and Disbursement Cycle**Background**

According to CCPS records, non-payroll disbursements totaled \$64 million during fiscal year 2010. CCPS' Board of Education policy requires the Board to approve all contracts with a bid value of \$25,000 or greater. The policy also requires the solicitation of quotes for purchases from \$7,500 to \$25,000. To implement the policy, CCPS developed detailed procedures to govern the procurement process. CCPS properly procured the contracts we selected for review.

Also, in response to our preceding audit report, CCPS took a number of actions to better control the use of corporate purchasing cards (CPC). For example, CCPS developed a detailed *Procurement Card User Guide*, instituted periodic reviews of card usage including reducing or eliminating spending limits for underutilized or unused cards, required independent reconciliation

of user charges to the master billing, and required independent reviews of all processed transactions by Central Finance Office staff. According to CCPS records, as of November 2010, CCPS had approximately 325 active CPC. For fiscal year 2010, expenditures made using the CPC totaled \$8.6 million.

Although CCPS had instituted these measures, we found that control over disbursements could be improved and that certain CPC transactions may not have been processed in accordance with established CPC procedures.

Finding 3

Internal controls over procurements and disbursements were not adequate.

Analysis

Although CCPS had established a process to periodically review capabilities assigned to employees on the automated financial system used to process purchases and disbursements, our testing disclosed several instances in which employee capabilities allowed them to record and process critical transactions. Specifically, we found that four employees' assigned capabilities allowed unrestricted access to critical system functions (including incompatible functions such as entering accounts payable, adding and deleting vendors, entering and posting manual and void checks, and printing checks). As a result of these incompatible capabilities, improper or erroneous transactions could be processed without detection. One of these employees did not require any of these capabilities to perform their job duties. Our testing of purchase orders and invoice payments processed by these employees did not disclose any inappropriate or erroneous transactions. A similar condition was commented upon in our preceding audit report.

Although CCPS had a process in place to review all checks for propriety prior to issuance, the employees responsible for this review function were two of the four employees with the unrestricted access capabilities commented on above. Accordingly, this review was not an effective control process due to the lack of reviewer independence from the transaction processing.

Recommendation 3

We recommend that CCPS improve its internal controls over procurements and disbursements. Specifically, we recommend that CCPS

- a. restrict critical system access capabilities so that incompatible functions are separated (repeat), and**
- b. ensure that the comparisons of transactions and checks processed to the related supporting documentation are performed by persons independent of transaction processing.**

Finding 4

Certain purchasing card transactions did not appear to be in compliance with CCPS policy and were not always properly supported.

Analysis

Our test of 40 corporate purchasing card (CPC) transactions totaling \$58,900 made during fiscal years 2010 and 2011 disclosed the following conditions:

- CCPS lacked documentation to support the propriety of certain CPC transactions for the purchase of gift cards. Specifically, 12 transactions totaling \$4,800 used to purchase gift cards did not include documentation listing who was to receive the gift cards and documentation that the cards were distributed as intended.
- Certain transactions using school activity or principal funds were made to purchase items to benefit employees. Five transactions totaling \$2,000 (including one transaction noted in the preceding paragraph) were used to purchase items subsequently awarded to school staff (such as chocolates and gift cards). This appears to violate CCPS' *Procedures Manual for School Funds* which states that principal funds may only be used to benefit the general student body and student funds shall benefit those students who have contributed to the accumulation of such funds. Furthermore, the *Procurement Card User Guide* specifically prohibits the use of a CPC for the purchase of gift cards for employees or employee volunteers.

Similar conditions regarding the use of corporate purchasing cards were commented upon in our preceding audit report.

Recommendation 4

We recommend that CCPS

- a. improve controls over its credit card program by reviewing the propriety of CPC transactions for the purchase of gift cards (including the aforementioned transactions), and ensure that appropriate supporting documentation is being maintained (repeat); and
- b. ensure that CPCs are used in accordance with current requirements that limit the use of school activity funds and principal funds as well as enforcing its policy prohibiting the purchase of gift cards for employees.

Human Resources and Payroll

Background

Payroll represents the largest single cost component in the CCPS budget. According to CCPS records, fiscal year 2010 salary, wage, and benefit costs totaled \$260 million. According to MSDE reports, as of June 2010, CCPS had 3,594 full-time equivalent positions, including 1,084 non-instructional positions.

Internal Control over the Processing of Human Resources and Payroll Transactions Was Adequate

CCPS had established adequate controls over its automated human resources and payroll processing systems. Specifically, adequate automated and manual processes were in place to ensure the propriety and accuracy of additions and modifications to personnel information as well as related payroll disbursements. These included an independent supervisory review of human resources and payroll transactions as well as a periodic review of all access to the automated system used to process these transactions to ensure that access was appropriate based on the employee's position and job duties.

Payments to Employees were in Accordance with Approved Contracts and Appropriate Documentation

Our test of regular and hourly payroll transactions processed in fiscal year 2011 disclosed that CCPS made payments in accordance with appropriate contracts and the payments agreed to support documentation such as timesheets or other attendance records.

Inventory Control and Accountability

Background

According to CCPS' audited financial statements, the undepreciated value of its capital equipment inventory totaled \$49.5 million as of June 30, 2010. CCPS uses automated records to track equipment inventory with a cost of \$1,000 or more (including items capitalized for financial statement purposes). In addition, CCPS tracks certain other technology sensitive equipment costing over \$500 (such as laptops and projectors) for control purposes.

Finding 5**Internal controls and record keeping over equipment were not adequate.****Analysis**

Our review disclosed that CCPS controls and record keeping were inadequate to ensure accountability over equipment. Specifically, the audit disclosed the following conditions:

- Although CCPS procedures require that schools periodically conduct physical inventories of items included in the inventory records, there was no documentation to substantiate that these inventories were completed as required. Although each school received an annual listing of all items assigned to that school according to the automated inventory records, we were advised that the listing was used to facilitate reporting of disposals, transfers and related activity, but CCPS could not provide documentation that the schools actually conducted the required inventories. In addition, CCPS had no procedures specifying the process to be followed to investigate and resolve lost or missing items.

Furthermore, certain technology sensitive items were not subject to periodic physical verification. In this regard, CCPS' Technology Services Department maintained system-wide automated records over certain technology sensitive items and could track all computers attached to the CCPS network to verify their existence and location. However, CCPS had no process to ensure accountability for computers not attached to the network and other sensitive equipment such as electronic whiteboards and projectors.

