

Financial Management Practices Audit Report

Allegany County Public Schools

July 2019



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DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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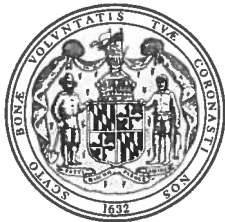
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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

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Gregory A. Hook, CPA
Legislative Auditor

July 12, 2019

Senator Craig J. Zucker, Senate Chair, Joint Audit and Evaluation Committee
Delegate Shelly L. Hettleman, House Chair, Joint Audit and Evaluation Committee
Members of Joint Audit and Evaluation Committee
Annapolis, Maryland

Ladies and Gentlemen:

We conducted an audit of the financial management practices of the Allegany County Public Schools (ACPS) in accordance with the requirements of the State Government Article, Section 2-1220(e) of the Annotated Code of Maryland. The objectives of this audit were to evaluate whether ACPS' 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 ACPS needs to improve internal controls and accountability in a number of areas including procurement and disbursements, payroll processing, equipment inventory, and information systems. Also in the transportation services area, we identified certain deficiencies contributing to inefficiencies and potentially excessive costs.

Specifically, ACPS did not adequately restrict users' capabilities in its automated procurement and accounts payable system and transactions were not subject to independent review. Furthermore, purchase orders were not always prepared or independently approved, and the receipt of goods and services was not always verified before invoices were paid. Finally, ACPS' procurement of contracts were not always in accordance with its procurement policy or State law. For example, our review disclosed that a properly documented competitive bidding process was not used in the procurement of a new automated financial system with an estimated cost of \$1.1 million.

In addition, there was no process in place to ensure that employee access to critical human resources and payroll functions was appropriate and an

independent documented supervisory review of critical personnel and payroll transactions processed was not performed. Furthermore, equipment record keeping practices and controls were not comprehensive. For example, equipment policies did not include requirements for investigating physical inventory discrepancies, or separating the duties of equipment custody, performing physical inventories, and recordkeeping.

We also found that significant risks existed within the ACPS computer systems and network. For example, ACPS lacked assurance that adequate information technology security and operational controls existed over its financial and student information systems, which were hosted, operated, and maintained by service providers. In addition, certain publicly accessible servers were improperly located within the internal network, and intrusion detection prevention system coverage was not adequate or complete. Furthermore, certain computer workstations had not been updated with the latest releases for software products that were known to have significant security-related software vulnerabilities or were lacking malware protection.

We also determined that ACPS could not ensure its methodology for determining payments to its bus contractors resulted in the best value. For example, we estimated that payments to bus contractors for the purchase price and investment return of private buses could have been up to \$857,000 more than necessarily prudent based on recommended rates of return by past studies by the State and a consultant for another Maryland school system. In addition, the basis for certain payments to bus contractors for bus maintenance and operation costs were not documented nor supported by industry standards. Finally, a system-wide route analysis was not periodically performed and we found through testing that ridership on certain routes was lower than bus capacities.

Finally, based on our current audit assessment of significance and risk to our audit objectives, our audit included a review to determine the status of 18 of the 19 findings contained in our preceding audit report. We determined that ACPS satisfactorily addressed 12 of these findings. The remaining 6 findings are repeated in this report.

ACPS' response to this audit is included as an appendix to this report. We reviewed the response and noted general agreement to our findings and related recommendations, and we will advise the Joint Audit and Evaluation Committee of any outstanding issues that we cannot resolve with ACPS. In accordance with our policy, we have redacted the names of any private companies or products mentioned by ACPS in this document.

We wish to acknowledge the cooperation extended to us during our audit by ACPS and its willingness to address the audit issues and implement appropriate corrective actions.

Respectfully submitted,

A handwritten signature in black ink that reads "Gregory A. Hook". The signature is written in a cursive style with a large, stylized 'G' and 'H'.

Gregory A. Hook, CPA
Legislative Auditor

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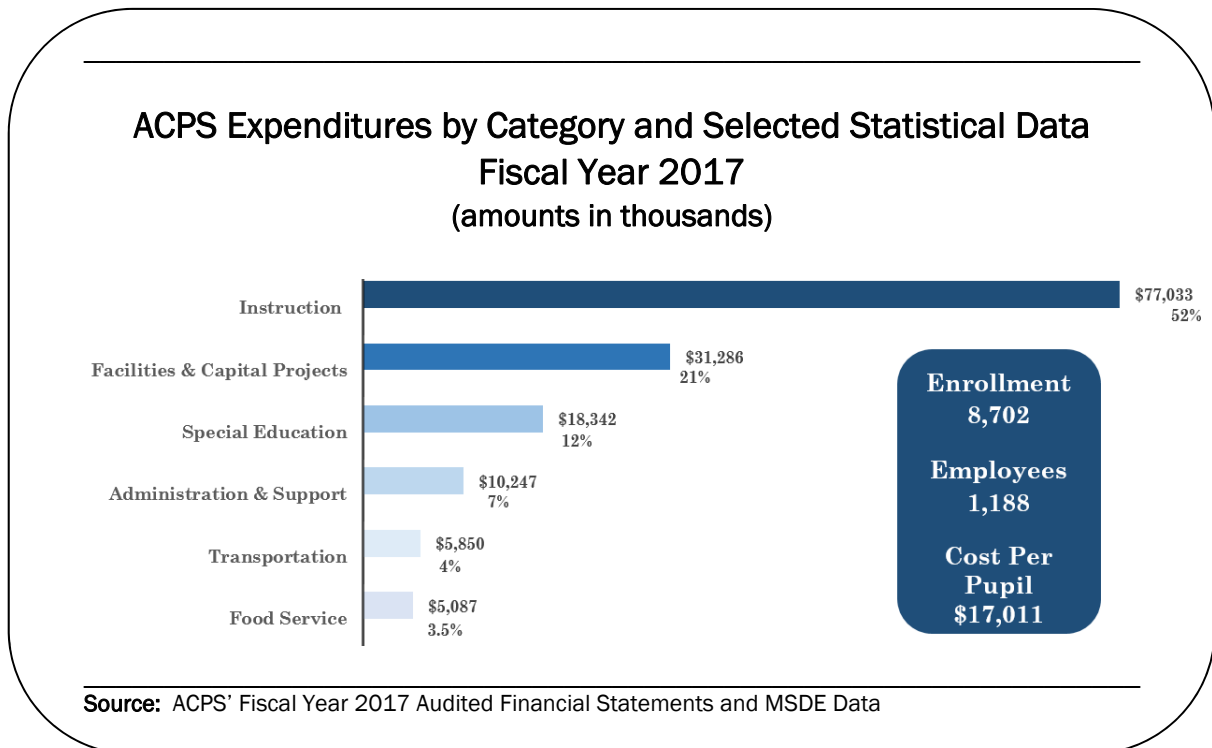
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Background Information

