

Financial Management Practices Audit Report

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Anne Arundel County Public Schools

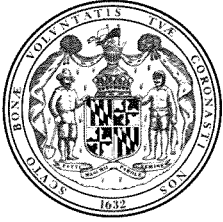
June 2014

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**OFFICE OF LEGISLATIVE AUDITS**  
DEPARTMENT OF LEGISLATIVE SERVICES  
MARYLAND GENERAL ASSEMBLY

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Karl S. Aro  
Executive Director

DEPARTMENT OF LEGISLATIVE SERVICES  
OFFICE OF LEGISLATIVE AUDITS  
MARYLAND GENERAL ASSEMBLY

June 25, 2014

Thomas J. Barnickel III, 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 Anne Arundel County Public Schools (AACPS) 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 the AACPS 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 AACPS needs to improve internal controls over information systems used to process procurements, payroll, and payments to vendors, including bus contractors. Specifically, AACPS did not sufficiently ensure that the system capabilities assigned to employees were necessary and appropriate. For example, a number of employees were assigned incompatible system functions that allowed them to process certain payments without independent review. Our audit also disclosed that AACPS had not taken certain steps to properly secure its network and critical data files, such as those that contain student information.

AACPS also needs to ensure the accuracy of payments for employee healthcare and bus transportation. For example, although AACPS had verified that dependents of its employees were eligible for health care coverage, it had not conducted reviews to verify the propriety of health care claim payments, which totaled \$89.2 million in fiscal year 2013.

AACPS should also implement steps to improve cost-effectiveness and efficiency, especially as it relates to its student bus transportation. For example, AACPS did not effectively use automated bus routing software, and ridership on routes we selected for testing was significantly lower than bus capacities.

An executive summary of our findings can be found on page 5 of this report. The AACPS 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 AACPS.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Thomas J. Barnickel III". The signature is written in a cursive style with a large, stylized initial "T".

Thomas J. Barnickel III, 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 Anne Arundel County Public Schools (AACPS) June 2014

According to data compiled by the Maryland State Department of Education, AACPS ranks 5th in student enrollment among the 24 public school systems in Maryland. During the fiscal year ending June 30, 2013, AACPS had a total full-time regular and special education pupil population of 77,700 at its 110 schools. The AACPS operating and capital expenditures totaled \$1.1 billion during fiscal year 2013, and revenues totaled \$1.1 billion.

The Office of Legislative Audits has conducted its second audit of AACPS' financial management practices. Our current audit found that AACPS had established proper controls and oversight in a number of areas, but there are additional opportunities for AACPS to improve its operations. Many of these issues were identified in our first audit report issued in September 2007.

### **AACPS Needs To Improve Internal Controls and Accountability**

AACPS needs to improve internal controls in several critical areas. We noted that a number of employees were assigned capabilities that allowed them to process transactions on the automated procurement and disbursement system without any subsequent review. Non-payroll disbursements processed through this system totaled \$189 million during fiscal year 2013. Other users of this system as well as the payroll system were assigned capabilities that were not necessary to perform their job duties. Similarly, we found that a number of individuals had full administrative access to the AACPS student information system database that allowed the users to perform unauthorized modifications to critical student data. We also noted that several employees entered data into AACPS' automated bus payment system without any subsequent review or approval.

AACPS did not verify the propriety of certain vendor payments. Specifically, AACPS did not verify health care claim payments made to a third-party administrator, which totaled \$89.2 million during fiscal year 2013. Also, AACPS did not verify that the time and mileage reported by bus contractors (and used to calculate payments to these contractors) were accurate. We were advised that fiscal year 2013 payments to bus contractors totaled approximately \$42 million.

**AACPS Should Consider Implementing Certain Steps to Improve Cost Effectiveness**

AACPS should take steps to ensure the efficiency of its bus operation, which transported over 50,000 students on over 500 buses, primarily operated by contractors. Specifically, AACPS did not utilize automated bus routing software designed to assist in planning efficient bus routes. We also found that ridership was often significantly lower than bus capacity.

AACPS needs to take steps to ensure that information system contracts are properly monitored. Our review of one contract to provide an automated human resources system found that AACPS made payments under the contract related to system development, but did not receive a viable product. AACPS eventually discontinued the contract after paying \$4.8 million and contracted with another vendor to upgrade the current system.

**AACPS Needs to Establish Certain Comprehensive Policies**

AACPS needs to develop formal policies pertaining to student bus transportation (such as bus capacity utilization) and physical inventory requirements for equipment.



# Background Information

## Statistical Overview

According to Maryland State Department of Education (MSDE) student enrollment records, the Anne Arundel County Public Schools (AACPS) ranks 5th in student enrollment among the 24 public school systems in Maryland. Fiscal year 2013 full-time student enrollment was 77,770 students. For the 2011-2012 school year, AACPS had 110 schools (not including vocational or other alternative schools), consisting of 79 elementary, 19 middle, and 12 high schools.

According to the AACPS audited financial statements, fiscal year 2013 expenditures were \$1.1 billion and revenues were \$1.1 billion. The largest expenditure category was salaries and wages, which, including benefits, accounted for approximately 74 percent of total expenditures during fiscal year 2013. According to MSDE records, as of October 2012, AACPS had 9,634 full-time positions, which consisted of 6,949 instructional and 2,685 non-instructional employees.

## Oversight

AACPS is governed by a local school board, consisting of eight appointed voting members and one voting student member. The State and the Anne Arundel County government provide the vast majority of AACPS 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 AACPS to comply with the requirements and mandates of federal law. Anne Arundel County government exercises authority over AACPS primarily through the review and approval of AACPS' annual operating and capital budgets.

## External and Internal Audits

Annually, AACPS engages a certified public accounting firm to independently audit its fiscal year-end financial statements. Additionally, the auditor conducts what is referred to as a Single Audit of AACPS federal grant programs (as required by federal regulations). The resulting financial statement audit and Single Audit reports for fiscal year 2012 were issued October 11, 2012 and November 11, 2012, respectively, and the reports for

fiscal year 2013 were issued October 22, 2013 and December 13, 2013, respectively.

Due to similarities between the work of the independent certified public accounting firm that audited the AACPS financial statements and conducted the Single Audit, and the risks and scope of our audit in certain areas, we relied on the results of the independent audit for fiscal years 2012 and 2013 to reduce the scope of our audit work related to revenues, accounts receivable, and federal grant activity. In addition, we relied on the results of the work performed by the AACPS internal auditors related to school activity funds.

### **Status of Findings From Preceding Audit Report**

Our audit included a review to determine the status of 20 of the 29 findings contained in our preceding audit report dated September 27, 2007 (the 29 findings resulted in 16 detailed recommendations in that report). We followed up on these 20 findings based on our current assessment of significance and risk relative to the audit objectives. We determined that AACPS satisfactorily addressed 11 of these findings. The remaining 9 findings are repeated as 8 findings in this report.

# Findings and Recommendations

## Revenue and Billing Cycle

### Background

Anne Arundel County Public Schools (AACPS) revenues consist primarily of funds received from Anne Arundel County, the State, and the federal government. According to the AACPS audited financial statements, revenues from all sources totaled \$1.1 billion during fiscal year 2013. In addition, AACPS collects funds for various purposes, such as student activity groups, clubs and school publications. These school activity funds<sup>1</sup> are accounted for separately by each school and reported in summary in the audited financial statements. Although this revenue is raised through student-related activities, AACPS has a fiduciary duty to safeguard these funds. For fiscal year 2013, school activity fund collections totaled \$12.9 million and the June 30, 2013 balance was \$5.3 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 AACPS financial statements and the objectives of our audit in this area, we placed significant reliance on the results of that audit for certain 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 material revenue types or accounts receivable for governmental funds, the majority of which related to electronic fund transfers from other government entities.