- The employees responsible for maintaining and updating inventory records at the schools, essentially the property custodians, also had the responsibility to verify the existence of the equipment as recorded on the annual listing of items assigned to the school. CCPS did not have a process to independently verify the accuracy of the inventory records, at least on a test basis.
- Although CCPS procedures require that the automated inventory records include a property ID number and serial number for identification purposes, our review of these records disclosed that the records were often incomplete. For example, the records for one high school showed a number of items (such as flat screen televisions) that did not include serial numbers or other item-specific identification. In addition, CCPS did not require that items be tagged to identify the items as property of CCPS.

- Certain equipment was not recorded in the detail records. Of 30 capital/sensitive equipment items totaling \$34,800 tested from purchases made in fiscal years 2010 and 2011, we found that 14 of the items totaling \$17,300 were not recorded in CCPS' equipment inventory records, including the records maintained by the Technology Services Department. We sighted each of the unrecorded items. Our test of 15 sensitive equipment items (computers) sighted at 3 locations disclosed that 2 items were not included in the detail equipment records and 1 item could not be positively identified as being recorded due to the lack of a serial number in the automated records.

Similar conditions were commented upon in our preceding audit report.

Recommendation 5

We recommend that CCPS

- ensure a physical inventory of all school equipment items and sensitive technology items are periodically conducted and the results are reconciled with the automated records;**
- implement a process to periodically and independently verify the results of the physical inventories taken by the schools, at least on a test basis;**
- update its existing procedures to include directives on the processes for following up on lost and missing items (repeat);**
- ensure that the inventory records include all required equipment identification information and that all equipment (especially sensitive equipment) is tagged or otherwise identified as CCPS property (repeat); and**
- ensure that the equipment inventory records accurately include all equipment owned by CCPS.**

Information Technology

Background

CCPS' Technology Services Department maintains and administers CCPS' computer network, computer operations, and instructional information systems applications. CCPS operates a wide area network, with Internet connectivity, which connects the individual schools' local networks to the computer resources located at CCPS headquarters. The Technology Services Department maintains a server room at the headquarters location and at a disaster recovery location where numerous computer servers operate to support CCPS' information system applications and provide alternate processing capability. The Technology Services Department supports CCPS'

critical applications including the student management application and the financial/human resources application which includes accounts payable, purchasing, human resources, and payroll.

CCPS Properly Procured a Contract for New Student Information Software

CCPS properly procured software and related implementation services (such as training) for a new student information system. The procurement process included submission and review of technical proposals by a team of CCPS staff, user committee review, and selection of the lowest price of the technically qualified vendors. The Board approved the contract. The system was implemented for the 2011 school year (placed in service effective July 1, 2010). Based on our review of available documentation, CCPS implemented the system in accordance with its anticipated schedule.

Finding 6

Administrative access to the CCPS network was not adequately restricted and network password controls were not adequate.

Analysis

Administrative access to the CCPS network was not adequately restricted and network password controls were not adequate. Specifically, we noted the following conditions:

- Eleven accounts were improperly placed in the domain administrators group. As a result of this condition, these accounts had administrative control over all domain resources and could access and make unauthorized modifications to critical data without detection by management.
- Twelve development staff accounts were improperly placed in the local administrators group on two critical servers. As a result of this condition, these accounts had full control over all data files and programs residing on these servers.
- Network password controls with respect to password length, complexity, age, and history were not adequate. For example, the minimum password length was set to only six characters.

Recommendation 6

We recommend that CCPS

- a. remove unnecessary accounts from the domain administrator and local administrator groups; and
- b. implement stronger password controls with respect to length, complexity, age, and history.

Finding 7

Student management system database controls were not sufficient and certain program change controls were inadequate.

Analysis

Student management system database controls were not sufficient and program change controls over the financial/human resources application's computer programs were inadequate. Specifically, we noted the following conditions:

- Critical security and audit events on the student management system database were not logged. As a result, an audit trail to identify any unusual or questionable activities did not exist. A similar condition was commented upon in our preceding audit report.
- Seventeen accounts were improperly given full control over the student management system database. As a result, these accounts had improper modification access to all data on this database.
- Program change controls over the financial/human resources application's computer programs did not provide for a comparison report of program changes or a technical review of the changes by information technology management personnel. In addition, documentation of program change reviews and approvals was not maintained and the programmers who performed the changes moved the programs into production. As a result of these conditions, unauthorized or erroneous changes to production programs could occur without detection. A similar condition was commented upon in our preceding audit report.

Recommendation 7

We recommend that CCPS

- a. log critical security and audit events on the student management system database, regularly review these logs, investigate unusual or questionable items, and document and retain these reviews and investigations; (repeat)

- b. remove all unnecessary access to the student management system database; and
- c. establish controls over program changes to ensure that all changes to production programs are properly reviewed and approved (repeat).

Finding 8 CCPS network was not properly secured.

Analysis

CCPS network was not properly secured. Specifically, we noted the following conditions:

- CCPS used an intrusion prevention system (IPS) to monitor network traffic. However, CCPS did not effectively employ the IPS component to monitor network traffic flowing to critical CCPS network resources. As a result, the CCPS would not be aware of attacks against the internal network originating from the Internet and other untrusted locations.
- Firewall rules allowed numerous insecure and unnecessary connections to critical network devices. For example, firewall rules were not configured to adequately secure connections into the CCPS network from the Internet.
- Four vendors who performed support services for CCPS and students using the CCPS wide area network had unrestricted network level access to the entire CCPS network. Such access should be limited to the devices and ports necessary for these vendors and students to perform their required tasks.

Recommendation 8

We recommend that CCPS adequately secure its network. Specifically, we recommend that CCPS

- a. employ the IPS to effectively monitor network traffic,
- b. configure firewalls to adequately secure connections into the CCPS network, and
- c. restrict network level access.

Facilities Construction, Renovation, and Maintenance

Background

CCPS maintains 44 schools (totaling 4.4 million square feet) with a staff of 303 custodial and 73 maintenance personnel. According to the fiscal year 2011 Capital Improvement Plan (CIP), the estimated cost of construction,

major renovations, and systemic improvements that were needed for CCPS facilities over the next six years totaled \$212 million.

An Inclusive Process is Used to Plan for School Facility Construction, Major Renovation, and Repair Projects

CCPS uses a comprehensive process, which includes the solicitation of input from various sources, to plan for future school construction, major renovation, and repair projects. For example, CCPS uses public meetings, student demographic data, and other internal sources (such as current curriculum mandates) to develop its six-year CIP. The CIP is presented to and approved by the Board, as well as elected local officials. In addition, the Educational Facilities Master Plan that is used to guide overall CCPS operations incorporates CIP objectives and strategies related to school facilities. Our review of the fiscal year 2011-2016 CIP disclosed that it appeared to address the needs of CCPS based on items such as student demographics and facility assessments.