Statistical Overview

According to student enrollment records compiled by the Maryland State Department of Education (MSDE), Allegany County Public Schools (ACPS) ranks 16th in student enrollment among the 24 public school systems in Maryland. Fiscal year 2018 full-time student enrollment was 8,702 students. ACPS has 21 schools, consisting of 13 elementary, 4 middle schools, 3 high schools, and 1 career and technical school.

According to ACPS' fiscal year 2017 audited financial statements, revenues and expenditures were approximately \$158 million and \$148 million, respectively. The largest expenditure category was salaries and wages, including benefits, which accounted for 69 percent of total expenditures during fiscal year 2017. See the chart below for ACPS' expenditures by category in fiscal year 2017 according to its audited financial statements. According to MSDE records, during the 2016-2017 school year, ACPS had 1,188 full-time equivalent positions, which consisted of 845 instructional and 343 non-instructional employees.



Oversight

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

External Audits

ACPS engages a certified public accounting firm to independently audit its annual financial statements. Additionally, the auditor conducts what is referred to as a Single Audit of ACPS' federal grant programs (as required by federal regulations). We reviewed the resulting financial statement audit and Single Audit reports for fiscal years 2015 through 2017, and examined the related work papers for fiscal year 2017, which were the latest available at the time we performed our audit fieldwork.

There were similarities between the work of the independent certified public accounting firm that audited ACPS' financial statements and conducted the Single Audit, and the risks and scope of our audit in certain areas. As a result, we reduced the scope of our audit work related to State and local government revenues received via wire transfer, accounts receivable, and federal grant activity.

Status of Findings From Preceding Audit Report

Based on our current audit assessment of significance and risk to our audit objectives, our audit included a review to determine the status of 18 of the 19 findings contained in our preceding audit report dated January 29, 2013. We determined that ACPS satisfactorily addressed 12 of those findings. The remaining 6 findings are repeated in this report as noted in the following table.

Status of Preceding Findings

Preceding Finding	Finding Description	Implementation Status
Finding 1	ACPS had not processed reimbursement claims for Medicaid-subsidized services timely and was at risk that eligible claims may not be processed by established deadlines.	Not repeated
Finding 2	Duties for purchasing and payment processing were not properly separated and certain transactions were not subject to independent review.	Repeated (Current Finding 1)
Finding 3	ACPS has not established comprehensive written procurement policies and procedures.	Not repeated
Finding 4	ACPS did not competitively bid certain service contracts.	Repeated (Current Finding 3)
Finding 5	ACPS did not ensure the propriety of payments for employee and retiree health care costs.	Not repeated
Finding 6	ACPS did not adequately monitor payments made for special education services.	Not repeated
Finding 7	User access to the automated system was not properly restricted and documentation of independent reviews of certain payroll transactions was lacking.	Repeated (Current Finding 5)
Finding 8	ACPS did not always obtain independent approval before updating records for missing equipment.	Repeated (Current Finding 6)
Finding 9	Security events for a critical server and database were not properly monitored.	Not repeated
Finding 10	Application, network, and server account and password controls were not sufficient to properly protect critical resources.	Not repeated
Finding 11	ACPS's disaster recovery plan and program change controls were not adequate.	Not repeated
Finding 12	The ACPS network was not adequately secured.	Repeated (Current finding 8)
Finding 13	ACPS' energy management program was not sufficiently comprehensive.	Not repeated
Finding 14	ACPS does not maintain documentation of all preventive maintenance work performed.	Not repeated
Finding 15	Certain bus contractor payment rates were either not verified or not supported.	Not repeated
Finding 16	ACPS did not use automated routing capabilities to develop more efficient routes.	Repeated (Current Finding 10)
Finding 17	ACPS has experienced persistent deficits in its food service operations, although certain actions have been taken to reduce the deficits.	Not repeated
Finding 18	Proper internal controls were not established over food services inventory.	Not repeated (Not followed up on)
Finding 19	The disclosure form could be improved to identify potential conflicts of interest.	Not repeated

