

Financial Management Practices Performance Audit Report

Harford County Public Schools

May 2008



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

Bruce A. Myers, CPA
Legislative Auditor

May 30, 2008

Senator Verna L. Jones, Co-Chair, Joint Audit Committee
Delegate Steven J. DeBoy, Sr., 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 Harford County Public Schools (HCPS) in accordance with the requirements of the State Government Article, Section 2-1220(e) of the Annotated Code of Maryland. HCPS is the eighth largest public school system in Maryland based on the number of students enrolled. The educational services are delivered in 53 schools, with fiscal year 2007 expenditures of \$474 million. The objectives of this audit were to evaluate whether HCPS 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, in many cases, HCPS had procedures and controls in place to ensure the safeguarding of assets and the efficient use of financial resources. Nevertheless, our report contains 20 recommendations to enhance controls in its existing financial management systems and processes in such areas as procurement, transportation, and payroll. For example, management should ensure that available automated controls are used for accounting and procurement transactions, that proper approvals are obtained for all procurements in accordance with HCPS policy, and that the reasonableness of rates paid to bus contractors is periodically analyzed. Other issues to be addressed include improved controls over information technology resources, the collection of certain revenues, and performance benchmarking of its maintenance operations.

An Executive Summary of our findings can be found on page i, immediately following this cover letter, and our audit scope, objectives, and methodology are explained on page 65. We wish to acknowledge the cooperation extended to us during our audit by HCPS.

Respectfully submitted,

Bruce A. Myers, CPA
Legislative Auditor

Executive Summary

The Office of Legislative Audits has conducted an audit to evaluate the effectiveness and efficiency of the financial management practices of the Harford County Public Schools (HCPS) in accordance with the State Government Article, Section 2-1220(e) of the Annotated Code of Maryland. State law requires the Office to conduct such an audit of each of the 24 public school systems in Maryland and provides that the related audit process be approved by the Joint Audit Committee. Since the Committee approved the audit process in September 2004, we have issued audit reports related to nine school systems; HCPS represents the tenth to date. The approved process included 11 areas to be audited at each system. The following are summaries of the findings in these areas at HCPS.

Revenue and Billing Cycle (see pages 7 through 10)

According to the audited HCPS financial statements, \$453 million in revenue was received from all sources during fiscal year 2006 and \$481 million was received during fiscal year 2007, the vast majority of which was received via electronic fund transfers from other governmental entities. Procedures and controls for these revenue sources and accounts receivable were found to be adequate; however, based on our audit, controls over certain revenues received by cash or check could be improved. These revenues totaled approximately \$6.8 million during fiscal year 2007.

Federal Funds (see pages 11 through 13)

Annually, HCPS is subject to an audit of its federally-funded programs (often referred to as the Single Audit, and required by Circular A-133, which is issued by the U.S. Office of Management and Budget). Due to parallels between that work and the scope of our audit, we placed significant reliance on the results of the independent audits of the fiscal year 2006 and 2007 grant activity. The related reports stated that HCPS complied, in all material respects, with the requirements applicable to its major federal programs. In addition, with respect to internal controls over

compliance with and the operation of major federal programs, the auditors noted no reportable conditions and no matters considered to be material weaknesses. Reported federal fund expenditures totaled \$20.9 million during fiscal year 2007.

HCPS has an adequate process for the identification of children eligible for Medicaid-subsidized services, and for recovering the related costs.

Procurement and Disbursement Cycle (see pages 15 through 20)

According to HCPS records, non-payroll disbursements totaled \$143 million during fiscal year 2006. HCPS used a number of contract procurement best practices. However, HCPS did not always take full advantage of the controls provided by the automated system and numerous employees had unnecessary access to system capabilities that were not required for their job duties. New HCPS credit cards were sent directly to the employee who placed the card order with the bank rather than to an independent employee; this condition could allow unauthorized purchases to be made on improperly obtained cards. Also, documentation related to travel and credit card purchases was not adequately maintained by HCPS personnel. Finally, there was insufficient price monitoring over several contracts, and no supervisory review and approval of the HCPS bank reconciliations.

Human Resources and Payroll (see pages 21 through 25)

HCPS employed about 5,000 employees as of September, 2006 and payroll costs during fiscal year 2006 totaled \$310 million. Certain HCPS personnel had unnecessary and excessive access capabilities on the HCPS human resource and payroll system and certain human resource and payroll transactions lacked supervisory review. Although HCPS had implemented workforce planning, it was not comprehensive, as it did not address the needs and processes for employees other than teachers and related instructional positions. It is estimated that 15 percent of the HCPS staff are eligible to retire within five years. HCPS has established a leadership training program to assist personnel interested in progressing into administrative positions.

Inventory Control and Accountability (see pages 27 through 29)

Formal policies and procedures to account for and safeguard HCPS equipment were insufficient or non-existent. Furthermore, the procedures and record keeping practices in use did not provide adequate control over HCPS equipment. HCPS has implemented just-in-time purchasing for the majority of its materials and supply items to reduce the costs of maintaining on-hand inventories.

Information Technology Services (see pages 31 through 33)

HCPS maintains and administers a computer network, computer operations, and a number of significant financial and academic information system applications. HCPS developed and periodically updated written technology plans. However, we identified several areas in need of improvement, including the strengthening of policies over passwords and accounts, the safeguarding of data upon disposal of media and computers, the strengthening of procedures for the backup of data, the monitoring of security over critical servers, and the development of a comprehensive disaster recovery plan.

Facilities Construction, Renovation, and Maintenance (see pages 35 through 41)

HCPS maintains 53 schools and 4 other facilities (such as administration and support offices) with a staff of approximately 377 custodial and maintenance personnel. HCPS has implemented a number of best practices to help reduce construction and maintenance costs for its facilities. In addition, HCPS used alternative financing to construct a new administration building, which consolidated many administrative functions within one building and allowed HCPS to use available capital funds for school construction projects.

HCPS had developed a comprehensive preventive maintenance plan based on performance expectations. However, it had not established performance standards, benchmarks, and goals to evaluate the custodial and maintenance programs, nor had it

established guidelines for prioritizing work orders for general maintenance. Furthermore, since the inception of the HCPS energy management program in December 2001, HCPS had not performed a cost-benefit analysis to ensure that desired results were achieved. There have been reported energy savings at the 22 schools under the program, but the related lease and maintenance costs of the program have exceeded those savings. Finally, we noted that HCPS lacked a retention policy for construction procurement documentation and procurement documentation was inadequate for several construction-related contracts tested.

Transportation Services (see pages 43 through 50)

HCPS is responsible for the safe transportation of approximately 36,000 eligible students, of which two percent are disabled. HCPS used a number of recognized best practices to increase student transportation efficiency, such as staggering school arrival and dismissal times to enable certain buses to perform multiple runs. Nevertheless, HCPS had not conducted any recent analysis of its decision to outsource student transportation services and of the reasonableness of the rates paid to bus contractors. Furthermore, HCPS did not periodically adjust certain rates based on market conditions that were used to provide the bus contractors with a return on their initial investment of funds to purchase buses. Consequently, HCPS may end up paying \$9 million more than necessary over a 12-year period. Furthermore, the HCPS Transportation Department did not obtain the required Board approval for its contracted bus rates.

Food Services Operations (see pages 51 through 55)

HCPS has implemented a number of best practices to help reduce food service costs, such as using performance measures to gauge operational efficiency. HCPS has adequate procedures in place to identify students eligible for free and reduced-price meals under the federal national school meals programs. However, HCPS needs to implement appropriate segregation of duties over the food service bank accounts. Also, although HCPS stated that its food service department was designed to be self-funded, expenses such as cafeteria utility costs and custodial services were not charged to the food services fund.

School Board Operations and Oversight (see pages 57 through 61)

Oversight of HCPS operations included the seven-member Board receiving financial updates, such as monthly budget variances to assist it in monitoring the efficient use of funds. The Board is also extensively involved in a comprehensive budgeting process. HCPS has been awarded the “Distinguished Budget Presentation Award” by the Government Finance Officers Association of the United States and Canada for the last five years. Also, HCPS has an internal auditor, engaged primarily in developing student activity funds accounting procedures, and an active audit committee. However, several opportunities exist for the Board to improve oversight and effectiveness of HCPS operations. For example, the Board should consider focusing the work performed by its internal auditor on auditing significant HCPS operations, establishing a confidential hotline and whistleblower policy, and enhancing the ethics policy to cover additional employees with significant procurement duties.

Other Financial Controls (see pages 63 and 64)

While HCPS had procedures in place to govern its risk and cash management, it did not have written policies governing its use of long-term liabilities, such as lease-leaseback agreements.

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Background Information

Oversight

Harford County Public Schools (HCPS) is governed by a local school board, consisting of seven members appointed by the Governor of Maryland. The vast majority of HCPS funding is provided by the Harford County government and the State. In addition, the Maryland State Department of Education (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 HCPS to comply with the requirements and mandates of the federal No Child Left Behind Act of 2001. Oversight by the Harford County government is limited, although the HCPS annual operational and capital budgets require County approval.

Statistical Overview

According to MSDE student enrollment records, HCPS ranks eighth in student enrollment among the 24 public school systems in Maryland. From fiscal year 1997 through 2007, the total full-time regular and special education pupil population has increased 4.9 percent from 37,709 to 39,568, with further projected increases to 40,360 by 2015. As of the beginning of the 2007-2008 school year, HCPS had 53 schools, consisting of 32 elementary, 8 middle, 9 high, 1 middle/high, 1 charter, and 2 alternative schools. A review of the budget history from fiscal year 1996 to 2006 disclosed an increase in the HCPS operating expenditures from \$190.6 million in fiscal year 1996 to \$358.1 million in fiscal year 2006. The largest expenditure category is salaries, wages, and benefits, accounting for 80.3 percent of total operating expenditures. HCPS budgeted full-time positions in fiscal year 2007 totaled 5,036, which consisted of 3,741 instructional and 1,295 non-instructional employees.

Certain statistical information contained in this report was taken from reports distributed by MSDE and represents the most current information available at the time of our audit. These MSDE reports

are based on self-reported data from the 24 public school systems, and MSDE does not warrant the comparability or completeness of the data.

External Audits of Fiscal Year 2006 and 2007 Activity

Annually, HCPS 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 HCPS federal grant programs (as required by federal regulations). The resulting audit reports for the 2006 and 2007 fiscal years were issued in August 2006 and September 2007, respectively. None of the resultant reports included any reportable conditions or any significant findings on HCPS record keeping, processes, and controls.

Chapter 1

Revenue and Billing Cycle

According to the HCPS audited financial statements, \$453 million of revenue was received by HCPS during fiscal year 2006 and \$481 million was received during fiscal year 2007. Due to similarities between the work of the independent certified public accounting firm that audited the HCPS financial statements and the scope of our audit in this area, we placed significant reliance on the results of those audits for revenues and accounts receivable (for example, amounts due from other governments). The firm's procedural reviews and testing disclosed that collection activity for the most significant revenue types, the majority of which was received via electronic fund transfers from other government entities, and for accounts receivable, was adequate.

Our audit of certain revenues received by cash or check, which totaled approximately \$6.8 million during fiscal year 2007, disclosed that controls over the collection of these revenues could be improved.