CCPS Procedures and Practices for Bidding, Awarding, and Monitoring Construction Projects Appeared Proper

Our review of 11 construction-related procurements totaling \$22.9 million disclosed that CCPS properly procured all 11 contracts, including review and approval by the Board. In addition, our test of 11 invoices totaling \$1.9 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.

Energy Conservation Contract

Finding 9

CCPS had not implemented a process to independently verify the reported project benefits of its energy conservation contract.

Analysis

CCPS had not implemented a process to independently ensure that the calculation and reported amount of cost savings was accurate and in accordance with the methodology specified in its energy conservation contract. As a result, CCPS lacked assurance that the guaranteed cost savings established in the contract were realized.

The CCPS Board has adopted an energy conservation policy and CCPS has included energy conservation in its annual facilities planning documents. In order to implement its overall energy management conservation program,

CCPS contracts with a third-party vendor to provide a number of services including physical plant improvements, installation of energy efficient devices (lighting for example) and new heating and cooling equipment at certain schools as well as a system to monitor, measure, and achieve project benefits as a result of such improvements. The contract, beginning in October 2004, included costs of \$9.4 million for system improvements and \$7.1 million for system monitoring and reporting over the 15-year life of the contract. The total cost of the contract, including financing costs, is expected to be \$19.5 million.

The energy performance contract guarantees costs savings to CCPS totaling \$10.8 million over the life of the contract. Cost savings (actually cost avoidance) is to be reported annually to CCPS using a methodology stated in the contract. The contractor is required to submit a measurement and verification (M&V) report that details the cost savings/avoidance and energy usage by school.

CCPS had not implemented a process to verify the accuracy of the reported cost savings. Based on the report received for contract year 2008-2009 (the most recent received by CCPS), the contractor indicated that actual cost avoidance from the beginning of the contract totaled \$3 million to date, which exceeded the guaranteed cost avoidance for the related period by \$970,000. The majority of this excess related to the installation year, when actual cost avoidance reportedly exceeded the guarantee by \$880,000. As of June 1, 2011, CCPS owed \$4.2 million for the remainder of the services portion of the contract (contract years 8 to 15).

Industry best practices state that, when a contractor is hired by a facility owner to make and report energy savings, the owner may need an independent verifier to review the savings reports. Independent verifiers are typically engineering consultants with experience and knowledge in energy performance contracting.

Recommendation 9

We recommend that CCPS

- a. independently verify the contractor reported data, at least on a test basis, to ensure the propriety of critical calculations (such as guaranteed cost savings) included in the related contract and subsequent M&V reports; and**
- b. retain documentation of all such verifications performed.**

Transportation Services

Background

CCPS has approximately 26,700 students eligible to receive student transportation services. These students were transported on one of 295 contractor-owned buses or 7 school-owned buses. According to CCPS records, fiscal year 2010 transportation costs totaled \$19.4 million, with 91 percent representing payments to contractors. Of the 5.4 million reported route miles for the 2009-2010 school year, 36 percent represented miles traveled to transport disabled students.

CCPS had Appropriate Practices in Place to Help Ensure Efficient Use of Regular Bus Routes

CCPS used a variety of practices in order to ensure efficient use of buses for regular bus routes. These practices included analysis of prior year's routes, projected enrollments, and use of routing software. Routing software provides the number and location of students and is updated periodically throughout the school year. CCPS is in the process of updating routing software to a new software package. In addition, CCPS reviews routes throughout the year based on data provided by the contractors (as to route time and load) and updates routes as needed.

We reviewed ridership data as of March 2011 to determine the efficiency of CCPS bus routes. Our analysis and tests of CCPS ridership data disclosed that CCPS generally operated buses within capacity targets (that is, 75 percent of intended capacity³).

Payments Made to Bus Contractors were Properly Controlled and Agreed to Supporting Documentation

In response to our preceding audit report, CCPS took a number of actions in order to better control payments to bus contractors. Contractors receive payments based on manifests that include driving time and mileage. CCPS personnel periodically verified the information provided on the manifests. Hours and mileage are entered into an automated system and payment reports are reviewed and approved by supervisory personnel prior to biweekly submission to the Finance Office for processing. Our tests of payments made to 10 contractors for fiscal years 2010 and 2011 disclosed that payments agreed to submitted manifests and contractually agreed upon rates.

³ Like other LEAs, CCPS uses a lower capacity rate than the manufacturer's stated bus capacities. For example, CCPS determined the capacity for high, middle, and elementary schools routes at 44, 51, and 58 passengers, respectively, based on 66 passenger buses (manufacturer stated capacity).

Finding 10

CCPS did not base certain elements used to determine payment amounts to bus contractors on market conditions or actual costs.

Analysis

Certain elements used to determine payment amounts to bus contractors did not reflect market conditions or actual costs over time. The Per Vehicle Allotment (PVA) is one of several elements used to determine payment amounts to bus contractors. CCPS' bus contracts are for one year with annual renewals generally granted over the 12-year useful life of the bus. Our review of the contract terms disclosed the following conditions:

- CCPS pays contractors an annual PVA for each bus. The PVA formula uses the average cost of buses purchased by the contractors multiplied by a factor that includes depreciation and a fixed rate of return on the initial outlay for the bus purchase. CCPS contractors generally receive the annual PVA payment for the 12-year life of the bus. However, the PVA is calculated as if the bus will only be in operation for 10 years. As a result, the PVA rate overpays the contractors for depreciation for the life of the contract (that is, the depreciation cost paid to bus contractors over 12 years will be 120 percent of the bus' cost). According to CCPS, this method provides a "profit" for the contractors.

To estimate the dollar effect, we calculated the PVA for each of the 129 new buses (regular and special education) placed into service from fiscal years 2007 to 2011 using a 12-year depreciation factor (8.33 percent per year instead of 10 percent per year), and compared these calculated PVA results to the actual PVA amounts paid by CCPS. This comparison showed that the CCPS annual PVA payments per bus were from \$1,292 to \$1,632 more than the payments would have been had CCPS used the 12-year depreciation factor. The effect is that, over the 12-year life of these 129 buses, CCPS will pay out approximately \$2.3 million more than if CCPS used the actual life of the bus. This analysis does not include the effects for any new bus purchases that may be made after fiscal year 2011 and those purchased prior to 2007.