### Internal Auditor Audits School Activity Funds

The AACPS internal auditor conducts audits of school activity funds. The internal auditor's review and testing of the school activity funds at AACPS schools identified some control weaknesses at certain schools that were addressed by school management. The internal auditor's reports we reviewed disclosed that internal control weaknesses identified were not prevalent. The internal auditor audits all schools' activity funds on a rotating basis and reports its findings to the school principals, central administrative staff, and the Board.

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<sup>1</sup> The Board has a fiduciary responsibility to ensure that school activity funds are used only for intended purposes by those to whom the assets belong. Receipts for the school activity funds are not included in the \$1.1 billion revenue total because the Board cannot use these assets to finance its operations.

## Federal Funds

### Background

AACPS receives funds pertaining to federal government programs that are generally restricted for use for a specific program (such as the School Lunch Program or Special Education). According to the audited Schedule of Federal Awards, fiscal year 2012 expenditures totaled \$55.6 million and fiscal year 2013 expenditures totaled \$55.2 million, not including federally funded fee-for-service programs such as Medicaid reimbursement for certain services.

### Single Audit Report Disclosed No Reportable Conditions Regarding Federal Grant Management

Due to work performed by the independent certified public accounting firm that conducted the Single Audit of the AACPS 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 AACPS' compliance with the terms of several grant programs, the auditor also considered the existing internal control structure's impact on compliance and audited the required Schedule of Federal Awards (which includes claimed and reported grant expenditures) for fiscal years 2012 and 2013. The related reports stated that AACPS 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 significant deficiencies.

## Procurement and Disbursement Cycle

### Background

According to the audited financial statements and AACPS records, non-payroll disbursements totaled \$189 million during fiscal year 2013. AACPS has a comprehensive procurement policy and related procedures. The policy sets bidding requirements and specifies when Board approval is required. AACPS uses a combination of automated and manual processes to process requisitions, purchase orders, invoices, and payments to vendors.

#### **Finding 1**

**AACPS did not use available features of its automated accounts payable and procurement system to restrict and monitor user capabilities.**

### Analysis

AACPS did not use available features of its automated accounts payable and procurement system to restrict and monitor user capabilities. The AACPS

automated system allows AACPS to limit user access capabilities to provide proper internal control over the processing of critical transactions such as requisitions, purchase orders, and related invoices.

- The access capabilities assigned to six employees allowed them to process critical transactions (such as recording invoices for payment in the system) for which there was no subsequent manual review designed to detect errors or improper transactions. These capabilities could allow an employee to process erroneous or improper payments.
- Ten userids were assigned capabilities that allowed the user to process transactions that were not necessary for their job duties. Three of the ten userids were not assigned to a specific AACPS employee, which makes it difficult to identify the individual initiating a particular transaction.
- AACPS did not generate and review security reports of assigned user capabilities to ensure access was properly granted and continued to be proper. We were advised by AACPS management that a report of user access was generated during November 2012 which included 507 userids; however, the review of this report was not completed as of August 2013.
- AACPS did not generate a report of changes to vendor information (such as new vendors or address changes) recorded in the automated financial system for independent review and comparison to source documentation. As a result, there was no assurance that changes were proper.

Similar conditions regarding controls over user access were commented upon in our preceding audit report.

#### **Recommendation 1**

**We recommend that AACPS**

- a. restrict employees' capabilities on the system to only those needed to perform their job duties and eliminate incompatible functions (repeat),**
- b. periodically generate and independently review system reports of user capabilities to ensure access is properly granted (repeat), and**
- c. ensure that changes to the vendor information recorded in the system are verified to appropriate source documentation by an independent employee.**

**Finding 2**

**AACPS did not adequately monitor a contract to develop an automated human resources management and payroll system. Payments to the contractor totaled \$4.8 million.**

**Analysis**

AACPS entered into a contract with a vendor to provide an automated human resources management and payroll system and made payments under the contract, but did not receive a viable product. The contract, which was approved by the Board, required AACPS to pay the vendor \$4.6 million during the contract period June 2007 through June 2010. The contract required AACPS to make payments to the vendor based on time (labor hours) and materials and payments to the vendor totaled \$4.8 million from October 2007 through August 2011. The vendor failed to perform on the contract. In November 2011, the Board directed AACPS to terminate the contract. After attempts to rectify the problems failed, the Board authorized legal counsel to file suit against the vendor. According to AACPS legal counsel, it is expected that this suit will be filed in the near future.<sup>2</sup>

We found that (1) the use of a time and materials basis for this and similar contracts is unwise, involves greater risk to the government, and requires higher levels of supervision than other contract bases; and (2) that AACPS failed to provide adequate supervision of this vendor. Federal best practices note that time and materials based payments present the highest risk to the government and the lowest risk to the contractor, and they should only be used if the contracting unit documents its determination that no other contract type is suitable. These best practices also indicate agencies using this type of contract should prevent wasteful spending by monitoring contractor performance to ensure that the contractor is efficiently performing the work and effectively controlling costs.<sup>3</sup>

Although the contract contained project milestones with associated deliverables, payments were not contingent on meeting the milestones or providing the deliverables. Furthermore, AACPS did not ensure that the specified milestones were met and deliverables were received, although future work to be performed by the vendor was contingent upon AACPS acceptance of deliverables. AACPS could not provide documentation that the milestones were met and acknowledged that they continued to pay the

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<sup>2</sup> The Office of Legislative Audits takes no position on the merits of the lawsuit. Liability and, if appropriate, damages will be determined through the court system.

<sup>3</sup> Sources for best practices are the Federal Defense Procurement and Acquisition Policy and a Government Accountability Office report dated June 2007 "Defense Contracting – Improved Insight and Controls over DOD's Time and Materials Contracts."

contractor for over two years after AACPS realized that system implementation would be delayed, with the possibility that the vendor would not be able to deliver the system.

Due to the inability of the vendor to provide a working system, AACPS was required to contract with another vendor in December 2012 to upgrade the current system. This contract has an estimated cost of \$2.3 million, and contains a completion date of July 31, 2014. As of October 2013, payments to this vendor totaled \$350,000.

## **Recommendation 2**

### **We recommend AACPS**

- a. ensure that provisions in information technology contracts specify a correlation between payments and the receipt of specific deliverables and/or the meeting of milestones;**
- b. ensure that payments are made only when vendors fulfill contractual obligations; and**
- c. continue, with the assistance of legal counsel, to assess whether legal actions against the vendor should be pursued.**

## **Finding 3**

**AACPS did not thoroughly evaluate purchasing card assignments to reduce the number of unnecessary cards.**

### **Analysis**

AACPS did not thoroughly evaluate corporate purchasing card (CPC) assignments to determine whether the individuals needed the cards. According to the issuing bank's records, CPC expenditures totaled approximately \$5.8 million during the period January 2012 through February 2013. As of May 2013, 1,802 purchasing cards had been issued to 687 cardholders.

- Records provided by the bank disclosed that, as of May 2013, 125 cards had not been used for periods ranging from 12 to 52 months. Although AACPS had initiated procedures to review cards for inactivity, not all inactive accounts were reviewed and adequate action was not taken to determine if inactive accounts should be closed. A similar situation regarding the need to conduct periodic evaluations of card usage to detect unused cards was commented upon in our preceding audit report.
- Multiple cards were issued to 307 cardholders, including 53 cardholders that were issued 10 or more cards. AACPS management advised us that

multiple cards are issued to employees in order to allocate costs to various accounts. AACPS management also advised us that it is in the process of implementing an online system that will allow cardholders to use one card for all purchases and subsequently allocate costs to multiple accounts, rather than assigning multiple cards to one employee.