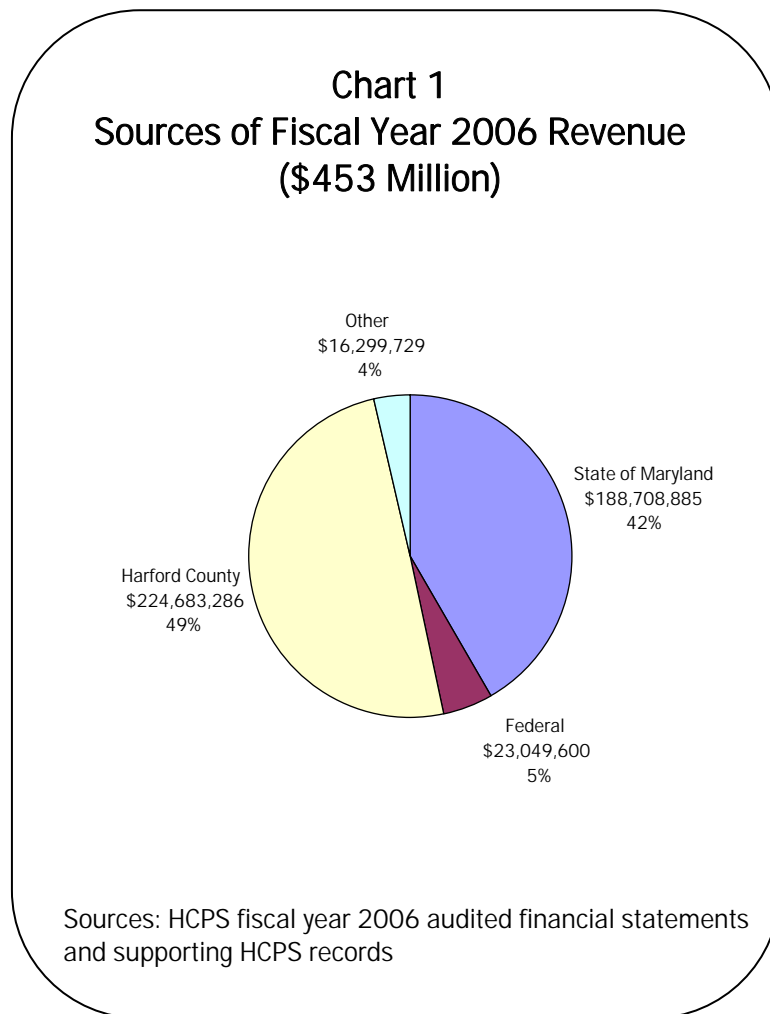
The HCPS internal auditor conducts audits of school activity funds.¹ The internal auditor's review and testing of the school activity funds at HCPS schools identified some control weaknesses at certain schools that were addressed by school management. The internal

¹ 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, which totaled \$6.7 million during fiscal year 2006, are not included in the \$453 million revenue total because the Board cannot use these assets to finance its operations.

auditor's reports we reviewed did not disclose any fraudulent acts and the control weaknesses identified were not prevalent, but were isolated to particular schools.

Background

HCPS revenues consist primarily of funds received from Harford County and the State. Other sources include federal grant funds, receipts from the sale of food, interest income, and other miscellaneous sources. Chart 1 (below) shows HCPS fiscal year 2006 revenues of \$453 million by major source.



In addition to the revenues in Chart 1, schools also collect funds for various purposes, such as yearbook and school trips. These school activity funds are accounted for separately by each school and are

reported in summary in the audited financial statements. According to the audited financial statements, fiscal year 2006 school activity funds revenue totaled \$6.7 million, and the June 30, 2006 balance was \$2.4 million.

Revenue and Billing Cycle Activities Were Generally Adequate for Significant Revenue Types

Due to similarities between the work of the independent certified public accounting firm that audited the HCPS financial statements and the scope of our audit in this area, we placed significant reliance on the results of the financial statement audits. The firm's procedural reviews and testing disclosed that collection activity for significant revenue types and for related accounts receivable, was adequate. The majority of this revenue was received via wire transfer from other government entities.

Controls Over the Collection of Cash and Check Revenues Should Be Improved

Controls over medical assistance and E-Rate collections

should be enhanced – Accountability over medical assistance and E-Rate collections should be improved. Specifically, neither the medical assistance (Medicaid) nor the E-Rate checks were initially recorded and restrictively endorsed immediately upon receipt. Furthermore, for both receipt types there was no independent verification that all collections were deposited. For E-Rate checks, the employee receiving the checks did agree the check amounts with the expected revenue on the related reimbursement requests; however, the expected revenue was not established as an accounts receivable in the accounting system.

Prior to January 2007, HCPS received its medical assistance reimbursements via electronic funds transfer. Since January 2007, when the Department of Health and Mental Hygiene began paying HCPS directly rather than through MSDE, HCPS has received these reimbursements via check. According to HCPS records, medical assistance reimbursements received via check during the period from January through June 2007 totaled \$2,044,815.

HCPS applied for and obtained funding under the federal Schools and Libraries Universal Service Program (E-Rate). This program provides discounts to subsidize schools in obtaining telecommunications and internet access. According to HCPS records, federal E-Rate reimbursements received by HCPS during fiscal year 2007 totaled \$307,828.

Controls over funds collected at the HCPS food service central office need to be improved

– The following control issues, relating to cash receipts collected at the HCPS food service central office, were identified that resulted in a lack of assurance that all collections were deposited. These cash receipts, which related to federal and state reimbursements for the school breakfast and lunch programs and to catering services, totaled approximately \$4.5 million during fiscal year 2007.

- Cash receipts were not recorded when initially received to establish immediate accountability over receipts. Furthermore, as a result, no record existed to document how long the checks were held at HCPS prior to deposit. Our test of five reimbursement checks, totaling \$2.2 million, disclosed that four checks, totaling \$1.7 million, were deposited between 7 and 14 days after the dates on the checks.
- Checks received were not always restrictively endorsed immediately upon receipt.
- Cash receipts were not always safeguarded under locked storage when the responsible person was not present.
- There was no verification that checks received for catering services provided by the food service department to schools and other departments were properly deposited.

Recommendation

1. HCPS should improve controls over its collection of cash and check receipts by ensuring accountability and safeguarding for these collections from the time they are initially received until they are deposited at a bank. Independent verifications should be performed to ensure all amounts received were deposited timely and intact, and agreed to related receivable records (when applicable).

Chapter 2

Federal Funds

Annually, HCPS is subject to an audit of its federally-funded grant programs (often referred to as the Single Audit, and required by Circular A-133 issued by the U.S. Office of Management and Budget). The reports on the audits of fiscal year 2006 and 2007 federal grant activity were issued by the independent certified public accounting firm on August 31, 2006 and September 14, 2007, respectively.

In those reports, the auditor stated that HCPS complied, in all material respects, with the requirements applicable to its major federal grant programs. In addition, with respect to internal controls over compliance with and the operation of major federal programs, the firm noted no reportable conditions² and no matters considered to be material weaknesses.³

² Reportable conditions are issues relating to significant deficiencies in the design or operation of the internal control over compliance that, in the auditor's judgment, could adversely affect the grantee's ability to administer a major federal program.

³ Material weaknesses are severe reportable conditions in which the existing internal control components might not detect, in a timely manner, a material instance of noncompliance with applicable requirements of laws, regulations, contracts, and grants caused by error or fraud.

HCPS had an adequate process for the identification of children eligible for Medicaid-subsidized⁴ services, and for recovering the related costs (although Chapter 1 contains a finding related to the receipt and deposit of those related reimbursements).

Background

HCPS receives funds primarily from Harford County, the State, and the federal government. Most funds received from Harford County and the State are unrestricted; however, federal funds 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 2007 expenditures of federal award funds totaled \$20.9 million.

According to HCPS records, HCPS also received an additional \$2.5 million of federal fee-for-service payments during fiscal year 2007 for Medicaid-subsidized services for qualified students.

HCPS Established Adequate Internal Controls Over Federal Grants and Complied With Federal Grant Requirements

Because of the accounting firm's work on HCPS federal fund expenditures, we relied on the auditor's results. Besides expressing an opinion on HCPS 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 years 2006 and 2007 required Schedule of Federal Awards (which includes claimed and reported grant-related expenditures). In its reports, the firm stated that HCPS complied, in all material respects, with the requirements applicable to its major federal grant programs. In addition, with respect to internal controls over compliance with and the operation of major federal programs, the auditor noted no reportable conditions and no matters considered to be material weaknesses.

⁴ The Federal Medical Assistance Program, or Medicaid, is not a grant program under Circular A-133 and is not included in the Single Audit.

Processes Were in Place to Identify Students Eligible for Medicaid Services and to Obtain Federal Cost Reimbursements

HCPS had adequate processes in place to identify students eligible for Medicaid-subsidized services. HCPS determines the eligibility of all children enrolled in Special Education programs within the school system by contacting the Medicaid Eligibility Verification System administered by the State of Maryland. In addition, HCPS contacts the families of eligible students through case managers to encourage program participation. HCPS also obtained timely reimbursements from the federal government for the costs of Medicaid-eligible services.

Recommendations

None

Chapter 3

Procurement and Disbursement Cycle

HCPS follows certain procurement best practices such as purchasing items through contracts already procured by the State and other local governments (referred to as “piggybacking”) when it is beneficial to do so, and reevaluating contracts instead of automatically exercising the contract renewal options. However, the HCPS procurement and disbursement processes did not always provide sufficient control and accountability to fully protect school system funds. Our review disclosed that significant weaknesses in internal control existed over the automated HCPS procurement and disbursement system. These weaknesses included unrestricted user access to the system that allowed numerous employees the capability to add vendors, generate purchase orders, and record the related receipt of goods. In most cases, the employees did not need the capabilities to perform their job duties. Also, our tests disclosed that sufficient price monitoring was not in place for several contracts, and that one service contract exceeding \$100,000 was renewed for several years without the required approval of the Board and Superintendent. Furthermore, the initial receipt and distribution of credit cards was not properly controlled, and the documentation and approval processes over certain credit card and travel transactions needed improvement. Finally, there was no supervisory review and approval of bank reconciliations.

Background

HCPS uses an automated system for procurements and disbursements. Requisitions are manually prepared by departments and are subject to supervisory approval within the requesting departments. Purchase orders, contracts, solicitations, and bids are usually handled by the Business Services Department's purchasing office with the exception of construction activities, which are managed by the Planning and Construction Department. Purchases of goods over \$25,000 are required to be formally bid. Contracts and agreements over \$100,000 are required to be approved by the Board and by the Superintendent. The ordering department documents the receipt of goods and services by signing a copy of the related purchase order, which is used by the purchasing department to enter receiving report information into the automated system. Payments are then processed on the automated system by the finance office's accounts payable unit. According to HCPS records, non-payroll disbursements totaled \$143 million during fiscal year 2006.

HCPS also has established a comprehensive credit card purchasing program and, during calendar year 2006, HCPS employees used credit cards to make purchases totaling \$10 million, with the monthly invoices being paid directly by the school system. According to HCPS records as of June 2007, 491 employees have been issued credit cards to facilitate purchasing activity.

HCPS Used Several Best Practices to Address Its Procurement and Disbursement Processing Needs

HCPS had instituted certain best practices, including the following, that should enhance the cost effectiveness of its procurement and disbursement transactions.

- When it is beneficial to do so, HCPS "piggybacks" onto contracts already procured by the State, other local governments, and cooperative purchasing organizations. This practice saves HCPS certain costs associated with the procurement of the contracts and provides larger discounts as a result of the combined purchasing power of multiple entities.

- Instead of automatically exercising contract renewal options, HCPS generally compares the benefit of exercising each renewal option with the benefit of rebidding the contract to obtain the most favorable costs or terms. This practice results in a more frequent evaluation of prices and assists HCPS in obtaining the best prices for its purchases on a continuous basis.
- HCPS established a comprehensive credit card purchasing program that saved HCPS on traditional processing costs, such as purchase orders and checks. Although elsewhere in this chapter we have several recommendations for improving the program, it was implemented with many best practices to control and account for credit card purchasing. Specifically, HCPS published a comprehensive credit card procedures manual; provided individual training to each cardholder as to their responsibilities and card usage requirements; required immediate supervisory review of all transactions; established daily credit levels and daily transaction monitoring by the finance office; applied automated card restrictions for inappropriate types of merchants, commodities, and services; and conducted periodic audits of transactions. HCPS received annual rebates from the bank issuing the credit cards. For example, the rebate was \$34,078 for the period from March 1, 2006 through February 28, 2007.