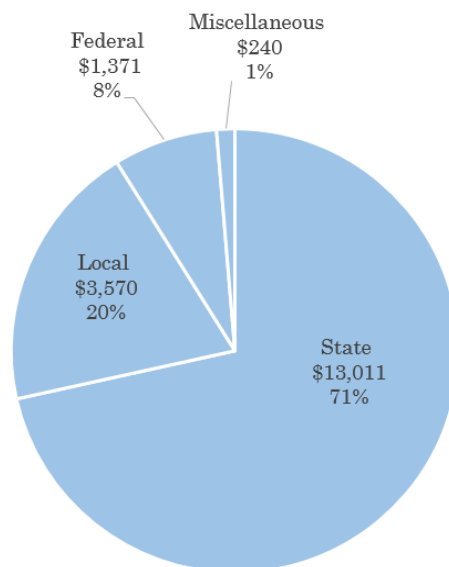
Findings and Recommendations

Revenue and Billing Cycle

Background

Allegany County Public Schools (ACPS) revenues consist primarily of funds received from the State, Allegany County, and the federal government. According to the ACPS audited financial statements, revenues from all sources totaled \$158.3 million during fiscal year 2017; including \$113.2 million from the State. See the Chart below for ACPS' revenue sources per enrolled student in fiscal year 2017, according to its audited financial statements.

**ACPS' Revenue Sources Per Enrolled Student
Fiscal Year 2017**



Source: ACPS' Fiscal Year 2017 Audited Financial Statements

In addition, schools collect funds for other purposes, such as for student activities, clubs, and school publications. Because they are not considered school revenue, these school activity funds are accounted for separately by each school and reported in summary in the audited financial statements. Although this revenue is raised through student-related activities, ACPS has a

fiduciary duty to safeguard these funds. For fiscal year 2017, school activity fund collections totaled \$2.9 million and the June 30, 2017 balance was \$2.1 million.

External Audits

There were similarities between the work of the independent certified public accounting firm that audited the ACPS financial statements and the objectives of our audit for certain revenue activities. As a result, we reduced the scope of our audit work related to State and local government revenues received via wire transfer and accounts receivable, for which the auditor's procedural review and testing disclosed no material weaknesses or significant deficiencies.

Reviews of School Activity Funds

The independent certified public accounting firm contracted by ACPS to perform its annual financial audit also conducts limited reviews of the school activity funds. These reviews consist primarily of tests of school activity fund bank reconciliations, and receipt and disbursement transactions at selected schools performed on a rotating basis. Our review of the firm's findings for fiscal year 2017 did not identify any improprieties and internal control weaknesses identified were not prevalent.

Federal Funds

Background

ACPS receives funds pertaining to federal government programs that are generally restricted for use for a specific program (such as the School Lunch Program or Special Education). According to the audited Schedule of Expenditures of Federal Awards, fiscal year 2017 expenditures totaled \$9.9 million, not including federally funded fee-for-service programs such as Medicaid reimbursement for special education services.

Single Audit Reports Disclosed No Material Weaknesses Regarding Federal Grant Management

Due to work performed by the independent certified public accounting firm that conducted the Single Audits of ACPS' federal grants for fiscal years 2015 to 2017 and the objectives of our audit in this area, we reduced the scope of our audit work related to federal grants. Besides expressing an opinion on ACPS' compliance with the terms of several grant programs, the auditor also considered the existing internal control structure's impact on compliance and audited the required Schedules of Expenditures of Federal Awards (which includes claimed and reported grant expenditures) for fiscal years 2015 to

2017. The related reports stated that ACPS complied, in all material respects, with the requirements applicable to its major federal programs. With respect to internal controls over compliance with, and the operation of, major federal programs, the firm identified significant deficiencies that were not considered to be material weaknesses for fiscal year 2017. ACPS generally agreed to take corrective actions to correct these deficiencies such as developing and adopting policies and procedures for cash management and procurements using federal grant funds.

Procurement and Disbursement Cycle

Background

According to ACPS records, non-payroll related disbursements totaled \$45.5 million during fiscal year 2017. Purchase orders for goods and services are manually prepared by the requesting department, under the signature of the department head or principal, and sent directly to the vendor. ACPS' written procurement policies require that procurements over \$25,000 be competitively bid in accordance with Section 5-112 of the Education Article of the Annotated Code of Maryland. Contracts and agreements over \$25,000 are to be approved by the Superintendent or designee and the Board approves all contracts over \$1 million.

ACPS procedures require the manual comparison of invoices submitted by vendors to the finance office to the related purchase order prior to payment. In addition, the receipt of goods and services is to be confirmed by the requesting department before payment processing. Payments are processed by the finance office through an automated system that prints vendor checks and posts the payments to the financial records.

Finding 1

ACPS did not adequately restrict users' capabilities in its automated procurement and accounts payable system and certain transactions were not subjected to independent review or supported by required documents.

Analysis

ACPS did not adequately restrict users' capabilities in its automated procurement and accounts payable system and certain transactions were not subjected to independent review or supported by required documents.

- Ten employees were assigned system capabilities that allowed them to perform incompatible functions. These ten employees from three different

offices or departments could perform a number of critical accounts payable system functions including adding a vendor, entering invoices, and processing payments. Nine of these employees could also change a vendor's address and two of these employees were responsible for printing checks that included authorized facsimile signatures. Furthermore, ACPS did not periodically assess the appropriateness of employee access for unnecessary or incompatible capabilities. Finally, available transaction history reports identifying specific transactions unilaterally processed by the above individuals were not generated for review.

- ACPS had not established adequate controls over certain purchasing functions to ensure that independent approvals were obtained and that all required documents were completed. Specifically, purchase orders were not required to be approved by individuals other than the preparer (in this case, department heads and school principals). Consequently, there was no process established to require an independent approval of the propriety of purchase orders (such as, justification for the purchase). In addition, required receiving reports were not always prepared prior to processing invoices for payment.