### **Recommendation 3**

**We recommend that AACPS**

- a. conduct periodic evaluations of card usage and terminate cards that are determined to be unnecessary (repeat), and**
- b. discontinue the practice of issuing multiple cards to individual users.**

## **Human Resources and Payroll**

### **Background**

Payroll expense represents the largest single cost component in the AACPS budget. Fiscal year 2013 salary, wage, and benefit costs totaled \$832 million. According to MSDE reports, during the 2012 - 2013 school year, AACPS had 9,634 full-time equivalent positions, including 2,685 non-instructional positions.

AACPS uses an integrated human resources and payroll computer system to maintain personnel information, record employee time, track leave usage, and process and record payroll transactions. The system automatically generates biweekly time records and any adjustments are processed by central payroll personnel. The system generates payroll checks and direct deposit advices. Payroll processing involves both automated processes (such as compiling leave and running edit reports) and manual processes (such as data entry of new employee information).

AACPS self-insures for health care benefits and contracts with a third-party administrator to pay health care claims on behalf of plan participants and eligible dependents. Providers submit claims to the administrator who pays them on behalf of AACPS and then obtains reimbursement from AACPS for the actual costs of claims paid. AACPS pays a fee to the administrator to provide these services based on the number of participants. According to the AACPS records, during fiscal year 2013 AACPS paid this vendor \$89.2 million for claim reimbursements (not including vision, dental, or prescription) and \$5.5 million for administrative fees. Coverage was provided to approximately 28,000 employees, retirees, and dependents.



### **AACPS Implemented Procedures to Remove Ineligible Individuals Covered Under its Employee Health Care Plans**

AACPS contracted with a consultant to conduct verifications of individuals that were covered as dependents under its health care plans. The vendor required employees to submit documentation to prove that each individual covered as a dependent was eligible under the criteria defined in the AACPS health care plans. In its report, issued in June 2013, the vendor identified 358 ineligible dependents and estimated that AACPS would save over \$1 million in health care costs during the first year. We were advised by AACPS management that as of August 2013, they discontinued coverage for 289 of the 358 individuals. AACPS management stated that adequate documentation was provided subsequent to the vendor's report by the remaining 69 individuals to support continued coverage.

#### **Finding 4**

**AACPS did not ensure the propriety of payments for employee and retiree health care costs.**

#### **Analysis**

AACPS lacked procedures and controls to ensure that health care claims paid by its third-party administrator were proper.

- AACPS paid the administrator's invoices without verifying that the amounts billed were proper. Specifically, AACPS made estimated payments to the administrator each month and then paid a settlement amount (or received a credit) based on the subsequently reported actual claims paid for each month. AACPS did not receive detailed claims data and therefore could not verify that the settlement amount was proper. In addition, AACPS did not adequately ensure that administrative fees invoiced and paid to the vendor were proper by comparing the number of participants from the invoices to its payroll records.
- AACPS did not conduct or contract for any comprehensive claim reviews to ensure that the vendor paid claims only for eligible individuals in accordance with the contract terms, and did not review claims documentation to ensure that services were actually provided and were paid in accordance with the terms of the contract.
- AACPS did not ensure that contractual performance measures were met. The contract defines the measures and how they will be calculated. The performance measures relate to certain operational areas, such as network discounts, customer service, and customer satisfaction. The

contract allows for assessment of penalties (up to \$889,400 per year) if these measures are not met. The vendor self-reported its compliance levels with these measures and we were advised that no penalties were assessed in plan years 2012 and 2013, however, AACPS did not have a process in place to verify the reported performance.

Recommended practices published by the Government Finance Officers Association state that health care cost containment is a critical component of long-term financial planning and budgeting. The Maryland Department of Budget and Management, which has similar claims processing contracts for State employees, contracts with a third-party vendor (other than the vendor processing claims) to conduct reviews to ensure the propriety of claims paid.

#### **Recommendation 4**

**We recommend that AACPS establish procedures to verify the amounts paid for health insurance. Specifically, we recommend AACPS**

- a. obtain detail to support the administrator's billings;**
- b. verify the propriety and accuracy of claim payments and administrative fees; and**
- c. review documentation related to contractual performance measures to ensure that mandated measures were met, or if not met, consider assessing penalties as provided for in the contract.**

#### **Finding 5**

**Certain users were assigned unneeded capabilities in the automated human resources and payroll system, and reports of personnel and payroll changes were not comprehensive.**

#### **Analysis**

AACPS did not establish adequate internal controls over its automated human resources and payroll system and related processes.

- Nineteen employees had been assigned system capabilities that allowed them to perform certain incompatible system functions (including the ability to add employees and process payroll adjustments), even though these employees did not require such access in order to perform their job duties.
- AACPS did not generate and review reports of access capabilities assigned to system users to ensure that employees' ability to perform critical functions was properly restricted.

- Although AACPS generated output reports of changes made to the automated human resources and payroll system for review by independent supervisory personnel, these reports did not include all changes to the records. For example, the reports did not include new hires and payroll adjustments (such as pay adjustments for coaching sports). As a result, improper or erroneous transactions could be processed without detection. A similar situation regarding the lack of controls over additions of new employees to the payroll system was commented upon in our preceding audit report.

#### **Recommendation 5**

**We recommend that AACPS**

- a. restrict employees' capabilities on the system to only those needed to perform their job duties and eliminate incompatible functions,**
- b. periodically generate and ensure independent review of accurate and complete reports of access capabilities assigned to system users, and**
- c. modify its existing reports of changes to include all changes made to the human resources and payroll records (repeat).**

### **Inventory Control and Accountability**

#### **Background**

According to the AACPS audited financial statements, the undepreciated value of its capital equipment inventory totaled \$49 million as of June 30, 2013. AACPS uses automated records to track all equipment inventory items with a cost of \$5,000 or more. In addition, AACPS tracks certain other equipment items costing under \$5,000 deemed sensitive to theft, such as information technology items.

#### **Finding 6**

**The AACPS equipment inventory policies lacked specificity and a complete physical inventory had not been performed.**

#### **Analysis**

The AACPS equipment inventory policies did not specify the frequency for conducting periodic physical inventories of equipment nor indicate which items should be included in the physical count. For example, the AACPS Property Control Manual does not require that all sensitive equipment items be counted on a routine basis. Board regulations state that physical inventories shall be conducted by the school's administrative units. The

regulations also state that physical inventories may be directed by the Superintendent or designee at anytime.

AACPS has not conducted a complete physical inventory of its capital and sensitive equipment since 2004. From fiscal year 2010 to 2012, AACPS performed limited physical inventories of select items deemed to be at greater risk of loss (such as laptops in fiscal year 2010 and document cameras in 2012). Further, we found that these inventories did not include all items of record. For example, our review of an inventory of document cameras performed at one school found that that the inventory count included only 3 cameras while the AACPS records indicated that the school had 35 such cameras and school staff advised us that they had 143 cameras on site. AACPS had not reconciled these differences and could not explain the discrepancies. Our test of 15 other sensitive equipment items totaling \$26,546 that were recorded on the detail records for that school noted 4 items totaling \$11,675 that could not be located.

A similar situation regarding the lack of physical inventories of equipment was commented upon in our preceding audit report.