HCPS Should Strengthen Internal Controls Over Its Disbursements, Procurements, and Contract Monitoring

Procurement and disbursement controls need to be

strengthened – Our review identified significant internal control deficiencies over the HCPS automated procurement and disbursement system. Specifically, 100 employees (63 school-based and 37 administrative personnel) were provided system capabilities that allowed them to record and process critical accounting and procurement transactions without additional review. In most cases, the employees did not need the capabilities to perform their job duties. For example, 96 of these employees could individually add vendors, create purchase orders, and record the receipt of the related goods on the system. Furthermore, there were no procedures in place, such as independent documented reviews

of system transaction reports or exception reports, which could be used to detect inappropriate procurement and disbursement activity. These internal control weaknesses could allow unauthorized transactions to be processed and not detected.

Improvements are needed over contract price monitoring –

HCPS did not always verify that the prices on invoices agreed to the corresponding contracts. Our review of eight payments totaling approximately \$3 million related to piggybacked contracts disclosed that HCPS did not have the related discounted pricing information for comparison to the invoiced prices for three of these payments totaling \$481,000.

Also, invoices processed for a special education service provider were not verified against independent documentation. On a test basis, HCPS special education program personnel compared the invoices to time records which were produced and maintained by the provider's employees. Although the time records were signed by HCPS school-based personnel after services were rendered, these original signed time records were not sent directly to HCPS contract monitors but, rather, were first returned to the provider's employees. This practice allows opportunity for unauthorized changes to be made to the time records that could go undetected. According to HCPS records, payments to this special education service provider totaled \$597,000 during fiscal year 2006.

Contract should be approved by the Board as required– The service contract with the aforementioned special education service provider was not approved by the Board in accordance with HCPS policy. HCPS entered into a contract with this provider for fiscal year 2001, which was approved by the Superintendent and by the Board; however, subsequent annual renewals of the contract through 2007, which included adjustments to the payment rates, were not approved by either the Superintendent or the Board. According to HCPS records, payments to this provider for fiscal years 2001 through 2006 totaled \$2.8 million, with the lowest yearly total being \$332,464 for fiscal year 2001. HCPS policy requires Board and Superintendent approval for all purchases, contracts, and agreements exceeding \$100,000.

Documentation and Processes Related to Travel and Credit Cards Need Improvement

Documentation and processes related to travel expenditures and credit card usage need improvement. Specifically, our review of documentation for five trips disclosed deficiencies with respect to three trips made by HCPS personnel, some with family members⁵ and students. Specifically, the documentation approving the trips for 10 students or teachers, whose travel costs totaled \$2,694, either did not have all of the required pre-approvals or the required pre-approvals did not exist. Furthermore, reimbursement was not made to HCPS for travel costs totaling \$2,356 for 6 family members. Once we notified HCPS that reimbursement was not obtained for travel costs of family members, HCPS initiated collection efforts for these travel costs. In addition, proper credit card documentation supporting transactions totaling \$4,000 related to two of these trips was not maintained by the cardholders. Inadequate documentation could allow unauthorized trips or transactions to go undetected.

We also noted that, in two instances, HCPS credit card expenditures totaling \$6,795 were made for activities associated with a school-based student organization; however, the HCPS general fund was not reimbursed for these expenditures from the organizations' activity funds, as was required by HCPS policy.

Finally, duties over the ordering and initial receipt of credit cards from the bank were not adequately segregated. The individual responsible for ordering new credit cards also initially received these cards from the issuing bank prior to their distribution to HCPS personnel and was primarily responsible for the monitoring of credit card transaction activity. Under these circumstances, unauthorized cards could be obtained and inappropriate purchases concealed. Credit card transactions totaled \$10 million during calendar year 2006, with travel-related expenditures totaling approximately \$156,000.

⁵ HCPS policy specifically prohibits personal or family member travel being charged to the HCPS credit card.

Supervisory Review and Approval of Bank Reconciliations Is Needed

Although an HCPS employee prepared bank reconciliations in a timely manner, no supervisory review and approval of the reconciliations was performed. A supervisory review is a critical control since the employee preparing the reconciliations also had access to critical accounting and procurement functions on the HCPS accounting system and had the ability to produce checks. According to HCPS records, HCPS bank account balances totaled \$10.6 million as of June 30, 2006.

Recommendations

2. HCPS should implement effective internal controls over its procurement, disbursement, and contract monitoring processes. Such controls should include restricting employee capabilities on the procurement and disbursement systems and segregating employee duties. In addition, HCPS should ensure that invoiced prices agree to the related contracts. Also, HCPS should establish appropriate processes for obtaining support for invoices. Finally, all purchases, contracts, and agreements exceeding \$100,000 should be approved by the Superintendent and by the Board in accordance with HCPS policy.
3. HCPS should enhance its controls over its credit card and travel transactions. HCPS should ensure that adequate documentation exists for all credit card transactions. Also, HCPS should establish procedures for obtaining timely reimbursements from student activity funds for purchases made on behalf of student organizations using HCPS credit cards. Finally, HCPS should ensure that appropriate authorization is obtained prior to travel conducted by HCPS personnel and students, and that, in accordance with policy, travel charges are not incurred for family members.
4. HCPS bank reconciliations should be reviewed and approved by independent supervisory personnel.

Chapter 4

Human Resources and Payroll

HCPS should address certain procedural deficiencies with respect to payroll processing. These deficiencies include unnecessary and excessive access capabilities given to certain personnel on the HCPS human resource and payroll system and a lack of supervisory review of certain human resource and payroll transactions. HCPS had implemented workforce planning and, although it did not address the needs and processes for employees other than teachers and related instructional positions, some preliminary work in this area has begun. However, HCPS has established a leadership training program to assist personnel interested in progressing into administrative positions. It is estimated that 15 percent of the HCPS staff are eligible to retire within five years.

Background

Payroll costs represent the largest single cost component in the HCPS budget. According to HCPS records for fiscal year 2006, salary, wage, and benefit costs totaled \$310 million. As of September 2006, HCPS had 5,036 full-time equivalent employees, of which 1,295 (26 percent) were non-instructional. The 7.9 to 1 ratio of HCPS students to full-time equivalent employees (both instructional and non-instructional) is reasonable when compared with similarly-sized school systems (see Table 1 on the next page).

HCPS uses an automated integrated human resources and payroll system to maintain human resources information, record employee time, and track leave usage. Manual time records, including leave taken, are entered onto the system every two weeks by one of five HCPS payroll clerks. Leave accumulation is automatically calculated by the system which is also used to process and record all payroll transactions.

Payroll information is downloaded from the system into a separate check writing program to produce payroll checks and direct deposit advices. Payroll checks and deposit advices are delivered to employees independent of the timekeepers at the various work locations for distribution to the employees.

Table 1 Comparison of Employee to Student Ratios – Fall 2006 (Unaudited)			
School System	Number of Students (as of September 30, 2006)	Number of Full-Time Equivalent Employees	Student to Employee Ratio
Harford Co.	39,568	5,036	7.9 to 1
Anne Arundel Co.	73,066	9,046	8.1 to 1
Howard Co.	49,048	7,094	6.9 to 1
Frederick Co.	40,224	5,020	8.0 to 1
Carroll Co.	28,616	3,482	8.2 to 1

Source: MSDE 2006-2007 Fact Book

Note: School systems selected for comparison are those with student enrollments closest in number to HCPS.

Human Resource and Payroll Internal Controls Need to Be Strengthened

HCPS did not establish adequate internal control over its automated human resource and payroll system and related processes. Eighteen employees had unnecessary, unlimited system access to certain human resource and payroll functions that allowed them to add and delete employees and change salaries. Sixteen of these

employees could also add overtime payments, and 6 of those 16 could also prepare payroll checks and direct deposits. Additionally, there were no compensating controls requiring an independent review of accesses or transactions attempted or posted by those employees. Although we found no evidence of unauthorized additions to the payroll or unauthorized payments for the items tested, the improper separation of duties and access to the system could be used to process unauthorized payroll payments.

Similarly, final payout calculations for unused annual and sick leave for terminated employees were not independently verified for accuracy and propriety. However, our test of 20 such payments totaling \$386,424 disclosed no errors or improprieties. Final payouts totaled \$1,005,631 for fiscal year 2006.

Workforce Planning Should Be Expanded to Include Non-Instructional Positions

Although HCPS has implemented workforce planning for instructional positions, HCPS should expand its workforce planning efforts to include non-instructional positions, which represent 26 percent of its workforce (1,295 non-instructional professional and support staff, out of 5,036 full-time equivalent positions; see Table 2 on the next page). The HCPS Master Plan sets the strategic direction of HCPS and provides coordination and focus for initiatives to address challenges faced by HCPS. The Plan includes a number of objectives and strategies to address human resource needs—which is evidence of workforce planning. However, it addresses only the recruitment and retention of highly qualified instructional staff (that is, teachers and certain instructional aides).

Non-instructional positions play a key role in the ultimate success of HCPS in providing quality education and, therefore, should be included in workforce planning. HCPS has identified the need for workforce planning in this area and has performed some preliminary steps. For example, HCPS has begun working on a leadership succession plan for administrative and supervisory positions which it hopes to develop and implement over the next five years; however, a similar process has not begun for other key support personnel. Approximately 15 percent of the 5,000 employees at HCPS have 25 or more years of service, which makes

them eligible to retire within 5 years, and approximately 7 percent are currently eligible to retire.

Table 2
Comparison of Non-instructional Staff Per 1,000 Pupils for Select Categories
Fiscal Year 2007 (Unaudited)

School System	Number of Non-instructional Positions ^①		Number of Non-instructional Positions Per 1,000 Pupils ^②		
	Professional ^③	Support Staff ^④	Professional	Support Staff	Combined
Harford Co.	348	947	8.79	23.93	32.72
Anne Arundel Co.	643	1,879	8.80	25.72	34.52
Carroll Co.	292	722	10.20	25.23	35.43
Frederick Co.	313	1,259	7.78	31.30	39.08
Howard Co.	533	1,242	10.85	25.32	36.17
Average of Comparable Systems	445	1,276	9.41	26.89	36.30

Source: MSDE 2006-2007 Fact Book

- ① - Excludes contractual and consulting positions
- ② - Based on Fall 2006 student enrollment
- ③ - Includes principals, vice principals, social workers, and other administrators
- ④ - Includes technicians, secretaries, clerks, and trades personnel

Leadership Academy Was Instituted to Prepare Future Administrators

HCPS has developed a formal leadership training program to assist HCPS personnel interested in transitioning into non-instructional administrative positions, such as assistant principal. The program consists of seven weeks of classes covering various aspects of leadership and management skills. In addition, HCPS employees promoted into administrative positions receive ongoing leadership training.

Recommendations

5. HCPS should take the necessary corrective actions to ensure that adequate internal controls are in place over its automated human resource and payroll system. Specifically, system capabilities and job duties should be segregated and an independent review and approval process should be established over payroll-related changes recorded in the system, including final payments to terminated employees for unused leave balances.

6. HCPS should continue to develop and implement its workforce planning for key administrative and supervisory positions and should expand the planning to include other key non-instructional positions in critical operational units.

Chapter 5

Inventory Control and Accountability

Written policies and procedures to account for and safeguard its equipment were insufficient or non-existent. Furthermore, the procedures and record keeping practices in use did not provide adequate control over equipment. HCPS has implemented just-in-time purchasing for the majority of its material and supply items to reduce the costs of maintaining an on-hand inventory.