Our test of 20 paid invoices totaling \$316,000 disclosed that for 6 of the 20 invoices totaling \$61,000, purchase orders had not been prepared, and for the 14 purchase orders that were prepared, there was no documentation of independent approval. In addition, for 4 of the 20 invoices totaling \$45,000, ACPS was unable to provide documentation (such as a receiving report) that the goods or services were received.

We noted that ACPS' automated procurement and accounts payable system did have certain features to aid in providing necessary controls, including on-line approvals of purchase orders and recordation of receiving reports, but these were not used.

- Changes to vendor information in the automated system were not adequately verified. Specifically, only verbal approval from the Chief Financial Officer was obtained by finance office staff prior to adding new vendors to the system, and ACPS did not periodically generate a report of new vendors added to ensure that all recorded vendor changes are proper.
- Although ACPS had a process in place to review all checks for propriety prior to issuance, the employees responsible for this review also had system access capabilities that allow them to approve invoices for

payment, and notify information technology personnel to print signed checks. Accordingly, this review was not an effective control process due to the lack of reviewer independence.

Due to the above conditions, unauthorized purchases and disbursements could be processed without detection. Our review did not disclose any inappropriate transactions that were processed by employees that had unnecessary or incompatible access. Similar conditions were commented upon in our preceding audit report.

Recommendation 1

We recommend that ACPS strengthen its controls over procurements and disbursements (repeat). Specifically, we recommend that ACPS

- a. restrict user's capabilities to those needed to perform their job duties, and separate employee duties to eliminate incompatible procurement and disbursement processing functions (repeat);**
- b. perform a periodic documented independent review of procurement and disbursement system access;**
- c. ensure that an independent supervisory employee reviews and approves purchase orders (repeat);**
- d. ensure that all required documents (for example, receiving reports) are obtained prior to the completion of payment processing;**
- e. consider the use of the document approval and tracking features of the automated procurement and accounts payable system;**
- f. ensure that changes to the vendor information recorded in the automated system are verified to appropriate source documentation by an independent employee (repeat); and**
- g. ensure that an independent employee conducts a documented comparison of transactions and checks processed to the related supporting documentation (repeat).**

Finding 2

ACPS did not assess the benefits of using an intergovernmental cooperative purchasing agreement (ICPA), nor did it ensure that the ICPA contract was awarded through a competitive procurement process, as required by State law.

Analysis

ACPS had not assessed the benefits of using one ICPA, nor did it ensure that the ICPA contract was awarded through a competitive procurement process, as required by State law. In addition, ACPS had not verified with the agency that awarded the original contract that the ICPA was based on a competitive

procurement process. For the current contract period, which covered fiscal years 2014 to 2018, ACPS' payments to the ICPA vendor totaled \$3.8 million. Upon our inquiry, ACPS advised us that it had participated in this ICPA since 1998, but for the current contract period had not documented the benefits of using the ICPA.

State law, which legal counsel to the Maryland General Assembly advised us is applicable to local education agencies, allows the use of cooperative purchasing arrangements or ICPAs only after the using entity has determined in writing that the use of such arrangements will provide cost benefits, promote administrative efficiencies, or promote intergovernmental cooperation¹. Another State law stipulates that contract bidding requirements do not apply to a county board of education's participation in contracts awarded by other public agencies or intergovernmental purchasing organizations if the lead agency for the contract follows public bidding procedures.

Recommendation 2

We recommend that ACPS comply with State law by

- a. ensuring that a written determination is prepared of the benefits of using ICPAs and,**
- b. obtaining documentation that the ICPA contract was competitively procured by the originating agency.**

Finding 3

Contracts were not always properly procured in accordance with established procurement policy or applicable State law.

Analysis

The procurement and awarding of contracts tested were not always in accordance with ACPS' formal procurement policy or State law. Our test of

¹ Section 13-110 of the State Finance and Procurement Article, of the Annotated Code of Maryland in part, defines an intergovernmental cooperative purchasing agreement (ICPA). As defined, an ICPA is a contract that is entered into by at least one governmental entity in a certain manner, that is available for use by the governmental entity entering the contract and at least one additional governmental entity, and that is intended to promote efficiency and savings that can result from intergovernmental cooperative purchasing. The aforementioned law applies to all ICPAs regardless of the services, goods, or commodities purchased. In addition, Section 5-112(a)(3) of the Education Article, of the Code provides that local education agencies do not need to conduct competitive procurements for goods and commodities if they use a contract awarded by public agencies or intergovernmental purchasing organizations and the originating procuring agency followed public bidding procedures.

five contracts, for which ACPS' payments to the vendors totaled \$5.7 million in fiscal years 2016 and 2017, disclosed the following:

- Competitive bidding and the related evaluation criteria were not used in procurement of a new automated financial system with an estimated cost of \$1.1 million. During April 2015, in lieu of publicly advertising the solicitation as required by State law, ACPS selected three vendors to receive a solicitation to implement a new automated financial system without documenting the basis for its decision to limit the solicitation. Furthermore, the solicitation did not include a description of the bid criteria that would serve as the basis for making the contract award, such as the type of minimum technical qualifications and the impact of the bidder's technical and price proposals on the award decision. ACPS awarded the contract to the vendor with the highest price proposal without written justification of its decision. The \$1.1 million contract award was \$406,000 more (56 percent) than the next highest bidder and \$450,000 more (66 percent) than the lowest bidder. Further, a formal documented assessment of the technical merits of the three proposals was not performed. Consequently, assurance was lacking that the best value was obtained. A similar condition was commented upon in our preceding audit.
- ACPS did not use *eMaryland Marketplace* to publish bids or awards for four contracts. ACPS' payments to the vendors totaled a combined \$4 million in fiscal years 2016 and 2017. State law requires a local school system to publish a procurement solicitation or notice of award greater than \$25,000 on *eMaryland Marketplace*.
- ACPS did not obtain the Superintendent's required approval for three contracts for which fiscal year 2016 and 2017 payments totaled \$2.3 million. Additionally, for one of these procurements, for which 2016 and 2017 payments totaled \$1.7 million, the required approval of the Board was not obtained. ACPS policy requires the Superintendent's approval of procurements of \$25,000 or more and those of \$1 million or more must be approved by the Board.