#### **Recommendation 6**

**We recommend that AACPS**

- a. enhance its policies by specifying the types of equipment to be inventoried and the frequency of physical counts; and**
- b. conduct periodic physical inventories, reconcile these inventories to the related detail records, and retain the related documentation for review and verification purposes (repeat).**

#### **Finding 7**

**The AACPS detail equipment records were not always accurate and comprehensive.**

#### **Analysis**

The AACPS detail equipment records did not always contain sufficient data to identify equipment items. In addition, certain items were not properly recorded in the detail records.

- The detail records did not contain unique identifiers for all equipment items. Our review found that 15,121 of the 90,789 equipment items did not have serial numbers or other unique identifiers (for example bar codes) recorded in the detail records. AACPS management advised us that they have been in the process of placing bar code tags on all

equipment since 2007 in order to improve accountability of the items. However, our review noted that as of March 2013 the inventory records included bar code numbers for only 6,176 of 90,789 equipment items (6.8 percent). A similar situation regarding the lack of unique identifying data on the detail records was commented upon in our preceding audit report.

- Equipment acquired by using purchasing cards was not always recorded in the equipment records. We noted that 25 sensitive equipment items bought using one purchasing card during May and June 2012 totaling \$93,000 were not recorded in the detail records. In addition, our review of 15 monthly purchasing logs for purchases made by others during September 2012 through February 2013 noted that two other sensitive equipment items totaling \$1,417 were not recorded in the detail records.

#### **Recommendation 7**

**We recommend that AACPS ensure that**

- a. detail equipment records include serial numbers or other unique identifiers for all items (repeat), and**
- b. equipment items bought via purchasing cards are recorded in the detail records.**

## **Information Technology**

### **Background**

The AACPS Division of Technology, aided by other AACPS offices, maintains and administers the AACPS computer network, computer operations, and information system applications. AACPS operates a wide area network, with Internet connectivity, which connects the individual schools' local networks to the computer resources located at the AACPS headquarters. The Division maintains multiple computer rooms at the headquarters location in which numerous computer servers and network devices operate to support AACPS information system applications including its student information system, finance management system, and human resources/payroll application.

**Finding 8**

**Access and monitoring controls over critical databases and applications were not sufficient to protect critical data.**

**Analysis**

Access and monitoring controls over critical databases and applications were not sufficient to protect critical data.

- A default administrative database account unnecessarily had full access to the student information system database. Since this account includes local server administrators by default, all local administrators on the database server had full administrative access to this database. Also, anyone able to achieve local administrator privileges would automatically have full administrative access to this database and could perform unauthorized modifications to critical data. We noted that as a result of this condition, 20 userids (assigned to 12 unique individuals) had unnecessary full administrative access to this database.
- Certain critical security and audit events (for example, grant privilege and stop audit) for the student information system database were not recorded in audit logs or reviewed. As a result, management lacked assurance as to the propriety of these events. Furthermore, although failed login attempts were recorded, AACPS reviews of these events were not documented.
- Numerous accounts were assigned unnecessary direct modification access to the human resources/payroll production database files and certain application programs. For example, numerous accounts (assigned to numerous unique users) had unnecessary direct modification access to the aforementioned programs. In addition, the mainframe computer which hosts the human resources/payroll database and application did not have the capability to log access to program and data files. Unnecessary and unlogged direct modification access to these program and data files could result in improper modifications to human resources and payroll data without detection by management.

Best practice guidelines from the State of Maryland Department of Information Technology (DoIT) *Information Security Policy* recommend that access to information be strictly controlled and audited.

## Recommendation 8

We recommend that AACPS

- a. limit access to critical databases and production programs and data files to personnel whose job duties requires such access,
- b. log all critical security and audit events and direct modification access in audit logs,
- c. review audit logs on a regular basis (at least weekly) with appropriate investigation of questionable or unusual items, and
- d. document these reviews and investigations and retain the documentation for verification purposes.

## Finding 9

Administrative access to the AACPS network was not adequately controlled and audit policies for monitoring the security of certain critical servers were not in effect.

## Analysis

Administrative access to the AACPS network was not adequately controlled and audit policies for monitoring the security of certain critical servers were not in effect.

- A shared account was included in one administrator group and we were advised by AACPS management that six of nine employees who knew the password for this shared account did not require these administrator capabilities on the AACPS domain. Accounts that are members of this group are the most powerful and privileged in the system and should only be assigned to individuals requiring those capabilities to perform their assigned job duties. Furthermore, best practice guidelines from the DoIT *Information Security Policy*, state that shared accounts are generally prohibited since the use of a shared account precludes accountability for actions taken via the account.
- Although the server audit policies were properly enabled on the domain controller, these policies did not propagate to member servers in the domain as they should have. In this regard, our test of two critical member servers disclosed that AACPS local audit policy settings were not enabled. Accordingly, significant system security-related activities for member servers were not logged or reviewed, including failed logons and changes to audit policies. As a result of these conditions, certain unauthorized or inappropriate activities affecting the integrity of the AACPS critical production systems could occur and go undetected.

## Recommendation 9

We recommend that AACPS

- a. assign administrator capabilities on the AACPS domain to only those users requiring such privileges,
- b. appropriately limit the use of shared accounts, and
- c. ensure that audit policies enabled on the domain controller propagate to and are enabled on the member servers.

## Finding 10

Malware protection on AACPS workstations was not comprehensive.

### Analysis

Malware protection on AACPS workstations was not comprehensive.

- The antivirus software used to protect AACPS workstations was not properly configured to limit users' capabilities. Specifically, users of all AACPS administrative workstations could exclude any files or folders from malware scans. Additionally, all users were allowed to override and modify the antivirus software's default actions to be taken against potentially malicious discoveries.
- Local administrator privileges were not properly restricted. Our test of seven regular users noted that all seven users were assigned local administrative rights to their workstations. As a result, if these workstations were infected with malware, the malware would run with administrative rights and expose these workstations to a greater risk of compromise than if the workstations' user accounts operated with only user rights. In addition, as a result of this condition, these seven users could disable the antivirus software on their workstations.

Best practice guidance from the DoIT *Information Security Policy*, states that agencies should configure security settings of information technology products to the most restrictive mode consistent with operational requirements.

## Recommendation 10

We recommend that AACPS

- a. disable the settings which allow users to exclude files from malware scans and override and modify default security controls established by management, and
- b. limit local administrative rights on user workstations to only personnel that require such rights for their job duties.



**Finding 11****The AACPS network was not properly secured.****Analysis**

The AACPS network was not properly secured.

- Ten publicly accessible servers were located on the AACPS internal network rather than isolating these servers in a separate protected network zone. These servers, which could potentially be compromised, exposed the internal network to attack from external sources. Recommended security procedures, per the National Institute of Standards and Technology *Guidelines on Firewalls and Firewall Policy* include placing publicly accessible servers in an external protected zone so as to protect those servers as well as an entity's internal network.
- AACPS did not adequately secure its internal network from improper network level access from AACPS high school students using either computer lab workstations or media center workstations. AACPS did not use network access control software or network-level traffic filtering to protect its network from activity emanating from these workstations. Student access from these workstations should be limited to devices and ports necessary for these students to perform required tasks.

**Recommendation 11**

We recommend that AACPS

- a. segregate publicly accessible servers in a separate protected network zone, and
- b. implement controls to limit network level student access to only authorized local school and headquarters network resources.

**Facilities Construction, Renovation, and Maintenance****Background**

AACPS maintains a total of 110 schools and a number of other facilities (such as administrative and support offices) with 728 custodial and 111 maintenance personnel. The fiscal year 2013 Capital Improvement Plan (CIP) estimated that necessary construction, major renovations, and systemic improvements to AACPS facilities over the next six years would cost \$1.4 billion. AACPS uses various sources to develop its six-year CIP, which is presented to and approved by the Board. Our review of the fiscal year 2013-

2018 CIP disclosed that it appeared to address the needs of AACPS based on items such as student demographics and facility assessments.