Background

According to the HCPS audited financial statements, as of June 30, 2007, the undepreciated value of its capital equipment (including furniture and fixtures) was \$20.9 million and its non-food service materials and supply inventory value was \$478,977. Equipment items with a cost of \$5,000 or more are capitalized and depreciated for financial statement reporting purposes. According to HCPS records, fiscal year 2006 expenditures totaled \$12.2 million for capital and non-capital equipment items, and \$13.9 million for non-food service materials and supplies.

Policies, Controls, and Record Keeping Over Equipment Need Improvement

HCPS did not have adequate written policies or procedures to govern accountability and control for its equipment, including non-

capitalized equipment items. For example, HCPS did not have formal written policies addressing equipment tagging, record keeping, use of locked storage to secure items, reporting of lost and stolen items, and establishing separation of duties over the custody of, and record keeping for, equipment. Furthermore, the documented policies and procedures that did exist, such as procedures for performing physical inventories of equipment, no longer reflected the current practices of HCPS and need to be updated.

The lack of adequate written equipment policies and procedures likely contributed to deficiencies over HCPS equipment. For example, we were advised by HCPS that personnel responsible for performing the physical inventories of equipment at the schools had both routine access to the equipment and also maintained the related records. Also, although the HCPS IT department's equipment custodian could electronically detect computers connected to the HCPS network, which could serve to partially complete a physical inventory, there was no complete record of computer equipment available. A complete record is needed to identify computers owned whether or not they are connected to the network. Finally, at one of the three schools we visited, the equipment records were inadequate since they did not include sufficient information to specifically identify individual equipment items (such as, serial numbers and property tag numbers).

Furthermore, inventory records were not maintained to provide proper accountability and control over non-capitalized equipment items (that is, equipment items costing less than \$5,000) that are prone to theft or loss, such as digital cameras and other electronic equipment. This could result in unnecessary additional costs to replace missing property. According to HCPS documented incident reports, two laptop computers and a snow plow with total costs of \$5,397 were reported stolen during fiscal year 2007. Reports of additional lost, damaged, or missing items, for example, items not found during physical inventories, were not available from HCPS.

Certain Practices Have Been Used To Reduce the On-Hand Materials and Supplies

HCPS has limited the amount of items stored in its warehouse by acquiring most items through just-in-time purchasing and by

maintaining inventories only for items (such as paper) that were determined by HCPS to be more economical to purchase in bulk and store. Also, HCPS annually evaluated its materials and supplies inventory to determine the existence of any obsolete items. According to HCPS audited financial statements, as of June 30, 2007, the value of its non-food materials and supplies was \$478,977.

Recommendation

7. HCPS should establish policies and procedures to ensure that accountability and control is maintained over its equipment inventory, including certain non-capital items that are prone to theft or loss (and for which HCPS might want to establish a lower threshold than \$5,000 for control purposes).

Chapter 6

Information Technology Services

HCPS maintains and administers a computer network, computer operations, and a number of significant financial and academic information system applications. HCPS developed and periodically updates a written technology plan that is linked to the school system's Master Plan.

However, we identified several areas in need of improvement, including the strengthening of policies over passwords and accounts, the safeguarding of data upon disposal of media and computers, the strengthening of procedures for the backup of data, the monitoring of security over critical servers, and the development of a comprehensive disaster recovery plan.

Background

HCPS operates a wide area network, with Internet connectivity, which connects the individual school's local networks to the computer resources located at the HCPS headquarters. The Office of Information Technology at HCPS comprises 32 positions for instructional and technical support of the entire system. Several significant financial and academic information system applications exist. For example, the finance application includes modules for budgeting, payroll, human resources, accounts payable, fixed assets, and purchasing.

Technology Plans Are Regularly Developed to Address Current and Future Needs of HCPS

HCPS prepared an annual technology plan as part of the school system's Master Plan and prepared a separate, more extensive technology plan every three years. These plans established a vision and mission for technology in HCPS and have defined goals. These plans address various topics including student achievement, system security, hardware and software replacement, replacement cost schedules, professional development, and training.

Steps Should Be Taken to Ensure Access to IT Software Applications Is Appropriate and Controlled

Our review disclosed several deficiencies in computer application security which increased the vulnerability of various HCPS automated systems, programs, and data. For example, automatic password expirations were not enabled or, for high privilege users (such as database and network administrators), were set for excessive periods when compared to industry standards, and there was no standard as to the complexity of passwords (to make them more difficult to hack). In addition, significant system security-related activities (such as, account logons and failed attempts to access certain critical data) were not always logged for review and, as a result, unauthorized or inappropriate activities affecting the integrity of critical production applications, data, and system files could occur and remain undetected. Finally, certain academic system users were granted inappropriate or unnecessary system access and capabilities.

Data Processing Functions Should Be Better Safeguarded

Methods to remove critical data from sensitive media and equipment need to be enhanced – HCPS did not document the actual activities performed to sanitize computer hard drives (such as overwriting or destroying) when disposing of the drives. Although HCPS procedures call for the sanitation of hard drives scheduled for disposal by erasing the critical data, HCPS was unable to provide us

with documentation to substantiate what procedures were actually performed (including who performed the procedures and when and where they were performed). Furthermore, HCPS did not have procedures for the disposal and sanitation of removable media (for example, compact disks and floppy disks).

Procedures for the backup of critical servers need

improvement – Backup tapes of certain critical servers were stored in the same facility as the original data. Accordingly, if this facility was destroyed by a disaster, it is uncertain if all critical information could be readily recreated.

HCPS needs to implement a disaster recovery plan – HCPS did not have a formal, comprehensive and consolidated disaster recovery plan (DRP) for its computer systems. Although certain documents, which addressed specific components of a DRP, did exist, no provision was made for the following critical elements of a DRP:

- Identification of an alternate site for computer operations in the event of a disaster
- Applications prioritized for recovery
- Team designations and areas of responsibility
- Testing of the DRP
- Restoration of network connectivity

Recommendations

8. HCPS should enhance its IT security by establishing and enforcing stricter password requirements, should log all significant security-related events and conduct documented reviews of logged system activity, and should ensure that users are only given capabilities necessary for their job functions.
9. HCPS should ensure that all media and equipment are properly sanitized prior to disposal and that these activities are properly documented. HCPS should also establish and implement procedures for the appropriate offsite storage of backup copies of data from critical servers and complete the development of a formal, comprehensive disaster recovery plan.

Chapter 7

Facilities Construction, Renovation, and Maintenance

HCPS has the following best practices to help reduce construction and maintenance costs for its facilities: (1) the use of a six-year Capital Improvement Plan based on a comprehensive and public process to plan for construction and renovation of school facilities, (2) the implementation of a comprehensive preventive maintenance program, (3) the adoption of monitoring practices for construction and renovation projects, (4) the development of a design manual to standardize building materials and components, and (5) the implementation of processes to reduce the need for additional construction. In addition, HCPS used alternative financing to construct a new administration building, which consolidated many administrative functions within one facility and allowed HCPS to use its capital funds for needed school construction projects.

However, HCPS had not established formal performance standards and related benchmarks and goals to assess the efficiency of both the custodial and maintenance operations. Also, HCPS did not always document the expected resources needed to perform certain general maintenance processes and did not establish formal guidelines for prioritizing related work orders within its automated work order system. Furthermore, HCPS had not performed a cost-benefit analysis of its energy management program, adopted in December 2001, to ensure that desired results were being

achieved. Based on available records, since the inception of the HCPS energy management program for 22 schools through fiscal year 2006, total program costs have exceeded the resultant energy savings by \$200,000. Finally, we noted that HCPS lacked a retention policy for construction procurement documentation, and documentation for several construction procurements was inadequate.

Background

HCPS maintains 53 schools and 4 other facilities (such as administration and support offices) with a staff of approximately 305 custodial personnel and 72 maintenance personnel. These schools included a charter school opened for the 2006-2007 school year and a recently completed new middle/high school, which opened for the 2007-2008 school year.

HCPS used a six-year Capital Improvement Plan (CIP) to identify ongoing and projected needs for new buildings and major renovations. The annual CIP was developed using student demographic data and input from various sources, including public meetings, and was approved by the Board. In the fiscal year 2008 CIP (prepared in fiscal year 2006), necessary major renovations, repairs, and systemic improvements to existing schools over the next six years were estimated to cost \$483 million.

Table 3 on the following page compares HCPS fiscal year 2006 plant costs (that is, maintenance and operational costs) with other similarly-sized school systems in Maryland. The table presents two cost measures used to assess plant costs: cost per student and cost per square foot. These statistics show that HCPS facilities operation and maintenance costs are in line with its peer group and its square footage per student is the lowest of the similarly-sized school systems.

**Table 3
Plant Cost Comparison Per Student and Per Square Foot
Fiscal Year 2006 (Unaudited)**

School System	Plant Costs			Square Footage Per Student	Total Gross Square Footage
	Total	Per Student ①	Per Square Foot		
Harford Co.	②\$33,105,071	\$827.50	\$6.51	127.09	5,084,164
Anne Arundel Co.	59,188,511	811.18	5.07	159.89	11,666,226
Carroll Co.	27,585,085	949.25	6.65	142.70	4,146,896
Frederick Co.	34,768,309	875.86	6.28	139.40	5,533,550
Howard Co.	44,455,079	912.07	6.56	139.13	6,781,422
Average of Comparable Schools	\$41,499,246	\$887.09	\$6.14	145.28	7,032,024

Sources: MSDE Financial Data, MSDE Fact Book, Maryland Public School Construction Square Footage Data

① - Based on Average Daily Enrollment 2005-2006 (most recent data available)

② - Operations (\$23.8 million) and Maintenance (\$9.3 million)

A Number of Best Practices Were in Place to Enhance the Effectiveness of the HCPS Facility Construction and Maintenance Department

HCPS has instituted several best practices to enhance project results and cost effectiveness in its facilities and maintenance department, beyond the previously noted six-year CIP:

- HCPS employed five project managers to directly oversee and monitor major construction and renovation projects. HCPS also employed an inspector on large construction projects to ensure that projects were being constructed to specifications and to help keep the projects within budgets and time constraints.
- HCPS developed a design manual for construction projects to standardize various parts and construction materials used throughout the school system. This standardization helps to provide more uniformity in building components and assists HCPS in obtaining more comparative bids.

- HCPS developed a comprehensive preventive maintenance program that included the use of performance benchmarks for the amount of time needed to complete tasks and the number of personnel assigned to perform the tasks.
- Various methods were used to reduce the need for additional construction. The periodic evaluation of space utilization included consideration of capacity, enrollment projections, redistricting students among schools, and the use of relocateable (portable) classrooms.
- HCPS used alternative financing (that is, a lease-leaseback agreement) to construct new administrative office space, which consolidated most of its administrative functions within a single building.⁶ The use of alternative financing allowed HCPS to obtain the office space without using capital funds that were needed for school construction projects, and the annual lease costs were expected to be essentially the same or less than the total of the rents estimated to be paid for multiple office locations. This financing arrangement also resulted in a cap on the project's total costs.

Performance Standards Need to Be Developed for General Maintenance and Custodial Operations, and the Work Order System Should Be Fully Utilized

As previously mentioned, HCPS uses a comprehensive preventive maintenance program that included the use of performance benchmarks for the amount of time needed to complete tasks and the number of personnel assigned to perform the tasks. However, HCPS had not implemented a performance measurement system to measure and assess the efficiency of its general maintenance and custodial operations; such a system could be used both for internal self-evaluation purposes and for comparisons with other systems.