Recommendation 3

We recommend that ACPS

- a. establish and publicize the vendor bid evaluation criteria prior to soliciting bids, and document evaluation results in support of the related contract awards;**
- b. competitively bid all procurements unless adequate justification is appropriately documented for limiting the vendors solicited (repeat);**

- c. comply with State procurement law by using *eMaryland Marketplace*; and
- d. obtain required contract approvals in accordance with its policies.

Finding 4

ACPS did not execute a contract modification with its automated student information system vendor for cloud hosting and data back-up services, which resulted in a lack of contract provisions to protect its interests.

Analysis

ACPS did not execute a contract modification with its automated student information system (SIS) vendor for cloud hosting and data back-up services. Consequently, ACPS' contract did not establish provisions for required services, additional fees due, and needed protections and remedies for the additional system security and operational control risks.

In July 2012, the hosting of the ACPS SIS, which includes student grades and personally identifiable information (such as students' social security numbers), was transferred from an in-house server to an off-site cloud-based environment, which was to also include data back-up services. The off-site location vendor was the same as the vendor providing the system application software for the in-house server. However, ACPS did not execute a contract modification identifying the increased cost, additional security risks, and other considerations inherent with off-site hosting and data back-up services with the existing SIS vendor.

Information technology security and operational controls for maintaining the data in a cloud-based environment should be implemented in accordance with best practices². Specifically, contract provisions should include the frequency and location of data backups and provide for liquidated damages for the breach or loss of data. In addition, the contract should have outlined the specific costs associated with the additional services provided and required an independent security assurances report such as a System Organization Controls (SOC) report (which is discussed in greater detail in Finding 7 below).

ACPS' payments to the SIS vendor for system software and related services totaled \$643,000 during the period from fiscal years 2013 to 2018. These

² The Cloud Security Alliance, a not-for-profit organization with a mission to promote the use of best practices for providing security assurances within cloud computing, details the specific operational and security risks over data maintained in a cloud-based environment, such as those cited above, that need to be addressed in applicable cloud contracts.

payments included \$117,000 for added cloud hosting and data back-up services for which no formal agreement existed.

Recommendation 4

We recommend that ACPS

- a. ensure that contract modifications are executed as required and specify the services to be provided and related fees to be paid;
- b. ensure that security and operational controls are established for cloud-based hosting of automated systems and the related data, which include ensuring protection and timely back-up of critical data, and that a provision be made for liquidated damages in the event that the vendor fails to adequately safeguard the ACPS data; and
- c. require hosting vendors to obtain an appropriate annual SOC review and provide a copy to ACPS.

Human Resources and Payroll

Background

Payroll expense represents the largest single cost component in the ACPS budget. According to ACPS records, fiscal year 2017 salary, wage, and benefit costs totaled \$102.5 million, or 69 percent of the total operating expenditures. According to Maryland State Department of Education reports, during the 2016-2017 school year ACPS had 1,188 full-time positions, which consisted of 845 instructional positions and 343 non-instructional positions.

ACPS uses an automated system to maintain human resources information, process payroll, track leave usage, and process and record payroll transactions. Employees submit attendance reports bi-weekly and leave is recorded and adjustments are processed on the system by central payroll personnel. The system also generates payroll checks and direct deposit advices.

Finding 5

ACPS did not ensure employee access to human resources and payroll systems was appropriate and adequately controlled.

Analysis

ACPS did not ensure employee access to human resources and payroll systems was appropriate and adequately controlled.

- Employee access to automated human resources and payroll functions was not subject to periodic supervisory review to ensure that such access was appropriate and necessary. Our review of critical human resources and payroll access capabilities (such as, adding employees, processing payroll transactions) assigned to 12 ACPS employees disclosed that 2 employees who processed payroll transactions also had unnecessary access to human resources functions. Additionally, these 2 employees were responsible for authorizing the final release of the bi-weekly payroll.
- ACPS did not perform independent documented reviews of all critical personnel and payroll transactions processed. Although system reports of payroll changes processed were generated each pay period for independent supervisory review, the review of the reports was not documented. Additionally, the reports were not all inclusive as they excluded employee terminations.
- ACPS did not perform an independent review of the hourly wages entered on the system for Transportation Department employees. Specifically, an independent employee did not review the related time sheets to verify the accuracy of the hours worked, authorized hourly rate, and calculation of wages paid. Further, the time sheets were not signed by either the employee or their supervisor. Consequently, assurance was lacking that the time worked and wages paid were proper. Transportation Department payroll expenditures totaled approximately \$970,000 in fiscal year 2017.
- ACPS did not obtain the appropriate form of supervisory approval of critical human resources documentation to add new employees, process salary increases, and delete employees from the payroll. Although the approval documentation included a pre-printed signature of the Superintendent, no other supervisory approvals were written on the form.

Our review did not disclose any inappropriate or erroneous transactions that were processed by the employees that had unnecessary or incompatible access. Similar conditions regarding the lack of a documented independent review of critical human resources and payroll changes was commented upon in our preceding audit report.