AACPS contracted for a Strategic Facility Utilization Master Plan (SFUMP) to provide a comprehensive review of all schools and address the needs for future construction, renovation, and other facility needs. Our review of 10 contractual procurements for capital projects (totaling approximately \$53 million) disclosed that nine of these projects were identified as a high priority in the SFUMP, while the remaining project was started prior to the issuance of the SFUMP.

AACPS prepares an annual Comprehensive Maintenance Plan (CMP) which identifies and prioritizes all maintenance projects, including those that are backlogged. AACPS reported deferred maintenance projects totaling \$238 million in the fiscal year 2013 CMP. During the annual budget request submitted to the Anne Arundel County Council, AACPS considers the CMP as well as the potential funding in order to determine the amount requested for these projects. As part of the fiscal year 2013 budget approval process, AACPS received approximately \$4 million specifically to address deferred maintenance projects.

#### **AACPS Contracts and Expenditures for Capital Projects Were Proper**

Our review of 10 contractual procurements totaling approximately \$53 million disclosed that the contracts were properly bid, awarded, and approved by the Board. We also tested 10 related invoices totaling \$5.2 million and found that the payments were proper. That is, payments were based on the percentage of completion as evidenced by formal approved inspection documentation.

#### **AACPS Had Established Processes to Minimize Energy Costs**

AACPS had an approved comprehensive energy policy and was drafting regulations necessary to implement the policy. In July 2012, AACPS established an Energy Conservation Office within the Division of Facilities to identify initiatives to achieve energy savings. The Office began conducting energy audits of schools using a risk-based approach by focusing on older schools where greater savings could be expected. Furthermore, AACPS had consulted with a vendor to analyze lighting fixtures to reduce electrical costs and the Office was installing energy efficient fixtures in certain high schools and pursuing utility rebates.

## Transportation Services

### Background

AACPS has approximately 56,000 students eligible to receive transportation services. These students were transported on one of 450 contractor-owned buses or 56 school system-owned buses. AACPS uses a bidding process to award routes to contractors based on the lowest competitive bid. Prospective bidders submit proposals that specify several cost components (annual fixed rate, hourly rates for drivers and aides, and per mile maintenance and fuel rates). AACPS calculates the lowest bid for the 12-year life of the bus,<sup>4</sup> based on a standard number of hours and miles contained in the request for bids. AACPS uses an automated bus contractor payment system, which was implemented in fiscal year 2010, to calculate monthly payments that are to be based on the contractor bid and actual mileage and driver time. During fiscal year 2013, according to the audited financial statements, expenditures for student transportation totaled \$50 million of which we were advised that \$42 million represented payments to contractors.

### Finding 12

**AACPS did not have formal targets and goals for revising bus routes or use automated routing software to improve route efficiency.**

### Analysis

AACPS did not have formal targets and goals to guide the decisions made during the process of reviewing and revising bus routes nor did it use automated bus routing software to promote more efficiency. Specifically, AACPS did not have written procedures specifying critical factors used to determine efficient bus routes such as formal bus capacity guidelines and maximum student ride times. Further, there were no written procedures for determining and implementing changes to the existing bus routes. Current AACPS policies only provide general information regarding bus transportation, such as distance from school required to ride a bus.

AACPS did not use automated bus routing software capabilities to develop more efficient routes. Our prior audit report noted that during the period 1994 through 2005, AACPS attempted to obtain computerized routing software but was unable to obtain a suitable working system. Subsequently, AACPS relied on the experience and knowledge of its transportation staff to manually develop bus routes. For example, when a new housing development

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<sup>4</sup> In Maryland, conventional school buses operated in certain jurisdictions have a useful life of 12 years as established by Maryland law. Under prescribed maintenance and inspection conditions, the State Superintendent of Schools can grant approval to operate a conventional school bus beyond 12 years.

is built the staff will adjust the existing routes to accommodate the students residing in the new development.

The lack of a system-wide route analysis could impact route efficiency. For example, our review of the AACPS fiscal year 2013 time and mileage reports (which are also used to record student ridership) for 1,272 regular bus routes disclosed that 336 routes were below 50 percent of AACPS' informal bus occupancy goals.<sup>5</sup>

Using routing software is a recognized best practice that can be used to reduce the time it takes to design efficient routes, reduce student ride time and help ensure that routes minimize the number of buses needed to transport students. Similar conditions were commented on in our preceding audit report.

### **Recommendation 12**

**We recommend that AACPS**

- a. **develop formal targets and goals for its bus routes to address factors such as desired bus capacity and student ride times in order to assist in developing more efficient bus routes (repeat), and**
- b. **improve the efficiency of bus utilization by obtaining and implementing automated routing software (repeat).**

### **Finding 13**

**Procedures and controls were not sufficient to ensure that contractors were paid the proper amounts.**

### **Analysis**

Procedures and controls over payments to bus contractors were not sufficient to ensure the propriety of those payments.

- Data entered into its bus contractor payment system by several employees to pay contractors were not subject to independent review. Specifically, reviews were not performed to ensure the accuracy of data entered for the initial cost components from winning bids, the annual contractually required cost of living adjustments to labor rates and monthly fuel prices, the number of miles driven and any related mileage adjustments, as well as the hours worked by bus drivers.

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<sup>5</sup> AACPS management advised that they consider student bus capacity as 44 for high school, 48 for middle school, and 54 for elementary school.

- AACPS did not implement a process to determine if the time and mileage, including adjustments, as reported by the contractors were accurate (that is, reflect actual mileage and hours worked).
- Access capabilities assigned to individuals on the payment system were not adequately controlled. Two users could record adjustments to the contractor pay data; however, their job function did not require this capability. In addition, we were advised by AACPS management that one other userid, which provides access to update contractor pay data, was used by multiple users.

A similar condition regarding controls over changes to the information in the automated bus contractor payment system was commented upon in our preceding audit report.

### **Recommendation 13**

**We recommend that AACPS ensure that sufficient procedures and controls over payments to bus contractors are established. Specifically, we recommend that AACPS**

- ensure that an independent employee verifies that data entered into the contractor payment system agrees to source documents, at least on a test basis (repeat);**
- verify the time and mileage reports received from the contractors to actual mileage and driver hours required for the specific bus routes; and**
- eliminate payment system access for individuals that do not require assigned access to perform their duties and ensure that users have unique userids.**

### **Finding 14**

**Payments to contractors for bus transportation were not always properly calculated and were not always in compliance with the contract terms.**

### **Analysis**

Payments to contractors for providing bus transportation to students were not always proper. Our review of payments totaling approximately \$98,000 for transportation services provided by 10 buses during April 2013 disclosed the following conditions:

- Mileage recorded in the bus contractor payment system was not always accurate, and did not always agree to the miles reported by the contractor. Our review noted that the mileage recorded in the system and used for

payment calculations exceeded the OLA calculated mileage for 6 of the 10 buses tested by 12 to 42 miles. Based on these differences, we calculated that AACPS may have overpaid these contractors \$5,300 for transportation services provided during April 2013. In addition, mileage recorded in the system for 4 buses (including 3 of the 6 buses included above) exceeded miles reported by the contractors by 4 to 43 miles. AACPS was not able to explain these mileage discrepancies.