- In addition to the PVA, CCPS payments to bus contractors also include a per mile fee for maintenance and operating costs (including fuel). CCPS pays contractors for fuel usage using an assumed miles per gallon (mpg) rate below industry standards. Specifically, CCPS uses 6.5 mpg when determining the fuel cost reimbursement paid to bus contractors, although no data were accumulated and analyzed to substantiate the rate. However, the American School Bus Council reported that the national

average usage for a large school bus with a diesel engine is 7 mpg. CCPS acknowledged that this rate allows the contractors a small profit if they can achieve mileage above 6.5 mpg. Although the difference does not appear large, if contractor fuel payments were calculated using 7 mpg instead of the 6.5 mpg used by CCPS, the payments would have been lower (for example, a total of \$300,000 less during school years 2010 and 2011).

Recommendation 10

We recommend that CCPS

- a. reevaluate the elements used to determine payment amounts to bus contractors in future contracts, and**
- b. document the rationale for the various payment components.**

Food Service Operations

Background

CCPS has a cooking cafeteria at 39 of its 44 schools. Food and related supplies are received and stored in each school. In fiscal year 2011, CCPS had 125.5 cafeteria positions (consisting of 122 cafeteria positions and 3.5 administrative positions). According to the audited financial statements, food service operations expenditures exceeded revenues by \$319,000 for fiscal year 2010 prior to a transfer of \$400,000 in general operating funds to the food service fund.

Controls Over Food Ordering and Payment of Related Invoices Were Adequate

Our review of CCPS procedures over food ordering and usage disclosed that cafeteria managers monitor food usage on a daily basis and that this information is reviewed periodically by food service management. We also tested contracts procured for food supplies in fiscal year 2010 and 2011 and related invoices, and found that CCPS properly procured the contracts and that payments made to vendors were in accordance with the terms of the related contracts.

Finding 11

CCPS has experienced persistent deficits in its food service operations.

Analysis

CCPS food service operation expenditures have consistently exceeded revenues. For fiscal years 2007 to 2010, total expenditures have exceeded related revenues (exclusive of any transfers of general funds) by over \$1 million, see Table 1 on the following page. During the same period, CCPS'

budgets indicate that food service fund revenues were to equal expenditures for each fiscal year.

Table 1 Operating Deficiencies Fiscal Years 2007 to 2010			
Fiscal Year	Revenue	Expenditures	Deficit
2007	\$ 6,525,827	\$ 6,536,121	\$ 10,294
2008	6,467,971	6,985,165	517,194
2009	6,370,962	6,545,583	174,621
2010	6,069,303	6,387,855	318,552
Total	\$ 25,434,063	\$ 26,454,724	\$ 1,020,661

Source: Audited Financial Statements

Based on our analysis of CCPS food service costs, it would appear that a significant contributing factor to these deficits is personnel costs. Specifically, CCPS overall cost per meal and cost per meal related to salaries and wages were substantially higher than that of comparably-sized school systems as shown in Table 2 below.

Table 2 Comparison of Per Meal Costs by Category of Expenditure Fiscal Year 2010 (unaudited)						
School System	Salaries and Wages	Contracted Services	Supplies and Materials	Total Other Charges	Equipment	Average Cost Per Meal
Carroll County	\$ 1.88	\$ 0.01	\$ 1.10	\$ 0.02	\$ 0.01	\$ 3.02
Charles County	1.49	0.03	1.31	0.02	0.01	2.86
Frederick County	1.55	-	0.85	0.20	0.04	2.64
Harford County	0.94	0.06	1.10	0.47	0.05	2.62
Washington County	1.36	0.01	1.36	0.04	0.07	2.84
Average of Comparable Systems	\$1.33	\$0.03	\$1.16	\$0.18	\$0.04	\$2.74

Source: LEA provided data

We were advised by CCPS management that it monitors meals per labor hour or MPLH (a common efficiency measure) and has taken actions over the past several years to reduce staffing such as reducing hours and eliminating positions where practical. However, our tests of MPLH and a review of CCPS

MPLH calculations showed that a number of schools did not meet industry guidelines, especially at the CCPS high schools. For example, in May 2010, CCPS determined that the MPLH for its 8 high schools ranged from 8.1 to 13.2 MPLH, well below industry guidelines of 18-19 MPLH for similarly-sized schools. Per discussion with CCPS staff, although CCPS routinely calculated MPLH, it did not use predetermined or industry standard goals to compare against its performance and make appropriate operating adjustments.

We also found that student meal participation was generally below that of other similarly-sized school systems and this could be contributing to inefficient operations. We compared student participation (based on actual meals served versus total potential meals that could be served) for each type of student participant (paid, free, and reduced price). See Table 3 below for the participation rates for fiscal year 2007 as compared to the rates for fiscal year 2010 for paid lunches at CCPS and four similarly-sized systems. CCPS had the lowest participation rate for paid lunches in fiscal year 2010 as well as the largest decrease in participation over the period. While CCPS monitors average daily meals served, it did not determine participation rates or establish targets (and related actions) to increase participation.

Table 3 Change in Rate of Student Participation in School Lunches – Paid Lunches Fiscal Year 2007 to 2010 (unaudited)			
School System	Fiscal Year 2007 Participation Rate	Fiscal Year 2010 Participation Rate	Change in Participation
Carroll County	36.9%	27.9%	-24.4%
Charles County	48.8%	43.9%	-10.0%
Frederick County	29.7%	28.1%	-5.4%
Harford County	44.4%	43.6%	-1.7%
Washington County	48.4%	45.5%	-6.0%

Source: MSDE Fact Book

Recommendation 11

We recommend that CCPS

- a. establish performance benchmarks for existing performance measures (average cost per meal, meals per labor hour, participation rates), using industry standards or other accepted practices; and**
- b. monitor actual performance against these benchmarks and take appropriate actions to improve operating results.**

Finding 12

Internal controls over cash receipts processed at certain school cafeterias were not adequate and CCPS' manual system to track student meal purchases may be inefficient.

Analysis

Internal control over cash receipts processed at two school cafeterias reviewed was not adequate. Furthermore, the CCPS' manual system to track student meal purchases may not be efficient. Specifically, we found the following conditions:

- At two schools reviewed, cashiers did not always close the cash drawer between transactions, did not always record the transaction in the register at the time of the sale, and did not restrictively endorse checks (received for advance meal purchases) at the time of receipt. Revenues at these schools totaled \$475,000 for fiscal year 2010 according to CCPS records. A similar condition was commented upon in our preceding audit report.
- CCPS' manual process used to record and track advance meal purchases appears to be inefficient. Parents may purchase meals in advance by completing the appropriate paperwork and submitting payment to the central finance office or by providing bank account information for electronic payments. Central office personnel process the related revenue and submit spreadsheets to each school to advise them of students participating in the meal program. Each school manually tracks student use of meals through logs or other manual documents. In other school systems, automated cash register systems are used to track advanced meal purchases and student meal uses. CCPS cash registers do not have this capability or certain other reporting capabilities (monthly sales reports) that other systems possess. The use of a manual process can lead to errors in recording and accounting for student meals. Since the revenue for advance meal purchases was not separately accounted for in CCPS' records, the extent of such purchases could not be readily determined.