Recommendation 5

We recommend that ACPS

- periodically (such as annually) ensure that human resources and payroll system capabilities assigned to employees are appropriate, including removing human resources functions unnecessarily assigned to the two employees identified above;**

- b. perform a documented independent supervisory review of all critical human resources and payroll transactions processed (including hourly wages and terminated employees) to ensure that they are supported by appropriate documentation (repeat); and
- c. ensure the supervisory approval of critical payroll documents, such as personnel transaction forms and time sheets, is properly documented.

Equipment Control and Accountability

Background

According to ACPS' audited financial statements, the undepreciated value of its capital equipment was \$20 million as of June 30, 2017. ACPS maintains centralized automated records to track equipment inventory with a cost of \$1,500 or more (including assets capitalized for financial statement purposes). In addition, ACPS tracks equipment with a cost of less than \$1,500 deemed as sensitive that is subject to theft (such as information technology items) using automated records for control purposes.

Finding 6

ACPS had not established comprehensive equipment policies, adequate record keeping practices, and controls over equipment.

Analysis

ACPS had not established comprehensive written equipment policies and procedures, adequate record keeping requirements, and controls to ensure adequate accountability over its schools' equipment inventory.

- ACPS equipment policies and procedures did not include requirements for investigating and reporting lost or stolen items, or separating the duties of equipment custody, performing physical inventories, and recordkeeping. In addition, while policies and procedures require that all purchases of information technology (IT) equipment be recorded in a separate database regardless of cost, we were advised by IT personnel that only certain IT equipment items are recorded and the basis for such decisions varied. For example, certain items valued at less than \$300 (such as, digital cameras) were not recorded in the database. Furthermore, even though policies specify that the disposal of capital assets valued at \$3,000 or more require written supervisory approval on a designated form, the policies did not require written supervisory approval for all other assets.

- Entries in the equipment records for additions, disposals, and adjustments were not verified to supporting documents by independent supervisory personnel. For example, our test of 15 disposals of IT equipment items (such as network servers and laptop computers) totaling \$239,601, disclosed that independent approval was not obtained for any of the disposals and ACPS could not provide copies of the forms for the disposal of 6 items totaling \$43,024.
- The employee that was primarily responsible for receiving and recording equipment in the inventory records also investigated missing equipment.

As a result of the deficiencies cited above, equipment could be lost or misappropriated without detection. A similar condition regarding the lack of independent approval of disposals was commented upon in our preceding audit report.

Recommendation 6

We recommend that ACPS ensure

- a. comprehensive written policies and procedures are established to govern the accounting and safeguarding of its equipment, that address the issues cited above, including the segregation of employee duties; and**
- b. independent supervisory approval is obtained and documentation is verified before property records are updated (repeat).**

Information Technology

Background

ACPS' Information Technology Department (ITD) provides information system services to the Allegany County Commissioners (County Government) and ACPS. Specifically, ITD maintains and administers the ACPS computer network, computer operations, and information systems applications. The ACPS network operates as a wide area network, with Internet connectivity, which connects the individual ACPS schools' local networks to the computer resources located at the ACPS headquarters.

ITD maintains a computer room at the headquarters location in which computer servers operate to support certain ACPS information system needs, including a human resources application. Other significant administrative information system applications involving the ACPS finance and student information systems are operated and supported by third-party service providers.

Finding 7

ACPS lacked assurance that adequate information technology security and operational controls existed over its financial and student information systems, which were hosted, operated, and maintained by service providers.

Analysis

ACPS lacked assurance that adequate information technology security and operational controls existed over its financial and student information systems that were hosted, operated, and maintained by service providers. Specifically, ACPS had not performed its own security reviews or obtained and reviewed available independent security review reports.

- Our July 2018 review determined that ACPS had neither performed its own security review nor obtained reports of independent, standards-based security reviews for the ACPS' financial system that was hosted, operated, and maintained by a service provider, to ensure ACPS information was properly safeguarded. Based upon our inquiry, ACPS requested and obtained the service provider's SOC 2 Type 2 report, dated September 29, 2017, for the period of July 1, 2016 to June 30, 2017.

We reviewed the report and found that no control weaknesses were cited. However, we also noted that the report did not address certain key security controls typically addressed by a SOC 2 review. For example, we noted that the SOC 2 report did not provide test results evidencing whether data in transit, at rest, and within backups were encrypted; and that reports of privileged user access activities, authorized and unauthorized access attempts, and information security events were generated and retained. Furthermore, the report did not stipulate that adequate account and password controls were implemented over applications, databases, and operating systems.

- ACPS had not performed its own security review for the primary service provider that hosted, operated, and maintained ACPS' student information system, and had also not obtained any independent, standards-based security review for its operations. Furthermore, the subcontractor providing data center hosting had a SOC 2 Type 2 review performed; however, ACPS had not obtained and reviewed the related report. We subsequently obtained and reviewed the data center hosting subcontractor's SOC report and noted that no control weakness were reported.

For ACPS' financial and student information systems, significant operational and security risks could exist and remain undetected resulting in limited assurance of data security.

The American Institute of Certified Public Accountants has issued guidance concerning examinations of service providers. Based on this guidance, service providers may contract for an independent review of controls and resultant independent auditor's report referred to as a SOC report. There are several types of SOC reports, with varying scopes and levels of review and auditor testing. One type of report, referred to as a SOC 2 Type 2 report for Service Organizations, contains the service organization's description of its system and the results of the auditor's examination of the suitability of the system design, operating effectiveness for the period under review, and can include an evaluation of system security, data availability, processing integrity, confidentiality, and privacy trust criteria. Due to the nature and sensitivity of the information contained in ACPS' financial and student information systems, we believe a SOC 2 Type 2 report covering both the system security and data availability trust criteria is necessary.