- Hourly payment rates for drivers and aides for 5 of the 10 buses tested were higher than the rates that were provided for in the related contracts primarily due to incorrect cost of living adjustments (COLA). Each contract provides for specific hourly labor rates in the initial year and annual COLA factors for subsequent years. AACPS management advised us that due to the implementation of a new automated payment system in fiscal year 2010, subsequent annual COLA adjustments were improperly calculated for contracts that existed prior to 2009. As of April 2013, there were 312 buses operating under contracts prior to 2009, which could be impacted by improper hourly rate adjustments. Although we calculated that the overpayments for those five buses totaled approximately \$12,000 during fiscal year 2013, due to the number of affected buses and the length of time the improper calculations have occurred we could not readily determine the total system overpayments.
- AACPS increased the base hourly pay rates for bus drivers by a flat 50 cents per hour above the contracted amounts in fiscal year 2007. This increase was given to all contractors providing services that school year unless the contract was in its first year (that is, fiscal year 2007 contracts). Although this increase was approved by the Board, this increase conflicted with the terms of the contracts which specified increases to rates based on COLA and appears to be inconsistent with the intent of having a competitive procurement process. AACPS estimated that this increase would cost approximately \$277,000 in fiscal year 2007. This increase also affected subsequent fiscal years; however, AACPS did not determine the cost of this increase for the remaining years of the contracts.

A similar comment regarding increasing hourly rates above the contract amount was made in our preceding audit report.

#### **Recommendation 14**

We recommend that AACPS ensure that payments to bus contractors are proper and are paid in accordance with the contract terms. Specifically we recommend that AACPS

- a. determine the actual mileage required for each route and make payments according to the correct route mileage;
- b. ensure that hourly rates are paid in accordance to the contract;
- c. discontinue the practice of increasing hourly rates that were previously subject to the competitive bid process (repeat); and
- d. investigate mileage and payment discrepancies, make adjustments as necessary for future payments, and determine the appropriateness of recovering prior overpayments from bus contractors.

### **Food Service Operations**

#### **Background**

AACPS has a cooking cafeteria at 105 of its schools. Food and related supplies are received and stored in each school. In fiscal year 2013, AACPS had 529 cafeteria workers. According to the AACPS audited financial statements, food service operations expenditures (\$26,066,362) exceeded revenues (\$24,981,335) by \$1,085,027 for fiscal year 2013. AACPS advised us that a large purchase of replacement equipment contributed to the deficit in fiscal year 2013.

#### **Finding 15**

**Cash receipt duties were not properly segregated as transactions could be voided by cashiers without independent review or approval at the schools we reviewed.**

#### **Analysis**

Cash receipt duties were not properly segregated. Specifically, cashiers and managers in nine schools we reviewed (we visited four schools and contacted an additional five schools) had the ability to void transactions on the automated point-of-sale system with no independent review or approval. In several of the schools we visited, managers were also routinely responsible for initially processing cash receipts. Although the point-of-sale system is capable of generating output reports of voided transactions for subsequent review, the schools did not generate these reports.

According to the AACPS records, cashiers processed 13,756 voids totaling \$1.1 million during fiscal year 2013. Our review of 15 of these voids totaling

\$1.0 million disclosed that voids tested were appropriate (such as the cashier recording the student ID number as a cash payment instead of the price of the food).

#### **Recommendation 15**

**We recommend that independent supervisory personnel, such as food service headquarters personnel, review and approve voids, at least on a test basis. For example, AACPS could generate periodic reports of all void transactions to enable this review process.**

## **School Board Operations**

### **Background**

The AACPS Board of Education is composed of eight voting members appointed by the Governor and one voting student representative. In its oversight responsibilities, the Board contracted with a certified public accounting firm for independent audits of the AACPS financial statements and federal programs. The Board has standing committees for budget and policy and individual members are periodically informed of and become involved with all other aspects of operations and governance.

### **AACPS Adopted an Ethics Policy that Met the Current Requirements of State Law**

The AACPS Board has adopted a detailed ethics policy that conforms to State law and includes provisions for conflicts of interest and financial disclosure and was approved by the State Ethics Commission. Provisions of this policy are applicable to Board members as well as all AACPS employees. AACPS established an Ethics Panel consisting of five members who are appointed by the Board 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 April 30<sup>th</sup> of each year. Our review of the 469 employees required to submit financial disclosure forms for calendar year 2012 disclosed that forms were submitted as required with few exceptions.

### **AACPS Established a Confidential Hotline to Enable Employees and Others to Report Suspected Fraud, Waste, or Mismanagement**

During September 2010, the Board implemented a third-party hotline to report allegations of financial fraud, waste, or abuse. The Board also



implemented procedures to track and monitor these allegations. According to AACPS records, during the period September 2010 through March 2013, 11 separate allegations were received as a result of the hotline and our review of one of these allegations disclosed that it was appropriately investigated by the AACPS Office of Investigations. In addition, AACPS has implemented procedures to advertise and promote use of the hotline. For example, hotline contact information is shown on its website, and is printed on purchase orders that are used to procure goods and services from vendors.

### **Other Financial Controls**

As previously mentioned, AACPS self-funds health care costs. AACPS uses a third-party administrator to pay claims on behalf of plan members and their dependents and pays an administrative fee for these services. Our findings in the area of health care are addressed in Finding 4 of this report.

Our other work in this area disclosed that AACPS had established reasonable cash investment and risk management practices.



## Audit Scope, Objectives, and Methodology

We conducted a performance audit to evaluate the effectiveness and efficiency of the financial management practices of the Anne Arundel County Public Schools (AACPS). 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 AACPS procedures and controls were effective in accounting for and safeguarding its assets
2. To evaluate whether the AACPS policies provided for the efficient use of financial resources

In planning and conducting our audit of AACPS, 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 AACPS dated September 27, 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 AACPS 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 direct control or management of the Anne Arundel County Board of Education.

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 AACPS. We also interviewed personnel at AACPS, the Maryland State Department of Education

(MSDE), and staff at other local school systems in Maryland (as appropriate).<sup>6</sup> Our audit procedures included inspections of documents and records, and observations of AACPS operations. We tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives, generally for the period from July 1, 2011 through December 31, 2012. For certain areas within the scope of the audit, we relied on the work performed by the independent accounting firm that annually audits AACPS' financial statements and conducts the federal Single Audit.

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

We also used data extracted from AACPS' automated financial system and corporate purchasing card program for the purpose of testing expenditure and payroll transactions. We performed various tests of the relevant data and determined that the data were sufficiently reliable for the purposes the data were used during the audit.

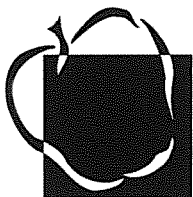
AACPS' management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of 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 AACPS that did not warrant inclusion in this report.

We conducted our fieldwork from February 2013 to November 2013. The AACPS 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 AACPS regarding the results of our review of its response.

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<sup>6</sup> During the course of the audit, it was necessary to contact other systems to identify policies or practices for comparative purposes and analysis.



ANNE ARUNDEL  
COUNTY PUBLIC SCHOOLS

APPENDIX

2644 Riva Road, Annapolis, MD 21401 | 410-222-5000 · 301-970-8644 (WASH) · 410-222-5500 (TDD) | [www.aacps.org](http://www.aacps.org)

June 18, 2014

Department of Legislative Services  
Attn.: Thomas J. Barnickel III and  
Members of the Joint Audit Committee  
301 West Preston Street, Room 1202  
Baltimore, Maryland 21201

Dear Mr. Barnickel and Joint Committee Members,

Attached please find Anne Arundel County Public Schools' (AACPS) response to the Department of Legislative Services audit regarding our financial management practices.

I am pleased that your thorough audit of our financial management practices, which occurred between November 2012 and February 2014, showed that there was no evidence of non-compliance, inaccuracies, or abuse of financial assets, policies, or procedures. The final report did present fifteen (15) recommendations, almost all of which have already been implemented or are in the process of being implemented.