In addition, while we noted that HCPS effectively used staffing formulas to determine the need for custodial and preventive maintenance personnel within the school system, a staffing formula

⁶ Under a lease-leaseback arrangement, a school district purchases land and leases it to a private developer for a nominal annual fee. The developer then finances the construction and subsequently leases the facility back to the school district over a period of time.

was not used to determine the number of maintenance personnel needed. Furthermore, we were informed that HCPS had not compared the costs of custodial and maintenance operations to similarly-sized systems in Maryland or other states. Comparability with other systems in Maryland could not necessarily be done unilaterally since there would need to be a consensus on the measures and methodology; however, other states (for example, Michigan, Florida, and Minnesota) have established measures and benchmarks (such as maintenance expenditures per square foot) to assist those school systems in the evaluation of costs and practices. Another technique used to evaluate performance is obtaining customer feedback, such as from school principals. HCPS was in the process of developing a customer feedback process.

Also, HCPS was not fully using its automated work order system, when assigning significant general maintenance work and tracking the completion of these assigned tasks, which could help HCPS to control costs and assess performance of maintenance personnel. We noted that, although all work orders for general maintenance work were logged, along with information related to the actual resources used to perform the tasks, no information was entered indicating the resources expected to be used to perform the tasks, based on either past history or industry guidebooks. As a result, completed work by maintenance staff could not be evaluated for efficiency nor could it be used to assess the performance of both individual employees and the entire department.

Additionally, formal guidelines had not been developed by HCPS establishing the expected timeframes for completing work orders for general maintenance based on the specific priority levels, and HCPS had not defined what types of maintenance should be designated within the priority levels entered into the work order system (such as, low, medium, high, or emergency). Of 8,663 HCPS work orders completed during the period from July 1, 2006 through February 8, 2007, 8,617 or 99.5 percent were categorized as a medium priority level. Of these 8,617 medium priority work orders, 567 (6.6 percent) were completed from one to more than three years after the initial request dates. An effective work order system can be used to generate a variety of statistical data (including employee productivity, cost reports, and facility assessments) and, if used effectively, could result in maintenance work being performed in a more timely manner.

Additional Analysis of the Energy Management Program Is Needed

HCPS did not perform a cost-benefit analysis of its energy management program to ensure that desired results were being achieved. HCPS entered into two contractual agreements with a vendor establishing an energy management program at 22 HCPS schools. The program included making improvements to some of the schools' mechanical and electrical systems and installing a facilities management system to allow for the centralized control of the schools' thermostats. The total cost of these programs (both lease and maintenance) during the period from fiscal year 2003 through fiscal year 2018 is \$16 million. Our analysis of the program, based on actual vendor reporting and HCPS records, indicates that energy savings were attained; however, resultant savings were less than the program's costs. Based on available records, from the inception of the program in December 2001 through June 2006, there has been a net cost of \$200,000 when comparing the vendor's reported energy costs savings (\$3 million) and the related lease and maintenance costs of the programs during the same period (\$3.2 million).

Adequate Procurement Documentation Should Be Maintained for All Construction Contracts

HCPS lacks a policy governing the maintenance and retention of construction procurement documentation. As a result, our testing of the procurement of 14 HCPS construction or construction-related contracts with awards totaling \$75.6 million noted that certain procurement documentation was inadequate for 11 contracts with awards totaling \$59.6 million. Specifically, there was no documentation related to the awarding of a construction manager contract totaling \$1.7 million. HCPS informed us that the documentation may have been accidentally discarded. For another construction manager contract totaling \$2.2 million, documentation was not provided to the Board to explain the selection of a construction manager over a competing vendor when both vendors received the same evaluation score. Specifically, the meeting agenda item presented to the Board stated that the vendor that was selected was the top-ranked firm even though the evaluation documentation, which was not formally presented to the Board,

showed that two firms were tied for the top ranking. Finally, we noted that no documentation existed recording the participants (such as HCPS employees and personnel from bidding firms) in the bid openings of nine construction contracts that we tested. In this regard, HCPS informed us that it did not routinely record individuals in attendance at the bid openings. Without adequate documentation, the improper awarding of contracts may go undetected.

Recommendations

10. HCPS should develop a performance system with standards and measures for maintenance and custodial operations. HCPS should also fully use the existing work order system for general maintenance operations and should establish guidelines for work order priority levels, to ensure that appropriate, cost effective, and timely maintenance is provided to all facilities.
11. HCPS should perform a cost-benefit analysis of its energy management program to ensure that the desired results are being achieved.
12. HCPS should maintain adequate documentation regarding the awarding of construction contracts, including contract evaluations and bid openings. Furthermore, HCPS should develop policies and procedures for governing the retention of procurement documentation. Finally, HCPS should provide more detailed documentation to the Board to allow them to make informed decisions on construction procurements.

Chapter 8

Transportation Services

HCPS used a number of recognized best practices to increase student transportation efficiency, such as (1) staggering school arrival and dismissal times to enable certain buses to perform multiple runs, (2) combining rural middle and high school bus runs to minimize the number of runs with longer ride times, (3) consolidating bus stops for magnet and technical high school students to reduce overall ride times, and (4) using software to track the maintenance of HCPS vehicles. Nevertheless, we noted areas where improvements could be made, primarily with respect to the HCPS practice of outsourcing its student transportation services. For example, HCPS had not conducted any recent analysis of its decision to outsource student transportation services and of the reasonableness of the rates paid to bus contractors. Consequently, HCPS had not adjusted the 10 percent return on investment rate used to reimburse the bus contractors for bus purchases since 1981. Based on our comparison of the rate paid by HCPS and the market rate, HCPS may end up paying \$9 million more than necessary over a certain 12-year period because it did not periodically adjust that rate to market conditions. Furthermore, the HCPS Transportation Department did not obtain Board approval for its contracted bus rates.

Background

HCPS is the eighth largest school system in Maryland, based on student enrollment. The school system serves a county that is described in its budget document as a suburban rural mix. HCPS is responsible for the safe transportation of approximately 36,000 eligible students, of which two percent are disabled. In fiscal year 2007, the majority of HCPS students were transported on one of 331 buses owned by 43 bus contractors hired by the school system. For 2007, HCPS also operated a fleet of 74 buses used primarily to transport disabled students. According to its audited financial statements, HCPS fiscal year 2006 pupil transportation operating costs totaled approximately \$20.6 million,⁷ with 74 percent representing payments to bus contractors. Of the 6,738,632 reported route miles for the 2005-2006 school year, 25 percent were for transporting disabled students.

As seen in Table 4 below, the cost per rider and per mile for HCPS is reasonable when compared with similarly-sized school systems.

School System	Number of Eligible Riders		Miles (in thousands)		Expenditures (in thousands)	Average Annual Cost per	
	Non-Disabled	Disabled	Non-Disabled	Disabled		Rider	Mile
Harford Co.	35,193	702	5,032	1,707	\$20,651	\$575.32	\$3.06
Anne Arundel Co.	53,698	1,651	6,207	3,427	34,772	628.23	3.61
Carroll Co.	27,538	597	3,631	1,747	16,462	585.11	3.06
Frederick Co.	33,502	836	4,970	1,582	17,153	499.53	2.62
Howard Co.	40,117	1,213	3,569	1,766	26,999	653.25	5.06
Average of Comparable Schools	38,714	1,074	4,594	2,131	\$23,847	\$591.53	\$3.59

Sources: MSDE 2005-2006 Fact Book and MSDE 2005-2006 Financial Data

⁷ The \$20.6 million pupil transportation operating cost includes \$500,000 of vehicle depreciation expense, but does not include \$1 million for bus purchases made during fiscal year 2006.

Several Best Practices Were in Place to Enhance Bus Route Efficiency and to Control Related Costs

The HCPS transportation department had numerous practices in place to help reduce student transportation costs:

- Staggering school arrival and dismissal times to enable certain buses to perform multiple runs (up to four morning and four afternoon runs in some cases) on the same day, thereby reducing the need for HCPS to obtain additional buses through bus contractors or purchase
- Combining rural middle and high school bus runs to take advantage of the close proximity of the schools and to avoid sending multiple buses on these longer runs
- Consolidating bus stops for magnet and technical high school students to reduce the ride time on these buses
- Minimizing deadhead miles (the distance traveled by buses when not transporting students) by assigning bus routes to contractors that started and finished as close as possible to the contractors' bus depots
- Monitoring bus contractor activity, including verifying the accuracy of information on bus contractor manifests and performing annual quality assurance reviews to ensure contractors were adhering to standards and contractual requirements
- Reimbursing bus contractors for the cost of buses and mileage based on a standard 66-passenger capacity bus, even when a contractor chose to purchase and use more costly and less fuel efficient larger buses
- Using software to schedule vehicle maintenance, retain vehicle maintenance histories, track trends with vehicle repair issues, and track fuel usage by all HCPS owned vehicles
- Establishing guidelines for retiring school buses, which include the consideration of each vehicle's age, maintenance costs, options, and trade-in or resale value (For example, five buses

with recurring maintenance issues were traded-in one year early on July 1, 2006.)

- Performing a cost-benefit analysis to assist with the HCPS decision to perform vehicle maintenance services in-house at a lower cost than under a Harford County government vehicle maintenance services contract
- Using routing and mapping software to assist in the development and revision of disabled students' bus routes

Outsourcing of Bus Services Has Not Been Established As Cost Beneficial

The cost benefit of outsourcing regular bus services has not been determined – HCPS has not prepared a current cost-benefit study to determine the cost efficiency of contracting out its transportation services rather than directly owning and operating the buses. Although HCPS personnel advised us that a cost-benefit study was prepared in 1996 that showed it was beneficial to outsource its transportation services, HCPS personnel were unable to provide us with documentation of this study. Furthermore, no recent analysis has been performed to determine what rates the bus contractors should be paid for acquisition and operating costs.

Under current arrangements with bus contractors, HCPS assumes nearly all of the risks for bus operations while essentially guaranteeing a profit to the contractors each year for the expected 12-year⁸ life of a bus. Specifically, contractors are paid a “per vehicle allotment” (PVA) that repays the bus contractors the full acquisition cost of the bus over a 12-year period with the assumption that there is no residual value. The PVA also provides an additional annual payment as a return on investment (ROI) to the contractors, which is established when a bus is purchased and remains fixed over the bus' life. The ROI component of the PVA paid each year by HCPS was 10 percent of the original bus cost.⁹

⁸ Conventional school buses in Maryland 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.

⁹ We analyze and explain the PVA payment more fully in the next comment.

Furthermore, the bus contractors are paid a per mile rate for bus operating and maintenance costs, a driver per hour allotment to cover the contractor's labor costs, an annual administrative cost allotment, and for fuel usage at market rates. Additionally, HCPS pays for the liability insurance, including personal injury, property damage, and medical payments coverage, for all buses operated for HCPS, including contractor buses.

In fiscal year 2007, HCPS contracted with 43 bus contractors who provided service using 331 buses, with each contractor owning between 1 and 33 buses. Available routes were awarded after circulating notice to existing bus contractors and to other persons who have indicated an interest in becoming bus contractors. Contractors for each route were selected based principally on past performance and geographic area. Competitive bidding was not used; rather, the HCPS Transportation Department annually prepared a table of rates to be paid to bus contractors for each of the pay elements described in the preceding paragraph. Once a route is awarded, the contract renews automatically and typically lasts for the 12-year life of the bus.¹⁰ Routes are adjusted to meet HCPS needs but are not typically eliminated until the end of a bus' life, essentially as a concession to the contractor for investing in the bus.

HCPS continues to believe that contracting out for these services benefits the school system since it does not require an initial capital outlay for buses, it avoids certain ongoing expenses for health care, taxes, and other personnel-related costs for drivers, and additional maintenance and administrative personnel may not be required. However, without proper study and analysis, this conclusion is not necessarily justified. Actual experiences in other states have indicated that outsourcing of bus services can be more expensive than providing student bus services in-house.