Recommendation 7

We recommend that ACPS, for its financial and student information systems

- a. obtain and review copies of SOC 2 Type 2 reports annually and ensure that these reviews, at a minimum, cover the security and availability trust criteria including all related critical security controls; and**
- b. ensure that these reviews adequately address all necessary critical security and operational concerns and that the service provider implements all critical report recommendations.**

Finding 8

Certain publicly accessible servers were improperly located within the internal network, intrusion detection prevention system coverage was not adequate or complete, and ACPS network resources were not secured against improper access from students using either ACPS owned or their personal devices.

Analysis

The ACPS computer network was not adequately secured. We noted the following conditions affecting network security.

- Certain publicly accessible servers were located in the ACPS internal network rather than being isolated in a separate protected network zone to minimize security risks. These publicly accessible servers, if compromised, could expose the internal network to attack from external sources. Recommended security procedures, as stated in the National

Institute of Standards and Technology *Guidelines on Firewalls and Firewall Policy*, include placing publicly accessible servers in an external protected zone to protect those servers as well as the entity's internal network. A similar condition was commented upon in our preceding audit report.

- The ACPS network's intrusion detection prevention system (IDPS) was configured to detect, log, and report potentially malicious intrusion attempts instead of blocking these attempts. Accordingly, effective IDPS protection did not exist for the ACPS network. Additionally, IDPS coverage for encrypted traffic entering the ACPS network did not exist. Specifically, host-based intrusion prevention system (HIPS) coverage was not in use on ACPS servers that processed encrypted traffic, nor was encrypted traffic subject to inspection by the ACPS network-based IDPS. We identified 12 firewall rules that allowed traffic from any source to access 14 unique ACPS network destinations via encrypted methods without IDPS coverage. The absence of IDPS coverage for such encrypted traffic creates network security risk as such traffic could contain malicious data, which are not detected or dropped. Best practices in the State of Maryland *Information Security Policy* require protection against malicious code and attacks by using IDPS to monitor system events, detect attacks, and identify unauthorized use of information systems and/or confidential information.
- ACPS did not adequately secure its internal network from improper network-level access from ACPS students' wireless traffic using either ACPS owned computers or their personal devices. ACPS did not use or have adequate network-level traffic filtering to protect its network from activity emanating from these student connections, resulting in improper access to broad portions of the ACPS internal network. Student access from these connections should be limited to devices and ports necessary for these students to perform required educational tasks. Best practices in the State of Maryland *Information Security Policy* require that entities' networks ensure that only authorized individuals have access to confidential information and that such access is strictly controlled, audited, and that it supports the concepts of least possible privilege and need to know.

Recommendation 8

We recommend that ACPS

- a. relocate all publicly accessible servers to a separate protected network zone to limit security exposures to the internal network segment (repeat);**
- b. perform a documented review and assessment of its network security risks and identify how preventive mode IDPS coverage should be applied**

- to its network for all untrusted traffic, including encrypted traffic, and implement this coverage; and
- c. restrict student network-level access to only authorized local school and headquarters instructional network resources.

Finding 9

Certain ACPS computer workstations were running outdated software or lacking malware protection software.

Analysis

Certain ACPS computer workstations were running outdated software or lacking malware protection software. Consequently, assurance was lacking that the related workstations were properly protected against malicious software.

- Certain ACPS workstations had not been updated with the latest releases for software products that are known to have significant security-related software vulnerabilities. Although the vendors for these software products frequently provide software patches to address these vulnerabilities, ACPS had not updated these workstations by applying these patches. For example, as of August 2018, we identified that 8 of 10 tested workstations were running outdated versions of a commonly vulnerable application where the older software versions installed on the workstations had release dates that ranged from October 2012 to February 2018.
- Malware protection software was not installed on ACPS workstations that used a certain operating system software product. In this regard, we were advised by ACPS personnel that approximately 70 workstations were operating using this operating system without malware protection software installed.

The above conditions create potential system security vulnerabilities from malicious software. Best practices in the State of Maryland *Information Security Policy* state that system hardening procedures shall be created and maintained to ensure up-to-date security best practices are deployed at all levels of IT systems (operating systems, applications, databases, and network devices). The *Policy* also requires that agencies, at a minimum, must protect against malicious code (viruses, worms, Trojan horses) by implementing anti-malware solutions that, to the extent possible, include a capability for automatic updates.

Recommendation 9

We recommend that ACPS

- a. promptly install all critical security-related software updates for commonly vulnerable applications on all computers, and
- b. ensure that malware protection software is installed on all computers and that the related signatures are kept up-to-date.

Facilities Construction, Renovation, and Maintenance

Background

ACPS maintains 21 schools and other administrative and support offices with a staff of 80 custodial and 21 maintenance personnel. According to the fiscal year 2018 Capital Improvement Plan, planned construction, major renovations, and systemic improvements to ACPS facilities over the next six years (fiscal years 2018 through 2023) are estimated to cost \$66.8 million.

ACPS Capital Projects Were Properly Approved By the Board

Our review of four construction-related procurements during fiscal years 2014 through 2016 totaling \$54.5 million disclosed that they were competitively procured and were properly awarded and approved by the Board. In addition, our test of five invoices totaling \$13.2 million disclosed that the invoices were properly reviewed and approved and the amounts invoiced were in accordance with related contract terms.