Recommendation 12

We recommend that CCPS

- a. ensure that schools institute adequate internal controls over all cash receipts, including recording all transactions immediately and restrictively endorsing checks when initially received (repeat); and
- b. investigate the feasibility of installing a new cash register system to improve efficiency and reporting capabilities.

School Board Oversight

Background

CCPS' Board of Education 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. Due to the size of CCPS and the limited membership of the Board, a committee structure is not used, but rather individual members are periodically informed of and become involved in all aspects of operations and governance.

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

The Board has adopted a detailed ethics policy that 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 five members who are not subject to the authority of the Board of Education 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 statements are required to be filed by Board members, candidates for the Board, the Superintendent, Assistant Superintendents, and a number of other administrators (such as school principals and agency buyers) by January 31st of each year. Our test of 20 judgmentally selected employees required to submit financial disclosure forms for calendar year 2010 disclosed that forms were generally submitted as required.

Other Financial Controls

Finding 13

CCPS had not implemented a formal investment policy and current investment practices should be reevaluated.

Analysis

CCPS' Board of Education had not adopted a formal investment policy. Furthermore, CCPS should reevaluate certain banking arrangements and investment practices to ascertain whether interest earnings are being maximized.

According to the fiscal year 2010 financial statements (the most recent available as of our audit), CCPS invested funds in the Maryland Local Government Investment Pool and in repurchase agreements. However, a considerable amount of operating funds was on deposit in its general checking account with a bank. Under its current banking agreement, effective February 1, 2010, CCPS receives a credit against bank fees incurred in lieu of any interest earnings on its general checking account balance. This decision was based on the bank's recommendation due to historically low interest rates.

However, our analysis of CCPS' main bank account disclosed that CCPS should further analyze this arrangement. Specifically, the bank's analysis was based on an estimated average account balance of \$3 million and estimated bank fees of approximately \$2,500 per month. For the period from February 2010 through May 2011, the average daily collected balance in the account was approximately \$16.4 million. CCPS received earnings credits based on a tiered interest rate structure to offset eligible service fee charges. According to CCPS provided documentation (which we traced to bank provided information), for the above period, CCPS received earnings credits totaling \$100,000. The actual service fees CCPS incurred were approximately \$74,000, which is even less than the earnings credit received.

Based on CCPS' average daily balance, CCPS could consider investing a higher portion of its funds into other legally permitted investments, such as the Maryland Government Investment Pool. For the 16-month period we reviewed, the ending daily balance in the checking account dropped below \$5 million just 4 days (out of 485 days in the period) and below \$10 million for 62 days. State law specifies that county boards of education may invest funds in any manner permitted by law for the Maryland Office of the State Treasurer.

Recommendation 13

We recommend that CCPS

- a. develop a formal investment policy including the Board's investment philosophy; and**
- b. regularly monitor cash flow, consider investing a higher portion of its funds in other investment options such as the Investment Pool, and adjust the arrangement with the bank for the general checking account to increase overall net earnings.**

Finding 14

CCPS had not implemented procedures to ensure that claims paid by the third-party health care administrator were reviewed for propriety and had not verified the authenticity of program participants.

Analysis

CCPS did not ensure that the claims paid by the third-party health care administrator were reviewed for propriety. CCPS self funds all health care costs. CCPS uses a third-party administrator to pay claims on behalf of plan participants and authorized dependents. Providers submit claims to the administrator who pays them on behalf of CCPS and then obtains reimbursement from CCPS for actual costs of claims paid. CCPS pays an administrative fee for these services. For fiscal year 2010, according to agency records, amounts paid for health care totaled \$41.1 million, including administrative fees of approximately \$1.9 million.

Also, CCPS did not have any process to periodically verify the authenticity of covered program participants and their listed dependents. As of March 2011, CCPS provided health care coverage to 5,053 employees, retirees, and their dependents.

Recommended practices published by the Government Finance Officers Association state that health care cost containment, which includes verification of enrolled participants, is a critical component of long-term financial planning and budgeting.

Recommendation 14

We recommend that CCPS institute processes to

- a. verify the propriety of claims paid by the third-party administrator, at least on a test basis; and
- b. verify the eligibility of enrolled health care program participants and their listed dependents.

Audit Scope, Objectives, and Methodology

We conducted a performance audit to evaluate the effectiveness and efficiency of the financial management practices of the Carroll 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. To evaluate whether the CCPS procedures and controls were effective in accounting for and safeguarding its assets
2. To 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 January 5, 2007, 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, the Maryland State Department of Education

(MSDE), and staff at other local school systems in Maryland (as appropriate).⁴ 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, 2009 through December 31, 2010. 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.

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 August 2010 to June 2011. 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.

⁴ During the course of the audit, it was necessary to contact other systems to identify policies or practices for comparative purposes and analysis.

APPENDIX



CARROLL COUNTY PUBLIC SCHOOLS

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STEPHEN H. GUTHRIE
Superintendent

March 15, 2012

Mr. Bruce A. Myers, CPA
Legislative Auditor
Department of Legislative Services
Office of Legislative Audits
301 West Preston Street, Room 1202
Baltimore, Maryland 21201

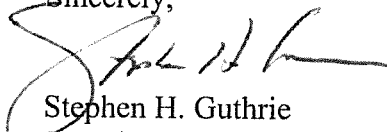
Dear Mr. Myers:

Enclosed are the responses to recommendations made in the Financial Management Practices Audit Report for Carroll County Public Schools dated February 2012.

I would like to thank the legislative auditors for providing us feedback in several areas where we can become a more efficient organization.

Please do not hesitate to call me if you need any additional information regarding this submission.

Sincerely,



Stephen H. Guthrie
Superintendent of Schools

/enclosure

**Carroll County Public Schools
Response to the
Draft Legislative Audit Report**

March 15, 2012

Revenue and Billing Cycle

Recommendation 1

We recommend that CCPS ensure that schools are properly administering student activity funds. Specifically, we recommend that CCPS:

- a. ensure that schools properly control cash receipts, deposit funds timely and independently verify that all collections were deposited; and
- b. ensure all accounts are reviewed in a timely manner.