The annual return on investment (ROI) payments to bus contractors did not reflect market conditions – For at least the past 12 years (since 1996), HCPS has not adjusted the component of the “per vehicle allotment” (PVA) that provides a ROI to bus contractors; therefore, HCPS has been paying more than appears necessary for bus services. Specifically, HCPS had not

¹⁰ As noted in the best practice comment, HCPS monitors the contractors' performance and can terminate a contract, if necessary.

changed the implicit 10 percent ROI used in its PVA calculations to reflect changes in market interest rate conditions. When questioned about the rate, HCPS personnel indicated that they were using the rate that was last used by the State in 1981 when the State was reimbursing LEAs for school transportation based on the PVA formula.

To estimate the financial impact to HCPS of using this constant rate over the life of a bus, we calculated the PVA for each of the past 12 years (1996 to 2007) using the prime interest rate¹¹ in the HCPS PVA formula and compared our PVA results to the HCPS PVAs that were calculated using the 10 percent rate. This comparison showed that the HCPS annual PVA payments per bus were from \$302 to \$4,024 higher than the payments would have been had the prime rate that existed at the time of purchase been used in the calculation. The effect is that, over the 12-year life of the 336 new buses put into service by contractors since 1996, HCPS will pay out approximately \$9 million more than if the prime rate had been used. Of the \$9 million, \$3 million has already been paid out through fiscal year 2007 and, unless changes are implemented, the remaining \$6 million will be paid out during fiscal years 2008 to 2018. This analysis does not include the effects for any new bus purchases that may be made after fiscal year 2007 and the lost interest income that could have been earned by HCPS on the excess amounts paid.

Bus Contractor Rates Paid Were Not Based on Documented Criteria, and Were Not Approved by the Board

HCPS does not have a written policy establishing the criteria for calculating the bus contractors' table of rates, which included the PVA, a driver per hour allotment to cover the contractor's labor costs, maintenance and fuel costs per mile, and an administrative cost allotment per bus. In addition, HCPS could not provide documentation to support the bus manufacturer's prices used when

¹¹ We used the prime rate since this rate was recommended in a November 1999 study commissioned by another Maryland LEA that used the same PVA formula, and it was suggested as a reasonable prevailing interest rate in a 1978 Maryland State Department of Education study on the PVA. The prime rates during 1996 to 2007 ranged from 4.00 percent to 9.50 percent.

calculating the PVA amounts (HCPS personnel indicated that they had obtained bus quote documentation, but discarded it).

Furthermore, the HCPS Board did not approve the annual table of rates to be paid to bus contractors, which includes the aforementioned PVA, even though this approval is provided for in the agreements between the HCPS bus contractors and HCPS. HCPS personnel informed us that the Board indirectly approved the rates when it approved the annual operating budget since the rates were the basis for the budget line item amount for contracted bus services. However, the Board was not provided with the table of rates or with any explanation of the rates as part of the budget approval process.

After our inquiry into this matter, the HCPS Board was presented with the proposed table of rates for fiscal year 2008, which the Board approved on June 11, 2007. Nevertheless, although descriptions of the rate categories were provided to the Board, the Board was not provided with details on how each rate was determined.

Cost Comparisons Should Be Performed When Procuring Fuel for the HCPS Fleet

HCPS did not adequately evaluate its options for obtaining prices for fuel for its in-house bus fleet. HCPS belongs to the Baltimore Regional Cooperative Purchasing Committee (BRCPC), which consolidates the purchases of various commodities and other goods (including diesel fuel and gasoline) for local governments and school systems. However, HCPS entered into its own contract to purchase fuel instead of using the BRCPC contract to purchase fuel. Without performing any documented cost analysis, HCPS personnel informed us that they believed, based on their experience, that they could obtain fuel at a better rate than BRCPC. Our after-the-fact comparison of diesel fuel rates between BRCPC and HCPS and the corresponding usage during the period from June 23, 2006 through April 11, 2007 disclosed that HCPS could have saved between \$28,000 and \$45,000 depending on the timing of fuel deliveries made if HCPS had participated in the BRCPC fuel contract.

Recommendations

13. HCPS should periodically prepare a documented analysis to determine whether continued use of outside vendors to provide student bus services is, in fact, cost beneficial for the school system. This analysis should include an evaluation of each pay element (including the ROI component of the PVA) of the current bus contracts to determine whether the rates are reasonable and necessary.
14. HCPS should establish formal written criteria for the components of the bus contractor's table of rates, and should maintain documentation of the calculation of these rates for future reference purposes. HCPS should also provide the Board with the necessary information to allow it to make an informed decision on the contracted bus rates.
15. HCPS should perform cost comparisons with other available sources when procuring fuel contracts to obtain the most favorable prices, and should use reorder points that maximize fuel delivery discounts.

Chapter 9

Food Services Operations

HCPS has implemented a number of best practices to help reduce food service costs, such as using performance measures and participating in both the United States Department of Agriculture (USDA) commodity program and a food purchasing cooperative. HCPS also has adequate procedures in place to identify students eligible for free and reduced-price meals under the federal national school meals programs. However, HCPS needs to improve internal controls over the food service bank accounts. Although HCPS intends for the food service department to be self-funded, certain expenses for food service, such as related utility costs, were charged to the HCPS general fund. See Table 5 below for cost per meal data (which, as noted above, exclude certain food service expenses), which indicate that the HCPS average cost per meal is generally lower than similarly-sized school systems. This result could be attributable to HCPS' failure to charge all associated costs.

Table 5
Comparison of Cost per Meal
Fiscal Year 2006 (Unaudited)

School System	Total Expenditures	Meals Served			Average Cost Per Meal
		Breakfast (paid, free, and reduced)	Lunch and Snacks (paid, free, and reduced) ❶	Total	
Harford Co.	\$12,286,807	791,792	3,598,017	4,389,809	\$2.80
Anne Arundel Co.	18,153,997	1,207,998	5,222,578	6,430,576	2.82
Howard Co.	11,041,316	215,768	3,467,764	3,683,532	3.00
Frederick Co.	10,328,068	563,706	2,640,136	3,203,842	3.22
Carroll Co.	6,327,094	190,201	2,135,851	2,326,052	2.72
Average of Comparable Schools	\$11,462,619	544,418	3,366,582	3,911,001	\$2.93

❶ Snacks are provided by certain school systems, excluding Howard, Frederick, and Carroll.

Sources: MSDE 2006 Data

Background

Fourteen of the 51 schools in existence during fiscal year 2006 had cooking cafeterias (2 schools opened after fiscal year 2006 for a total of 53 schools currently). The remaining schools received prepared food from another school. HCPS reported that it operated a self-sustaining food service operation. See Table 6 below for information regarding fiscal year 2006 food services.

Table 6
Food Service Facts for FY 2006

Average Cost per Meal				\$ 2.80
Number of Meals Served:				
Breakfast	Paid	298,493		
	Free	382,224		
	Reduced Price	111,075		
				<u>791,792</u>
Lunch	Paid	2,384,505		
	Free	824,595		
	Reduced Price	318,656		
				<u>3,527,756</u>
Snacks				32,938
Summer Meals				<u>37,323</u>
Total Meals Served				<u>4,389,809</u>
Schools				51
Kitchens				14
Full-time employees				109
Part-time employees				300
Revenues:				
Federal	Cash payments	\$3,904,780		
	USDA Commodities	720,024		
				<u>\$4,624,804</u>
Sales and other sources				7,778,263
State aid				257,235
Total Revenue (all sources)				<u>12,660,302</u>
Total Expenditures				<u>12,286,807</u>
Excess of Revenues over Expenditures				<u>\$ 373,495</u>

Sources: MSDE 2006 Data and HCPS Fiscal Year 2006 Audited Financial Statements.

Certain Best Practices Were in Place

HCPS implemented several practices to contain food

services costs – These measures helped to both increase operational efficiency and reduce food supply and material costs.

- HCPS used performance data, such as meals per labor hour and monthly financial reports, to track and monitor the operating efficiency at each of its school cafeterias. As shown in Table 5 on page 51, HCPS has the second lowest cost per meal compared to similarly-sized Maryland school systems.
- HCPS participated in the USDA commodities free food program. Per HCPS records, \$708,000 in USDA commodities were received in fiscal year 2007.
- HCPS participated in a food purchasing cooperative to maximize its buying power and to reduce food costs. According to HCPS records, payments to the cooperative-selected wholesale vendor totaled \$2.3 million during fiscal year 2006.
- HCPS used standard serving sizes and recipes to economize on food purchases.

HCPS used several best practices to encourage participation in the federal free and reduced-price meal

programs – These practices include the use of a family application process – instead of individual student applications – to simultaneously qualify more students for the programs, and the use of a keypad system in cafeterias to eliminate the easy identification (and any perceived stigma) of students in the free and reduced-price meal programs. For fiscal year 2006, 85 percent of HCPS students eligible to receive free lunches and 82 percent of the students eligible to receive reduced-price lunches actually participated in the programs, which was 6 percent and 11 percent, respectively, above the Statewide averages. This contributed to HCPS having the second highest rate of free and reduced-price meals served among similarly-sized Maryland school systems.

Controls Over Food Service Bank Accounts Need Improvement

The internal controls over the bank accounts maintained by the HCPS food service department were not adequate. Specifically, the individual responsible for reconciling the four food service bank accounts had check writing privileges for three accounts and regularly wrote checks from these accounts to transfer funds into the fourth food services bank account, which was the main account. Although the bank reconciliations were reviewed by an HCPS supervisory employee, no independent supporting documentation (such as bank statements) was provided to the supervisory employee for these three bank accounts to allow for an adequate review. These conditions could result in the misappropriation of funds from these bank accounts without detection. According to HCPS records, collections deposited into these three accounts during fiscal year 2006 totaled \$4.6 million.

All Applicable Expenditures for Food Service Operations Should Be Recognized When Determining Self-Sufficiency

Although HCPS stated that its food service department was designed to be fully self-funded, HCPS general funds appear to have been used to cover the costs for certain food service related expenditures. Specifically, we noted that the HCPS food service department did not pay for the cafeterias' share of utility and custodian costs at HCPS schools. Although we did not estimate what these costs were for fiscal year 2007, a consulting firm in its December 2001 performance audit report on HCPS estimated that the annual utility expenditures for food services ranged from \$140,000 to \$770,000 depending on the allocation method used. That report also estimated the cost of custodial services for food service to be approximately \$200,000 per year.

Recommendations

16. HCPS should improve controls over its food service bank accounts. Specifically, duties should be segregated between

the preparation of bank reconciliations and access to the related bank accounts. Also, supporting source documentation (such as bank statements) should be examined during the supervisory reviews of bank reconciliations.

17. The HCPS Board should consider charging the food service department for its share of all related costs, including utility and custodian costs, to properly reflect the department's full operating costs.

Chapter 10

School Board Operations and Oversight

Oversight of HCPS operations includes a comprehensive budget process that has received the “Distinguished Budget Presentation Award” from the Government Finance Officers Association of the United States and Canada (GFOA) for the last five years. The Board also receives financial updates, including monthly budget variances, to assist it in monitoring the efficient use of funds. Annually, the Board meets with the HCPS certified public accounting firm to review the results of the annual financial statement and the federal Single Audits. Also, HCPS has an internal auditor and an active audit committee.

Nevertheless, several opportunities exist for the Board to improve operations and oversight. For example, the Board should consider expanding the work of its internal auditor into areas beyond student activity funds. Also, consideration should be given to establishing a confidential hotline to enable employees and others to report operational concerns and suspected fraud, waste, and mismanagement. Finally, enhancements should be made to the HCPS ethics policy to cover certain additional employees who perform key procurement functions.