I would like to thank the Legislative Auditors for their comprehensive audit of our school system and value the input provided. If you have any questions with regard to the attached, please do not hesitate to contact my office at 410-222-5304 or at [superintendent@aacps.org](mailto:superintendent@aacps.org).

Respectfully submitted,

A handwritten signature in cursive script that reads "Mamie J. Perkins".

Mamie J. Perkins  
Interim Superintendent

MJP/ALS/sab

Attachment

cc: Senator James C. Rosapepe, Co-Chair, Joint Audit Committee  
Delegate Guy J. Guzzone, CO-Chair, Joint Audit Committee  
Members, Board of Education  
Alex L. Szachnowicz, P.E.  
Susan A. Bowen

## Legislative Financial Management Practices Audit Response

### Anne Arundel County Public Schools

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#### Procurement and Disbursement Cycle

***Finding 1: AACPS did not use available features of its automated accounts payable and procurement system to restrict and monitor user capabilities.***

**Recommendation 1.a: AACPS Response:** AACPS follows a policy of granting capabilities on the system to ensure sound financial controls on financial operations. However, AACPS also needs to ensure that these controls are not overly restrictive and do not impact day-to-day operations in case of the unavailability of key staff due to any reason. Therefore some redundancy in access capabilities is granted to ensure sufficient coverage for normal day-to-day operation. However, AACPS has reviewed the access issues raised during this audit and has taken action by changing some employees' access where it may no longer be warranted.

With regard to the two super-users identified, AACPS has taken actions to ensure separation of duties with regard to review and execution of EFT payments. New procedures have been implemented so that the two individuals no longer review EFT payments but only execute them after review of the EFT payments by other Finance Office staff. As a back-up measure, processing authority was granted to the four employees who are responsible for reviewing documentation for payments under \$15,000 and have capabilities for processing payments. AACPS is reviewing the need for processing capabilities, which may be modified or eliminated.

The finance system software requires that AACPS designate a **SYSTEMS ADMINISTRATOR ID** in the finance area that can be used to submit nightly jobs, nightly cycles, batch jobs, and carryout other system-related duties. The capabilities assigned to this ID pertain to the system administrator function. The individual who is identified as having two IDs is the designated systems administrator and is also the Lead Accountant with functional responsibility in the accounting area. It would be difficult to have an individual in the accounting area with only **SYSTEMS ADMINSTRATOR ID** since staff has functional responsibilities that require them to have capabilities associated with their function.

**Recommendation 1.b: AACPS Response:** AACPS has implemented a process to review security reports of user capabilities by the Supervisor of Finance.

**Recommendation 1.c: AACPS Response:** AACPS has implemented a process to review changes to the vendor information recorded in the accounts payable systems. Employees updating the finance system with vendor changes place original documentation into the shared drive. The Technology Division created a data change report from the finance system. The Supervisor of Finance verifies the source documentation against the change report on a quarterly basis using sampling methodology.

***Finding 2: AACPS did not adequately monitor a contract to develop an automated human resources management and payroll system. Payments to the contractor totaled \$4.8 million.***

**Recommendations 2.a: AACPS Response:** The Request for Proposal process includes a requirement for specification of deliverables and milestones. AACPS will strengthen that language in future software solicitations to include tying payment to deliverables and milestones. AACPS reserves the right to negotiate these terms in our best interests during the project kickoff stage.

**Recommendation 2.b: AACPS Response:** AACPS agrees that better project management may have mitigated certain payments to the contractor. Project management procedures were strengthened when this issue was identified.

**Recommendation 2.c: AACPS Response:** AACPS will follow through with exercising its legal options in consultation with and under the direction of the Board's Attorney.

***Finding 3: AACPS did not thoroughly evaluate purchasing card assignments to reduce the number of unnecessary cards.***

**Recommendation 3.a: AACPS Response:** Procedures are in place to review the inactivity of cards. It is not unusual to have inactivity for six months due to cyclical purchasing patterns. Procedures will be updated to ensure all accounts with inactivity of 12 or more months are reviewed for termination.

**Recommendation 3.b: AACPS Response:** As noted in the audit report, AACPS is in the process of implementing an allocation of expenditures which will allow cardholders to have only one procurement card. This program is being evaluated to ensure that expenditures are not being recorded just against the main account number, but are actually being redistributed to the correct expenditure account number. In some cases, funding may be better managed by having multiple cards.

## **Human Resources and Payroll**

***FINDING 4: AACPS did not ensure the propriety of payments for employee and retiree health care costs.***

**Recommendation 4 a: AACPS Response:** AACPS will establish a procedure, as part of our annual renewal process, for the health benefit plans to obtain the data required from to ensure

that the administrative fees have been calculated properly based on enrollment in the various plan options, and that fees have been charged only for eligible members.

**Recommendation 4.b: AACPS Response:** AACPS is currently exploring a plan for conducting a claims audit as a process improvement tool, and as a way to provide a comprehensive report card on the management of our health care plans.

**Recommendation 4.c: AACPS Response:** Our contracted actuarial and benefit consulting firm will monitor the performance standards that have been contractually agreed with each vendor on a quarterly basis. At the end of each quarter, the vendor and consulting firm will review the year to date performance with AACPS. At the end of the plan year, the consulting firm will review a final accounting from the vendor and will calculate any payment due from the vendor.

***FINDING 5: Certain users were assigned unneeded capabilities in the automated human resources and payroll system, and reports of personnel and payroll changes were not comprehensive.***

**Recommendation 5.a: AACPS Response:** AACPS is currently upgrading the 20 plus year old Human Resources Information System (HRIS) from a mainframe to web-based version. The upgrade, currently in the testing and implementation phase, has greater granularity for system security access and better reporting options. In addition, the upgraded system access to HRIS is tied to a user's overall network access, a process which aligns an employee's access rights based on their employment status. Implementing a more comprehensive, role-based, security plan will permit AACPS to better address this matter.

**Recommendation 5.b: AACPS Response:** AACPS agrees that there should be regular reporting and review of access capabilities assigned to system users. The HRIS system upgrade has greater granularity for system security access that AACPS will be taking advantage of to address this matter.

**Recommendation 5.c: AACPS Response:** AACPS is pleased that the auditors' test of personnel and payroll transactions did not reveal any unauthorized or questionable transactions. AACPS currently has reports to examine changes to existing employee payroll records which are reviewed by independent supervisory staff. However, they do not address new hires being entered into the system.

AACPS' current position control processes would prevent a permanent hire into a position where an allocation is non-existent. Additionally, the Budget Office monitors the position control regularly comparing budgeted positions to authorized positions and then to filled positions. While there is agreement that new hire entries and nonrecurring payroll payments are an area in which improvements may prevent erroneous or improper transactions, we are exploring its reporting capabilities for audit reports in the updated HRIS system that may assist with this need.



## **Inventory Control and Accountability**

***FINDING 6: The AACPS equipment inventory policies lacked specificity and a complete physical inventory had not been performed.***

**Recommendation 6.a: AACPS Response:** AACPS agrees that the current written procedures should be amended to include processes for complete inventories and timelines to be followed for equipment and sensitive items.

**Recommendation 6.b: AACPS Response:** AACPS agrees that physical inventory should be conducted within procedural specified timelines and will work to address this issue. AACPS will review approaches to ensure compliance with the recommendations above. AACPS will amend its Property Control Regulation and Manual to include the use of inventory variance reports showing the loss rate of items in the inventory.