Response

- a. CCPS implemented the *Procedures Manual for School Funds* which includes procedures to properly control cash receipts, deposit funds timely and independently verify that all funds collected are deposited. We addressed the specific receipts and deposits noted in the analysis with the appropriate employees who were in violation of the established procedures. We examined the deposit tickets related to the 2 receipts totaling \$29,980 in question and an independent verification was performed to ensure that all collections were deposited. In addition, we will continue to work to reiterate and remind schools of the necessity of complying with the established procedures for processing receipts. The following steps have already been taken:
 - Attending financial training classes is a requirement for all principals and assistant principals. This training specifically addresses the need for administrators and their staff to comply with established procedures, including the processing of receipts, the counting and verifying of funds, and the importance of timely bank deposits. The financial secretaries also attend an annual training class where these same procedures are discussed and reiterated.
 - To further ensure compliance with procedures, a new position was created in the finance department to deal specifically with financial transactions at schools. The creation of this position was a direct result of the 2006 legislative audit. Some of the responsibilities for this position include reviewing monthly bank statements, bank reconciliations, cash receipt forms, entries into the finance system, and pre-numbered cash receipts for every school. If any errors are made, they are corrected immediately.
 - The office of internal audit also performs comprehensive school audits that include testing of who originally receives funds, who verifies the funds, the timeliness of deposits, and documented evidence of the independent verification that all funds received were deposited. School audit reports are distributed to the principal, director at the appropriate level (i.e. elementary, middle, and high) and the audit committee.
- b. As stated in the analysis, CCPS has developed a web-based system that allows designated account advisors to review all account receipts and disbursements. Analysis of all accounts county-wide indicated that 85% were verified within 30 days as of May 2011. We have addressed the appropriate employees at the specific schools who were in violation of the established procedures. In addition, we will work to reiterate and remind schools to follow procedures to ensure that all accounts are reviewed in a timely manner.

Federal Funds

Recommendation 2

We recommend that CCPS ensure that all eligible costs for Medicaid-subsidized services are properly documented and fully recovered (repeat).

Response

CCPS agrees with the recommendation but wishes to state this can only occur in a perfect scenario whereby there is 100% student/provider attendance. The audit implies that CCPS could capture at least \$275,000 for the period from August 2010 to February 2011. We believe we could have captured at most that amount.

We continue to be in the process of developing an electronic billing system. The development of this system involves three phases. Phase I includes the development of the program for data submission to DHMH. This phase is expected to be completed by July 2012. Phase II is development and testing of the new process, which is expected to occur during the 2012-2013 school year. Full implementation, Phase III, is anticipated to occur during the 2013-2014 school year. This will reduce human error and make the process far more efficient, which will result in far more eligible costs being recovered.

Service providers have been assigned in such a manner to allow for billable services to be recovered by assuring fully certified and licensed providers.

Procurement and Disbursement Cycle

Recommendation 3

We recommend that CCPS improve its internal controls over procurements and disbursements. Specifically, we recommend that CCPS

- a. restrict critical system access capabilities so that incompatible functions are separated (repeat), and
- b. ensure that the comparisons of transactions and checks processed to the related supporting documentation are performed by persons independent of transaction processing.

Response

- a. CCPS agrees with the recommendation. As stated in the discussion notes, CCPS has established a process to periodically review employee access to the automated financial system used to process purchases and disbursements. Of the four employees with unrestricted access referred to in the analysis, we have already taken action and restricted system access for three of the employees. Regarding the remaining employee, we have compensating controls in place to ensure the security and integrity of the system. The controls allow the finance department to run effectively with a limited number of employees. Employees are cross-trained and act as back-ups which allows the department to run smoothly and continuously in the event of a key employee's absence.
- b. CCPS agrees with the recommendation. As stated in the discussion notes, CCPS has a process in place to review all checks for propriety prior to issuance. Together with the actions taken to restrict critical system access capabilities to those employees whose job duties require such access, we believe we have addressed this recommendation.

Recommendation 4

We recommend that CCPS

- a. improve controls over its credit card program by reviewing the propriety of CPC transactions for the purchase of gift cards (including the aforementioned transactions), and ensure that appropriate supporting documentation is being maintained (repeat); and
- b. ensure that CPCs are used in accordance with current requirements that limit the use of school activity funds and principal funds as well as enforcing its policy prohibiting the purchase of gift cards for employees.

Response

- a. CCPS agrees with the recommendation. Effective September 1, 2011, CCPS implemented a requirement that all gift card purchases must be documented with a gift card form, which details the individual responsible for distributing the gift card, the recipient of the gift card, the approving principal/supervisor, and the type of gift and amount.

The finance department communicated these changes to school/central office administrators at monthly principal and cabinet meetings. The new gift card form is available and the requirements are detailed on our website.

- b. CCPS agrees with the recommendation and this is our practice. The finance department reviews and reconciles each procurement card transaction on a monthly basis. This entails the review of thousands of transactions annually. The gift card purchases identified in this analysis were “flagged” in the monthly review process and addressed accordingly with the responsible cardholder.

CCPS will continue to communicate and educate our cardholders of the importance of adhering to the procurement card user guide. During our annual review of the procurement card program, we recently revised our user guide to incorporate a “violation of policy” section, which addresses minor and major offenses and the repercussions of failing to follow the guidelines.

In addition, CCPS implemented a requirement that all gift card purchases be documented with a gift card form, which details the individual responsible for distributing the gift card, the recipient of the gift card, the approving principal/supervisor, and the type of gift and amount. CCPS only allows gift card purchases for student incentives and for non-employee volunteers.

CCPS will continue to monitor purchases to ensure student activity funds are spent in a manner which benefits the general student population. While we do not promote the purchase of staff appreciation gifts, we believe these small tokens of appreciation express gratitude and can improve staff moral which ultimately benefits the general student body.

Inventory Control and Accountability

Recommendation 5

We recommend that CCPS

- a. ensure a physical inventory of all school equipment items and sensitive technology items are periodically conducted and the results are reconciled with the automated records;
- b. implement a process to periodically and independently verify that results of the physical inventories taken by the schools, at least on a test basis;
- c. update its existing procedures to include directives on the processes for following up on lost and missing items (repeat);
- d. ensure that the inventory records include all required equipment identification information and that all equipment (especially sensitive equipment) is tagged or otherwise identified as CCPS property (repeat); and
- e. ensure that the equipment inventory records accurately include all equipment owned by CCPS.