Background

HCPS is governed by a seven-member board selected by the Governor of Maryland. Due to its size, the Board generally acts in whole to carry out its oversight duties. The Board, however, may

form special committees at its discretion, and has an active audit committee consisting of two board members and several community members with various financial expertise. To assist in oversight, the Board contracts for independent audits of the HCPS financial statements and federal programs, has an internal auditor who reports to the Board through the audit committee, and receives regular updates from HCPS management personnel on a broad range of financial, administrative, and academic topics.

The Board is ultimately accountable for the success of HCPS in providing the children of Harford County with a quality education, while wisely spending local, State, and federal funds. Following is the HCPS stated policy on educational philosophy:

Vision

Harford County is a community of learners where educating everyone takes everyone. We empower all students to contribute to a diverse, democratic, and change-oriented society. Our public schools, parents, public officials, businesses, community organizations, and citizens actively commit to educate all students to become caring, respectful, and responsible citizens.

Mission

The Mission of Harford County Public Schools is to foster a quality educational system that challenges students to develop knowledge and skills, and to inspire them to become life-long learners and good citizens.

Board of Education Goals

Every student graduates ready to succeed
Every student achieves personal and academic growth
Every student connects with great employees
Every student benefits from accountable adults
Every student feels comfortable going to school

Source: www.hcps.org

Certain Oversight Has Been Put in Place Regarding HCPS Operations

The HCPS Board uses a number of methods to oversee the operations of HCPS.

- The Board's budgeting process includes a position control mechanism which can be used to monitor costs, and performance measures which can be used to assist in the decision-making process. In addition, the HCPS budget has received the "Distinguished Budget Presentation Award" from the Government Finance Officers Association (GFOA) for the last five years. Finally, the Board is actively involved in the development of the budget.
- The Board receives monthly expenditure data including budget variances, and is provided with quarterly financial updates by HCPS personnel, which include information such as projections of financial activity and more detailed explanations of variances. The HCPS principals and administrative personnel also receive monthly expenditure reports to help ensure efficient management of funds.
- The Board hires an independent certified public accounting firm to perform audits of its financial statements and federally-funded grant programs, and annually meets with that firm to review the results.

The Board Should Consider Additional Steps to Assist It in Governing HCPS

HCPS internal auditor's work should be expanded to include areas beyond student activity funds – Although HCPS has an internal auditor and an active audit committee that oversees the work of the auditor (both of which are deemed best practices), the scope of the auditor's work should be focused more on auditing significant areas within HCPS. The auditor's work plan for fiscal year 2007 allocated 88 percent of the auditor's time to performing operational functions such as assisting with the implementation of the new student activity fund accounting

system and updating the student activity fund accounting procedures manual. Similarly, the fiscal year 2008 auditor work plan shows that 84 percent of the auditor's time will be devoted to student activity funds. Although there are unique risks associated with student activity funds, which are not subject to review by other auditors, the dollar amounts involved are not as significant as with other HCPS operations. As noted elsewhere in this report, there are other significant operational areas (such as transportation and procurement) which should be considered for review. Student activity fund expenditures totaled \$6.6 million per the HCPS fiscal year 2007 audited financial statements, while HCPS expenditures totaled \$474 million for fiscal year 2007.

The HCPS Board should consider establishing a

confidential hotline – We noted that a process, such as a confidential hotline, had not been implemented to enable employees and others to confidentially report operational concerns and suspected fraud, waste, and mismanagement. Typically, such confidential mechanisms bring to light matters and issues previously unknown and unsuspected by organizational managers. If such a process was established, in conjunction with the establishment of a whistleblower policy, the internal auditor could conduct the initial reviews of information received via the hotline or direct the information to other appropriate officials, such as law enforcement.

Ethics policy should cover additional employees – HCPS

adopted an ethics policy in 1983, which was most recently revised in 2005. The policy includes provisions such as the filing of annual financial disclosures by certain HCPS employees and Board members. However, the policy does not require the filing of annual financial disclosures by the head of the HCPS purchasing unit and the buyers within this unit, who are responsible for most HCPS procurements. The filing of annual financial disclosures helps to identify any potential conflicts of interest between HCPS personnel and outside parties including contractors and, therefore, individuals responsible for significant procurement decisions should be required to file them.

Recommendations

18. The Board should consider expanding the scope of the internal auditor's work and should consider establishing a confidential hotline (with formal follow-up procedures and an employee whistleblower protection policy).
19. The HCPS ethics policy should be updated to ensure the filing of annual financial disclosures by all HCPS personnel involved in processing significant or numerous procurement transactions.

Chapter 11

Other Financial Controls

This chapter addresses the management of risk, cash, and debt (for example, long-term lease-leaseback agreements) within HCPS. While HCPS had procedures in place to govern its risk and cash management, it did not have written policies governing its use of long-term liabilities, such as lease-leaseback agreements.

Risk and Cash Management Best Practices Were in Place

HCPS used a combination of commercial insurance and self-insurance to manage its risks. HCPS insured its liability, property, and workers' compensation coverage through participation in the Maryland Association of Boards of Education Group Insurance Pool and the Workmen's Compensation Self Insurance Fund. The notes to the fiscal year 2007 audited financial statements stated that settled claims had not exceeded coverage in any of the past three fiscal years.

To reduce its workers' compensation costs, HCPS uses workers' compensation loss data to enhance safety training in areas with the greatest number of claims. HCPS has also established an early back-to-work program to maximize the work potential of injured

employees. Employees with work-related injuries perform meaningful tasks within their training, experience, knowledge, and physical limitations.

With respect to cash management, HCPS invested its cash in either the Maryland Local Government Investment Pool (MLGIP) or in a repurchase agreement with its depository bank. The depository bank transfers funds on a daily basis from the repurchase agreement to cover checks presented to the bank for payment. According to the HCPS audited financial statements, the MLGIP and repurchase agreement investments, which totaled \$12 million as of June 30, 2007, were fully collateralized with underlying securities held by the custodian in the Board's name.

Capital Lease Policies Need To Be Established

HCPS had not adopted a policy to govern its use of long-term lease obligations to finance operations, as recommended by the Government Finance Officers Association (GFOA). Long-term liability levels and their related annual costs are important obligations that must be managed within available resources. An effective policy should provide guidelines to ensure HCPS manages its long-term liabilities accordingly. By law, HCPS is not authorized to issue bonds or similar debt instruments to finance capital or operational needs. However, HCPS used a lease-leaseback agreement to construct a new administration building. According to HCPS audited financial statements, capital lease payments through 2030 had a present value of \$11.1 million at June 30, 2007, with \$823,822 due within one year.

Recommendation

20. HCPS should adopt a formal policy governing long-term obligations.

Audit Scope, Objectives, and Methodology

Scope

We conducted a performance audit to evaluate the effectiveness and efficiency of the financial management practices of the Harford County Public Schools (HCPS). 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.

Objectives

We had two broad audit objectives:

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

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. Our audit approach, including the specific objectives of our local school system audits, was approved on September 14, 2004 by the Joint Audit Committee of the Maryland General Assembly in accordance with the enabling legislation. As approved, the audit objectives excluded reviewing and assessing student achievement, curriculum, teacher performance, and other academic-related areas and functions. We also 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. Finally, we did not evaluate the HCPS Comprehensive Education Master Plan or related updates.

Methodology

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 HCPS. We also interviewed personnel at HCPS, the Maryland State Department of Education (MSDE), and staff at other local school systems in Maryland (as appropriate¹²). Our audit procedures included inspections of documents and records, and observations of HCPS 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, 2005 through December 31, 2006. For our audit work on revenue and federal grants, we primarily relied on the results of independent audits of fiscal year 2006 and 2007 activity.

In addition, we contacted a number of other state auditors' offices and legislative program evaluation agencies that had a history of conducting audits or reviews of local school systems. We interviewed those officials and inspected their work programs and resultant reports to identify specific audit techniques and operational practices at schools that could be adapted for our school system audits. We also 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

¹² During the course of the audit it was necessary to contact other systems to identify policies or practices for comparative purposes and analysis.

background or informational purposes, and was deemed reasonable. For comparison purposes, information provided in this report was generally limited to those Maryland school systems of similar sizes, based on student enrollment and/or system budget. In many cases, this information was self-reported by the school systems. The data were neither audited nor independently verified by us. Finally, information provided in this report was obtained from various reports readily available during our fieldwork.

Other Independent Auditors

When developing the approach for the audits of school system financial management practices, a consideration was the reliance on the work of other independent auditors to the extent practicable to avoid unnecessary duplication of audit effort. With respect to HCPS, the results of other auditors that we considered were reported in two distinct audit reports: one related to the administration of its federal grants and the other, the management letter from the audit of its Comprehensive Annual Financial Report.

During the course of this audit, we relied on these results. We performed certain steps to satisfy ourselves as to the reliability of the reported results of the independent federal grants audits of the HCPS federal financial assistance programs for the evaluation of internal controls and for compliance with federal laws and regulations and of the HCPS financial statement audits. Accordingly, we significantly reduced the scope of our work in Chapter 1 "Revenue and Billing Cycle," and in Chapter 2 "Federal Funds."

Limitations of Internal Control

HCPS 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 HCPS that did not warrant inclusion in this report.

Fieldwork and HCPS Responses

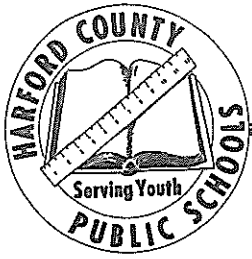
We conducted our fieldwork from January 2007 to September 2007. The HCPS response to our findings and recommendations is included as an appendix to this report.

APPENDIX

Harford County Public Schools

102 S. Hickory Avenue ♦ Bel Air, MD 21014 410-838-7300 Fax 410-893-2478

Jacqueline C. Haas, Ed.D., Superintendent of Schools



May 28, 2008

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

Dear Mr. Myers:

Enclosed are the responses to the recommendations made in the "Financial Management Practices Audit Report" that was issued for Harford County Public Schools in May 2008.

I would like to thank the legislative auditors for helping us identify areas where we can improve our system's performance and efficiency. We appreciate the recommendations as well as the recognition of the best practices within our organization. Many of the recommendations have already been implemented and we look forward to placing the remainder in effect.

Please do not hesitate to call our CFO, John Markowski, if you have any questions or need any additional information regarding this submission.

Sincerely,

A handwritten signature in cursive script that reads "Jacqueline C. Haas".

Jacqueline C. Haas, Ed. D.
Superintendent

Copy:
Board of Education Members
John Markowski

Encl.

JCH:jmm

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Recommendation #1: HCPS should improve controls over its collection of cash and check receipts by ensuring accountability and safeguarding for these collections from the time they are initially received until they are deposited at a bank. Independent verifications should be performed to ensure all amounts received were deposited timely and intact, and agreed to related receivable records (when applicable).

Response: We concur. The narrative indicates this recommendation relates to bank accounts managed by food services and is repeated as recommendation #16. Reassignment of the duty of verifying daily bank deposits to a clerical person that does not have access to the accounts was implemented beginning December 1, 2007. A report is prepared for the Supervisor to review on a monthly basis. In addition, we deposit cash receipts the day they arrive and have arranged electronic fund transfer from the Maryland Comptroller of reimbursements.

Recommendation #2: HCPS should implement effective internal controls over its procurement, disbursement, and contract monitoring processes. Such controls should include restricting employee capabilities on the procurement and disbursement systems and segregating employee duties. In addition, HCPS should ensure that invoiced prices agree to the related contracts. Also, HCPS should establish appropriate processes for obtaining support for invoices. Finally, all purchases, contracts, and agreements exceeding \$100,000 should be approved by the Superintendent and by the Board in accordance with HCPS policy.