***FINDING 7: The AACPS detail equipment records were not always accurate and comprehensive.***

**Recommendation 7.a: AACPS Response:** AACPS began Bar-coding as a perpetual process after the 2007 audit and continues today. Bar-coding is mandated in the Property Control Manual for sensitive, grant, and items greater than \$5,000 and is physically done at the user level. Serial numbers are also used as single item identifiers. The Property Control Office is in the process of following up with the identified items where a serial number or other unique identifier has not been recorded in the detailed records to obtain this information.

**Recommendation 7.b: AACPS Response:** AACPS defines “equipment” as “an item costing \$5,000 or more”. Certain sensitive items costing less than \$5,000, but which are highly prone to theft and having a useful life of greater than one year are also included in the Fixed Asset Inventory listing. A memo that is posted on the employee intranet is updated and reissued annually to remind employees on the definitions of equipment and sensitive items.

Current procedures require that identified employees (i.e. fiscal secretary, business manager) add equipment and sensitive items using the Logistics Office’s ADD Inventory Form. P-card limits are generally set at \$1,000 or less per transaction. P-card Program procedures prohibit the purchase of equipment or sensitive items. The Purchasing Office will initiate a process to copy the Property Manager on any violation letters sent to cardholders.

## **Information Technology**

***Finding 8: Access and monitoring controls over critical databases and applications were not sufficient to protect critical data.***

**Recommendation 8.a: AACPS Response:** AACPS has made the requisite adjustments to comply with this recommendation.

**Recommendations 8.b: AACPS Response:** AACPS has created a process to comply with this recommendation.

**Recommendation 8.c: AACPS Response:** AACPS has created a process to comply with this recommendation.

**Recommendation 8.d: AACPS Response:** AACPS will record that the documentation is reviewed and will retain this documentation for future audit verification. As noted in a previous response, the HRIS system upgrade has greater granularity for system security access and we will be taking advantage of this capability to address this matter.

***Finding 9: Administrative access to the AACPS network was not adequately controlled and audit policies for monitoring the security of certain critical servers were not in effect.***

**Recommendation 9.a: AACPS Response:** AACPS has made the requisite adjustments to comply with this recommendation.

**Recommendation 9.b: AACPS Response:** AACPS has made the requisite adjustments to comply with this recommendation.

**Recommendation 9.c: AACPS Response:** AACPS made the requisite adjustment and implemented audit logs for member servers and all local computers. However, this resulted in audit logs filling up local drives. The Help Desk received numerous calls as users were unable to log-in and perform daily activities. Therefore, AACPS has had to turn off audit logs until a solution can be determined and implemented to restrict log size.

***Finding 10: Malware protection on AACPS workstations was not comprehensive.***

**Recommendation 10.a: AACPS Response:** AACPS has upgraded this product to now allow this control and thus comply with this recommendation.

**Recommendation 10.b: AACPS Response:** AACPS has eliminated local administrative privileges except for personnel that require such rights for their job duties.

***Finding 11: The AACPS network was not properly secured.***

**Recommendation 11.a: AACPS Response:** AACPS is working to segregate publicly accessible servers in a separate protected network zone.

**Recommendation 11.b: AACPS Response:** AACPS is in the process of implementing a Network Access Control solution which will address this recommendation.

## **Transportation Services**

***Finding 12: AACPS did not have formal targets and goals for revising bus routes or use automated routing software to improve route efficiency.***

**Recommendation 12.a: AACPS Response:** We agree that having optimal bus routing is important, and we take great care to accomplish this through local knowledge, supervision, parental communication, and discretion of professional staff. As mentioned in previous audits, bus routes are determined by the geographic locations of students and schools, timing, and travel factors. Since each student's needs, location and school are unique, we are cautious about implementing policies where strict application of them could cause unintended consequences that could compromise student safety.

**Recommendation 12.b: AACPS Response:** We agree that obtaining and implementing an automated routing software package could potentially result in greater routing efficiency. For this reason, we've assigned a professional staff member to work with the Purchasing Office and Division of Technology to explore this possibility. We are exploring this technology cautiously, given our previous cancellation of a vendor software contract as noted on the previous audit, and the routing software issues that other counties have experienced. An analysis of the funding needed for this project as well as projected cost savings and other efficiency gains will be undertaken.

***Finding 13: Procedures and controls were not sufficient to ensure that contractors were paid the proper amounts.***

**Recommendation 13:** We recommend that AACPS ensure that procedures and controls over payments to bus contractors are adequate. Specifically, we recommend that AACPS ensure that:

**Recommendation 13.a: AACPS Response:** We agree that pricing components from winning bids, as well as annual cost of living adjustments (COLAs) and monthly fuel prices should be reviewed and signed off by staff other than the person entering these figures. A review process has been instituted whereby staff other than the Fiscal Specialist reviews and signs off on the bid prices, COLAs and fuel prices entered by the Fiscal Specialist.

**Recommendation 13.b: AACPS Response:** We agree that an independent review of time and mileage entries made in WINTSS by Specialists should be made. An independent review using statistical sampling is being implemented. We agree that the review process with regard to contractor-submitted time and mileage reports can be improved upon, and should include written adjustments and documentation to support the time and mileage paid to contractors. Supporting documentation for adjustments will be retained by AACPS staff.

**Recommendation 13.c: AACPS Response:** We are committed to providing appropriate levels of access to WINTSS by all staff who receives access. Access for all users has been reviewed and access has been amended for those users who necessitate read-only access or no access at all. Access to WINTSS is provided on an individual bases unique to individual users so that there are not multiple users.

***FINDING 14: Payments to contractors for bus transportation were not always properly calculated and were not always in compliance with contract terms.***

**Recommendation 14:** We recommend that AACPS ensure that payments to bus contractors are proper and are paid in accordance with the contract terms.

**Recommendation 14.a: AACPS Response:** We agree that calculated mileage in WINTSS must agree to the correct route mileage reported by the contractor and any changes that Transportation staff makes to the contractor-submitted mileage must be documented.

**Recommendation 14.b: AACPS Response:** We are committed to paying all bus contractors their hourly rates in accordance with contract pricing. Contracts implemented subsequent to the migration from BCPS to WINTSS have been paid according to their contract pricing, including proper COLA adjustments.

**Recommendation 14.c: AACPS Response:** The flat 50 cents-per-hour rate increase identified in the audit was authorized by the Board to address severe driver shortages and provide an augmentation over the COLA to alleviate the parity issue whereby commercial driver hourly rates were growing faster than the COLAs. We agree to review past practice of hourly rate increases and avoid future increases that conflict with the terms of contracts.

**Recommendation 14.d: AACPS Response:** We agree to review the overpayments identified in the audit and are evaluating the feasibility of payment recovery on a case-by-case basis. Some recover payments have already been received.

## **Food Service Operations**

***FINDING 15: Cash receipt duties were not properly segregated as transactions could be voided by cashiers without independent review or approval at the schools we reviewed.***

**Recommendation 15: AACPS Response:** Cash receipts cannot always be segregated (as is clearly the ideal practice) when the school site staff is limited to one person. Central Office Administrative Staff is aware of these situations and reviews voids at these school sites. Staff will continue to monitor voids on a site-by-site basis. Managers will also be directed to place a note in the bank deposit report stating void complete with total dollar amount. Area Specialists currently review bank deposit reports on a weekly basis. Monthly communication to the Supervisor will be added to the review process. Printing multiple page reports to reflect approved voids would not be beneficial, or cost effective.

Additionally, as of June 2014 all cashiers are required to obtain manager approval prior to completing voids. The void function is now password protected. Passwords are confidential and issued only to managers at the specific school site. Central Office Administration issue and monitor these passwords.

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