Response

- a. CCPS agrees. Procedures will be refined and promulgated for all cost centers to conduct periodic independent physical inventories of equipment and sensitive technology, and to reconcile all identified differences with inventory records. This process will include appropriate training for cost centers in conducting physical inventories, investigating and resolving differences identified between the physical inventory and inventory records, and documenting these resolutions. Documentation of this process will be maintained for review. These procedures will be incorporated into the system's Capital Assets Manual. The internal auditor will develop a periodic cycle of verification of these physical inventories to include reviews of physical inventory documentation and independent tests of inventory.
- b. CCPS agrees. As noted above in item a., the internal auditor will develop a periodic cycle of verification of these physical inventories to include reviews of physical inventory documentation and independent tests of inventory.
- c. CCPS agrees. As noted above in item a., procedures to conduct periodic independent inventories of equipment to reconcile all identified differences with inventory records will be incorporated into the system's Capital Assets Manual.
- d. CCPS agrees. As part of the initial physical inventory of all cost centers, the reconciliation process will include verification of information in the inventory records and the recording of any missing information. We are currently exploring various options to permanently mark ownership of equipment, including sensitive and non-sensitive equipment. Since equipment is shipped directly to cost centers, the cost centers will be trained and provided what is needed to implement the selected method. As part of the cyclical tests of physical inventory, the internal auditor will verify that equipment is being properly marked.
- e. CCPS agrees. As part of the refinement of the inventory process noted above in item a., verification of technology service tracked assets not verified through automatic means will be included in a physical inventory process.

Information Technology

Recommendation 6

We recommend that CCPS

- a. remove unnecessary accounts from the domain administrator and local administrator groups; and
- b. implement stronger password controls with respect to length, complexity, age, and history.

Response

- a. CCPS agrees, in part, with this finding and immediately re-arranged some staff responsibilities and decreased a few of the domain administrators. However, due to a lack of human resources and our staff needing to wear multiple hats and fulfill multiple roles, this is not as simple as it would seem in an ideal environment. So, we completed this to the extent of our capability to do so, but readily admit that it has not been reduced to an optimal level based simply on the human resource limitations. During our Discussion Notes Conference, this was confirmed as having been adequately addressed.
- b. CCPS fully agrees and are already in the planning stages of implementation during this school year. Historically, this challenge was a problem with our legacy system and a desire to make the transition to a new system as painless as possible. Technology Services has tested and will be implementing a new system to allow users to reset their passwords using industry standard methodology. We now have executive buy-in and approval to move forward with this plan. The controls in respect to length, complexity, age, and history are addressed in this implementation.

Recommendation 7

We recommend that CCPS

- a. log critical security and audit events on the student management system database, regularly review these logs, investigate unusual or questionable items, and document and retain these reviews and investigations; (repeat)
- b. remove all unnecessary access to the student management system database; and
- c. establish controls over program changes to ensure that all changes to production programs are properly reviewed and approved (repeat).

Response

- a. We are in the process of implementing a logging and reporting solution based on a new product. This was a planned part of our technology evolution strategy that was enabled when the migration was completed earlier this year. At the directive of the Superintendent, periodic reviews are conducted on a routine basis. All reviews that resulted in a finding were documented via a written "Incident Report" that was directed to Human Resources and/or the appropriate administrator if it involved a student. However, we recognize that the periodic reviews that did not result in any incidents or findings were not documented. Therefore, we have established a more formalized review procedure to address this concern. All reviews are now documented regardless of the outcome.
- b. CCPS agrees, in part, with this finding and immediately decreased the number of SysAdmin users and modified other roles accordingly. However, due to a lack of human resources, it is necessary for many of our staff to wear multiple hats and fulfill multiple roles. So, we completed this to the extent of our capability to do so, but readily admit that it has not been reduced to an optimal level based simply on the human resource

limitations. During our Discussion Notes Conference, this was confirmed as having been adequately addressed.

- c. CCPS agrees, in part, with this finding and have taken many steps to improve our change control process. Many of the issues are constraints of legacy products. However, we have created an "ownership" model and document all changes in our internally developed "Technology Services Project Center" application. However, due to limited staff with a large breadth of applications to support, we simply do not have the resources to implement change control in the "textbook" ideal manner described above. The model described requires ideal conditions with abundant human resources that we simply do not have. We will continue to make modifications to improve the process including the implementation of a software-based change control process such as Microsoft SourceSafe. Executive leadership is aware of the need for support in us enforcing the change control process including appropriate written approvals from system owners.

While it was noted that "a similar condition was commented upon in our preceding audit report", it should be noted that significant changes have been made during the interim and that this should be noted in the audit report. Our internally developed "Technology Services Project Center" is a direct result of our work to improve in this area and it was acknowledged by the auditors that this was an excellent tool and a significant improvement in the process. It also must be acknowledged that the "textbook" process is an ideal that we will continue to strive for but not necessarily realistic with current resources.

Recommendation 8

We recommend that CCPS adequately secure its network. Specifically, we recommend that CCPS

- a. employ the IPS to effectively monitor network traffic,
- b. configure firewalls to adequately secure connections into the CCPS network, and
- c. restrict network level access.

Response

- a. IPS was in test mode at the exact time of the audit to monitor, test and assess the impact on performance of the firewall when fully employed. Since the time of the review, a plan has been created to fully implement the IPS with assistance from a vendor and a consultant. This was explained to the auditors and verified as fixed at the time of the Discussion Notes Conference.
- b. CCPS agreed to the requested changes and made changes immediately that were verified as addressed during the Discussion Notes Conference. It should be noted that none of the issues presented significant security risks and in the original Discussion Notes, the auditors used the terminology of implementing a "*least privilege security strategy for better protecting the aforementioned network devices.*"
- c. CCPS agrees and are currently upgrading our VPN environment to address this concern. However, it should be noted that our current vendor list is very small and manageable and the four vendors noted were charged with supporting our network environment as "additions" to our own staff. We had researched and budgeted for Network Access Control in each of the past four CIP Budget requests and in each case, it was not funded. So while we agree, the solution required an investment and upgrade to our existing environment that we were already in the midst of performing.

Facilities Construction, Renovation, and Maintenance

Recommendation 9

We recommend that CCPS

- a. independently verify the contractor reported data, at least on a test basis, to ensure the propriety of critical calculations (such as guaranteed cost savings) included in the related contract and subsequent M&V reports; and
- b. retain documentation of all such verifications performed.

Response

- a. CCPS agrees that CCPS has not implemented any process to independently verify reported project benefits. However, CCPS reviews the annual report for data accuracy and agreement of assumptions made in the analysis before accepting the conclusions.

An independent evaluation would also add an unaccounted for expense, reducing the cost avoidance.

- b. If verifications are performed, CCPS will retain the documents.