Response: We concur with the recommendation and have restricted employee capabilities on the procurement and disbursement systems thereby segregating those duties. We also effected changes when a cooperative contract is utilized and require the contractor to indicate or append to their proposal a pricing sheet that is relational to the published prices and discounts given. Finally we have implemented changes requiring the Superintendent and Board approval on all contracts estimated to exceed, or having the potential to exceed, \$100,000 in value.

Recommendation #3: HCPS should enhance its controls over its credit card and travel transactions. HCPS should ensure that adequate documentation exists for all credit card transactions. Also, HCPS should establish procedures for obtaining timely reimbursements from student activity funds for purchases made on behalf of student organizations using HCPS credit cards. Finally, HCPS should ensure that appropriate authorization is obtained prior to travel conducted by HCPS personnel and students, and that, in accordance with policy, travel charges are not incurred for family members.

Response: We concur. The HCPS Procurement Card Program Procedures Manual, revised July 2007, indicates that "For airline or train tickets, the cardholder may only purchase tickets for HCPS employees or students. Tickets for others who are traveling (i.e., spouses, children, etc.) may not be purchased with the P Card." In addition, the

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manual indicates consequences for cardholders violating policies and procedures. These consequences will be enforced as necessary. Beginning September 2007, a travel report is generated on a monthly basis through US Bank (HCPS' card provider) that indicates detailed information for any airline activity on P Cards, including both cardholder and passenger information. If the passenger is not the cardholder, a report is run in the Lawson system to determine if the passenger is a HCPS employee. If the passenger is not an employee, the cardholder is contacted and required to submit payment to HCPS to cover the expense. In the event the person traveling is a student, the school is contacted to reimburse HCPS for those expenses from a student activity fund account. Additionally, transactions are reviewed daily and a list of reimbursable items is compiled. At the month end, we send schools an email requesting reimbursement for such purchases. The reimbursable items are maintained on the list until the reimbursement is received. Authorization for travel is required in advance and requires supervisory approval.

Recommendation #4: HCPS bank reconciliations should be reviewed and approved by independent supervisory personnel.

Response: HCPS agrees with the finding and has implemented the recommendation.

Recommendation #5: HCPS should take the necessary corrective actions to ensure that adequate internal controls are in place over its automated human resource and payroll system. Specifically, system capabilities and job duties should be segregated and an independent review and approval process should be established over payroll-related changes recorded in the system, including final payments to terminated employees for unused leave balances.

Response: HCPS agrees with the recommendation. The Finance Department reviewed existing security with the Technology Department as part of our upgrade to Lawson version 9.0. Our understanding is that the newer version of Lawson completely overhauls the security component of the software and the new functionality may provide opportunities to address the issues noted in the finding. We expect to implement Lawson version 9.0 in the fall of 2008. Additionally, the Payroll Manager developed a standard form to be used for calculating final payouts, including a place for an independent reviewer (Payroll Manager) to sign off.

Recommendation #6: HCPS should continue to develop and implement its workforce planning for key administrative and supervisory positions and should expand the planning to include other key non-instructional positions in critical operational units.

Response: We concur with the recommendation. In terms of the workforce development recommendation, it is noted that the Strategic Plan requires us to implement a systemic Leadership Succession Plan, which was to include everyone. The Plan was provided to

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the auditors. However, as there is no funding to implement this objective staff will be recommending that it be removed from the Strategic Plan.

Recommendation #7: HCPS should establish policies and procedures to ensure that accountability and control is maintained over its equipment inventory, including certain non-capital items that are prone to theft or loss (and for which HCPS might want to establish a lower threshold than \$5,000 for control purposes).

Response: HCPS agrees with the spirit of the recommendation but feels that implementing the recommendation given the current resources available, is not practical. HCPS currently tracks all asset purchases and disposals meeting our capitalization threshold of \$5,000. This threshold is a recommended practice by both the Government Finance Officers Association (GFOA) of the United States and Canada and the Association of School Business Officials (ASBO) International. It was linked to the implementation of the GASB 34 reporting standard. Beyond that, individual departments are responsible for tracking sensitive (prone to theft) items as deemed necessary by the Department Head. We comply with certain grants requiring capitalization at \$1,000. Achieving more accountability and control while maintaining segregation of duties, although desirable, would require hiring of additional resources in the form of a property manager and is not practical in the current fiscal environment.

Recommendation #8: HCPS should enhance its IT security by establishing and enforcing stricter password requirements, should log all significant security-related events and conduct documented reviews of logged system activity, and should ensure that users are only given capabilities necessary for their job functions.

Response: Office of Technology concurs with the IT security recommendations and will implement stronger password requirements for teacher/administrator/staff and secondary student accounts. Elementary accounts will not be altered. Special needs students are a concern and will need additional discussion, as numerous requests are received to accommodate students who are challenged with typing skills. In addition, HCPS will investigate a log management system to efficiently organize and analyze system logs.

Recommendation #9: HCPS should ensure that all media and equipment are properly sanitized prior to disposal and that these activities are properly documented. HCPS should also establish and implement procedures for the appropriate offsite storage of backup copies of data from critical servers and complete the development of a formal, comprehensive disaster recovery plan.

Response: We concur with the recommendation. Current policies address proper use of removable media especially for storage of sensitive information. Office of Technology will develop a procedure of disposal and sanitation of media. Given the size of HCPS, we believe it is unreasonable to monitor the tracking and disposal of such media. Newly

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adopted asset recovery program with Dell, Inc. provides comprehensive documentation including a list of asset tags disposed; certificate of hard drive sanitation; and a certificate of disposal of equipment. HCPS recognizes a formal disaster recovery plan does not exist as a single bound document. Many of the components which comprise a disaster recovery plan do exist on our Information Security SharePoint site which is access controlled to those job roles responsible for IT operations. OTIS has requested the new Edgewood HS be designed with a small satellite data center to be utilized in the event of a disaster to central office. The additional items suggested for inclusion to HCPS' plan will be added.

Recommendation #10: HCPS should develop a performance system with standards and measures for maintenance and custodial operations. HCPS should also fully use the existing work order system for general maintenance operations and should establish guidelines for work order priority levels, to ensure that appropriate, cost effective, and timely maintenance is provided to all facilities.

Response: We concur, as part of Harford County Board of Education strategic plan and goals we will establish performance measures and benchmarks.

Recommendation #11: HCPS should perform a cost-benefit analysis of its energy management program to ensure that the desired results are being achieved.

Response: We concur. Harford County Public Schools will periodically perform a cost benefit analysis of its energy management program.

Recommendation #12: HCPS should maintain adequate documentation regarding the awarding of construction contracts, including contract evaluations and bid openings. Furthermore, HCPS should develop policies and procedures for governing the retention of procurement documentation. Finally, HCPS should provide more detailed documentation to the Board to allow them to make informed decisions on construction procurements.

Response: We concur that HCPS should maintain adequate documentation regarding the awarding of construction contracts including contract evaluations, advertisements of solicitation for bids, and bid openings. We also concur that we need to establish and follow protocols and procedures for project documentation according to prescribed record retention schedules. Currently, the Legal Services Association (LSA) of the Maryland Association of Boards of Education is undertaking a project to identify and recommend document retention schedules for all Boards of Education. The result is to be approved by the State Department of Education, General Services Administration, and the State Archivist. In the interim our internal procedures will be reviewed to assure adequate documentation is maintained. Finally, if the Harford County Public Schools Board of

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Education wants to require more detailed documentation to make fully informed decisions on construction procurements, we will comply.

Recommendation #13: HCPS should periodically prepare a documented analysis to determine whether continued use of outside vendors to provide student bus services is, in fact, cost beneficial for the school system. This analysis should include an evaluation of each pay element (including the ROI component of the PVA) of the current bus contracts to determine whether the rates are reasonable and necessary.

Response: We concur with the recommendation. HCPS understands that MSDE is taking the lead in developing a model for PVA and ROI that would be consistent for all Maryland school districts using bus contractors. HCPS will implement that recommended model when released by MSDE.

Recommendation #14: HCPS should establish formal written criteria for the components of the bus contractor's table of rates, and should maintain documentation of the calculation of these rates for future reference purposes. HCPS should also provide the Board with the necessary information to allow it to make an informed decision on the contracted bus rates.

Response: We concur with this recommendation. HCPS has evaluated each pay element of the current bus contracts to determine whether they are reasonable, documented these calculations for future reference purposes, and provided the Board with the necessary information to allow it to make informed decisions on the contracted bus rates (June 9, 2008 Board agenda item).

Recommendation #15: HCPS should perform cost comparisons with other available sources when procuring fuel contracts to obtain the most favorable prices, and should use reorder points that maximize fuel delivery discounts.

Response: We concur that we should perform cost comparisons with other available sources. In the past, it was reported that there have been issues that arose between BRCPC and some of the cooperative participants which led to unfavorable results for the end users. In August, 2006, the Harford County Public School Board of Education approved a competitive bid to secure fuel from Mansfield Fuel Company. This bid goes through August 31, 2008, at which time HCPS will evaluate whether to utilize the cooperative fuel contract or to put the purchase out for competitive bid. In addition we will insure that reorder points that maximize fuel delivery discounts are used.

Recommendation #16: HCPS should improve controls over its food service bank accounts. Specifically, duties should be segregated between the preparation of bank reconciliations and

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access to the related bank accounts. Also, supporting source documentation (such as bank statements) should be examined during the supervisory reviews of bank reconciliations.

Response: We concur. This recommendation was also stated as recommendation #1. Reassignment of the duty of verifying daily bank deposits to a clerical person that does not have access to the accounts was implemented beginning December 1, 2007. A report is prepared for the Supervisor to review on a monthly basis.

Recommendation #17: The HCPS Board should consider charging the food service department for its share of all related costs, including utility and custodian costs, to properly reflect the department's full operating costs.

Response: We agree with the recommendation and will undertake an analysis by an independent firm to compare charging food services with all direct costs to the current system whereby food services reimburses the operating fund in full for certain costs that are shared. Our plan would be to implement the recommended change, should there be one, for the FY2010 budget year.

Recommendation #18: The Board should consider expanding the scope of the internal auditor's work and should consider establishing a confidential hotline (with formal follow-up procedures and an employee whistleblower protection policy).

Response: We concur. The Internal Auditor is currently immersed in a system conversion and standardization of school activity accounts. We believe this to be the high risk area due to the number of employees with access to cash, even though the dollar exposure is not substantial relative to the budget as a whole. Upon completion of that project time will be allocated to other areas. The Internal Auditor is a direct dial thereby serving as a confidential hotline. Follow-up procedures and an employee whistleblower protection policy will be prepared for approval by the end of the 2008 calendar year.

Recommendation #19: The HCPS ethics policy should be updated to ensure the filing of annual financial disclosures by all HCPS personnel involved in processing significant or numerous procurement transactions.

Response: We concur. The policy can be amended to add the pertinent personnel to the list of personnel who are required to so file. Projected completion date would be six months from the date this report is accepted by the Board of Education, with the following caveat. Any material change in the Ethics Policy is required by law to be submitted to the State Ethics Commission which must review and approve the modification.

Recommendation #20: HCPS should adopt a formal policy governing long-term obligations.

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Response: We concur. To achieve this recommendation we will research GFOA recommended practices and the review the County policy on capital leases to assure we are consistent with it and present a policy recommendation to the Board for approval by the end of the calendar year.

AUDIT TEAM

Timothy R. Brooks, CPA, CFE
Audit Manager

A. Jerome Sokol, CPA
Information Systems Audit Manager

Nelson W. Hopkins, CPA
Senior Auditor

Veronica Arze
Information Systems Senior Auditor

Erica R. Mulberger
Amber M. Schon, CPA
Adam J. Westover, CPA
Staff Auditors