Transportation Services

Recommendation 10

We recommend that CCPS

- a. reevaluate the elements used to determine payment amounts to bus contractors in future contracts, and
- b. document the rationale for the various payment components.

Response

- a. CCPS agrees that the breakdown of the annual PVA calculation as printed and approved by the School Board is misstated. Buses in Maryland generally are replaced after 12 years of service. The depreciation portion of the PVA should be correctly stated at 0.833% ($100\% \div 12$) rather than the 10% depreciation (+ 7 % profit) as stated in CCPS's current formula and paid in equal annual payments over 12 years. However, the overall 17% multiplied by the average cost of school buses purchased within a school year does accurately reflect CCPS's intended payments to bus contractors for the PVA portion of the bus contractor formula. The difference between the overall 17 % and the depreciation factor has been determined to be fair compensation (profit) to contractors. CCPS does a comparative analysis on an annual basis of the 17 Maryland counties using a formula-based compensation method. CCPS's overall formula compensation (PVA, salary, fuel and maintenance, and administrative allotment) provided to bus contractors is in line with the other 16 jurisdictions. (For SY 2010-2011, CCPS's formula compensation for an average bus route of 5 hours and 85 miles placed Carroll as the 7th highest county among all counties with contracted service using a formula-based compensation method.)

Based upon the audit recommendation, CCPS will study the current PVA formula (depreciation %+ profit %) and develop a revised calculation that does not overstate

depreciation (% over 12 years to not exceed 100 %) + an additional % representing current market conditions and what would be determined to be fair compensation to contractors over the life of the bus.

- b. CCPS has begun to collect data from school bus contractors related to MPG and the purchase price of new buses. Further study will be made regarding the fuel rate calculation and PVA formula.

Food Service Operations

Recommendation 11

We recommend that CCPS

- a. establish performance benchmarks for existing performance measures (average cost per meal, meals per labor hour, participation rates), using industry standards or other accepted practices; and
- b. monitor actual performance against these benchmarks and take appropriate actions to improve operating results.

Response

- a. CCPS agrees with the recommendation. We have always used benchmarks to monitor performance and have used this information to staff our schools. However, these changes have not been enough to offset the effects of the weak economy and declining student enrollment. In addition, we have taken a number of actions to promote marketing strategies to increase our breakfast and lunch participation along with efforts to increase the participation of our free and reduced eligible students.
- b. See a. above.

Recommendation 12

We recommend that CCPS

- a. ensure that schools institute adequate internal controls over all cash receipts, including recording all transactions immediately and restrictively endorsing checks when initially received (repeat); and
- b. investigate the feasibility of installing a new cash register system to improve efficiency and reporting capabilities.

Response

- a. CCPS agrees with the recommendation. We addressed the specific schools noted in the analysis with the appropriate employees who were in violation of the established procedures. In addition, we will remind schools of the necessity of complying with the established procedures for recording transactions and endorsing checks, and procedures will be reinforced in writing within the food services manual.
- b. CCPS agrees with the recommendation and will pursue as funding is available.

Other Financial Controls

Recommendation 13

We recommend that CCPS

- a. develop a formal investment policy including the Board's investment philosophy; and
- b. regularly monitor cash flow, consider investing a higher portion of its funds in other investment options such as the Investment Pool, and adjust the arrangement with the bank for the general checking account to increase overall net earnings.

Response

- a. CCPS agrees with this recommendation. CCPS will develop a formal investment policy which includes the Board's investment philosophy and permitted types of investments.
- b. Cash is monitored on a daily basis as we examine and record journal entries for the previous day's banking activity. On a weekly basis, we examine our current cash balance and cash needs for the next two weeks to determine the amount of funds to request from Carroll County Government (CCG). We provide CCG a two month forecast of expected cash requests. During the month following a state aid payment, we typically have a higher checking balance for approximately 30 days (until the funds are expended in normal course of business, i.e. A/P, Payroll, Self-insurance claims, Express Script (Prescription) payments, etc.).

CCPS agrees that we should review our current investment arrangement with our financial institution, however, we also wish to correct certain information provided in the analysis.

It is true that CCPS entered into our current financial service agreement during a period of historically low interest rates. Unfortunately, rates have continued to decline as the current interest rate on NOW Accounts stands at .0005 (5 basis points). In the current interest rate environment, our banking fees exceed the interest we would earn. Therefore, CCPS has opted to take advantage of the tiered earnings credit which is used to offset monthly banking fees. During the period, February 2010 through May 2011, the tiered earnings credit typically paid approximately 15-20 basis points higher than the annual interest rate, which supported taking advantage of the tiered earnings credit.

The following amounts are derived from monthly account analysis statements for the period of February 2010 – May 2011:

- The average daily balance in our account approximated \$17.9 million, however, the average collected balance (available to invest) approximated \$16.4 million.
- Service fees were approximately \$74,100.
- The earnings credit allowance was \$100,000.

CCPS receives funds from the state bi-monthly. We utilize these funds prior to requesting funds from the county. This effectively allows the county government to invest the pooled funds at a higher rate of interest than would otherwise be possible.

Our financial institution has shared that, in this current economic environment, most other governmental units have abandoned the overnight investment sweep accounts as this investment vehicle is "under water". The interest earned on REPO rates, ranging

from 9 - 11 basis points, simply cannot cover the monthly banking fees and the additional fees associated with an overnight sweep account. On the other hand, the tiered interest rate credit for investment balances in excess of \$1,000,000 is 47 basis points, which adequately covers our monthly banking service charges.

We do plan to meet with our financial institution to determine whether there are areas where we can reduce fees and maximize earnings; however, we believe that further analysis will support continuing to employ the tiered earnings credit over interest income.

Recommendation 14

We recommend that CCPS institute processes to

- a. verify the propriety of claims paid by the third-party administrator, at least on a test basis; and;
- b. verify the eligibility of enrolled health care program participants and their listed dependents.

Response

- a. CCPS has attempted to contact several of the firms utilized by other school systems for claims audits. The firms were not recommended by the school system or have gone out of business. CCPS has also contacted our insurance consultant to obtain other referrals. It is our intent to complete a full dependent audit and a claims processing audit for the medical plan by the end of FY13. The timing of these audits will depend on whether the cost requires a bid of these audit services through Purchasing.
- b. CCPS currently requests verification of lifestyle events when adding or making changes to eligible dependents for marriage, divorce, and loss of other insurance coverage. CCPS does not require a birth certificate for the addition of newborns at this time. The current IRS Section 125 Summary Plan Document is being updated and the verification of eligibility will be discussed with this process.

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