Processes are in Place to Promote Ongoing Facility Maintenance and to Minimize Energy Costs

ACPS has processes in place to promote ongoing facility maintenance and to minimize energy costs. For example, ACPS provides preventive maintenance of its buildings and equipment to prevent emergency repairs. In addition, ACPS uses energy management systems to monitor heating and air conditioning systems from a central location to control temperature settings. ACPS also has written policies that encourage both students and employees to be aware of and limit their energy use. Finally, ACPS has a commodity agreement with an independent energy supplier, which results in it receiving its electricity at a lower rate than its local utility.

Transportation Services

Background

ACPS has approximately 5,300 students eligible to receive student transportation services. These students were transported on 107 buses, of which 88 were owned and operated by contractors and the remaining 19 were owned by ACPS. According to ACPS financial records, fiscal year 2017 transportation costs totaled \$5.9 million, with \$4.3 million (73 percent) representing payments for contracted bus services. ACPS reported that 1.6 million route miles were traveled to transport students for the 2016-2017 school year.

Payments to bus contractors consist of amounts for the purchase of a bus (known as a per-vehicle allotment or PVA, intended as reimbursement for the cost of a bus and a flat rate for return on investment), hourly reimbursements for drivers, a per-mile maintenance fee, fuel costs, and an annual administrative fee. ACPS bus contracts are for a one-year term and renew automatically over the 12-year useful life of the bus, unless terminated by either party by giving 30 days written notice.

Finding 10

ACPS had not implemented certain practices to promote more efficient use of bus operations.

Analysis

ACPS bus routing procedures were not comprehensive, and a periodic system-wide analysis of bus routes and related bus ridership capacities was not performed to maximize the efficiency of its bus routes and address bus routes with low ridership.

ACPS' bus routing procedures were not comprehensive as they excluded formal ridership goals and student ride time limits, and existing bus routing procedures did not address the periodic reassessment of route efficiency on an individual or system-wide basis. ACPS had established school bus capacities for high, middle, and elementary school routes based on manufacturer-stated bus capacities,³ but the percentage of these capacities to be achieved in planning individual routes was not incorporated into the procedures. In addition, ACPS had not performed a system-wide analysis of bus routes and related bus capacities to maximize the efficiency of its bus

³ It is customary for school bus capacities to be lower than manufacturer stated capacities and differ depending on the school level. For example, for a similar sized bus, the capacity for elementary school students is higher than for high school students.

routes and address bus routes with low ridership. Although ACPS owned an automated bus routing software tool, it did not fully use this tool to calculate alternative routes, route consolidations, or bus stop consolidations that might reduce costs. Consequently, routes may be inefficiently designed and result in significantly underutilized capacity on individual buses (as noted below) and in operating more buses than necessary to fulfill ACPS' transportation needs. Our analysis of routing system data for 156 regular routes (we excluded certain special runs from our analysis) for the 2017-2018 school year disclosed that 121 routes were designed to transport students at less than 75 percent of ACPS' recommended bus capacity; including 57 routes that transported students at less than 50 percent of bus capacity. While we recognize that Allegany County includes large rural areas, which can make it difficult to maximize ridership in all cases, our analysis included all regular routes, so the buses cited were not isolated to only rural regions of the county.

Similar conditions were commented upon in our preceding audit report.

Recommendation 10

We recommend that ACPS

- a. **develop formal, comprehensive written policies and procedures that include student ride times, ridership goals, and any other factors affecting bus routing decisions (repeat); and**
- b. **use its automated bus routing software to periodically perform a system-wide analysis of its bus routes, to maximize the ridership on its bus routes (repeat).**

Finding 11

Certain elements used to determine payments to bus contractors did not reflect market conditions, actual costs, or were not properly documented.

Analysis

Certain elements used to determine payments to bus contractors did not reflect market conditions, actual costs, or were not properly documented. Our review of the contract terms and related payments disclosed the following conditions:

- ACPS' basis for the annual return on investment (ROI) used in the PVA payment formula was higher than the ROI suggested by certain studies⁴. ROI provides a financial return for the contractor investing in the purchase of a bus instead of another investment option over the 12-year life of the bus. ACPS' payment formula resulted in an average ROI of 7 percent for the 48 buses placed in service by contractors from fiscal years 2013 through 2018. The average ROI ACPS paid was higher because ACPS had established a minimum of 5 percent for the prime interest rate in its formula instead of using the actual prime rate plus 2 percent.

If ACPS would have used an ROI methodology based on the recommendation of a consultant hired by another Maryland school system, we estimate that its annual PVA payments for each of the 48 buses would have been from \$701 to \$1,777 lower. Over the 12-year life of those buses, ACPS could have saved approximately \$857,000. The savings would have resulted from the difference between using the prime rate (which ranged from 3.25 percent to 4.25 percent during fiscal years 2013 to 2018) plus 2 percent, which was recommended by the consultant, and the ACPS ROI rate of 7 percent. This analysis does not include the effects of lost interest income that could have been earned.

- ACPS payments to contractors for bus maintenance and operations costs were negotiated with the bus contractors; however, the basis for these costs was not documented nor supported by industry standards. For fiscal year 2018, ACPS paid a \$0.90 per-mile fee to reimburse the contractors for bus maintenance costs, which based on the number of reported miles driven by contractor buses; we estimate that ACPS paid approximately \$1.1 million for these costs.
- The standard contracts that ACPS executes with its bus contractors did not include a right to audit provision. Such a provision would allow ACPS to

⁴ There is no generally agreed upon formula or method for determining ROI. In 1975, an MSDE study recommended the prime rate as a reasonable ROI interest rate. The prime rate is actually a lending rate that nearly always exceeds the available market investment rate; therefore, it was deemed reasonable for the ROI calculation. The use of the prime interest rate was again recommended in a November 1999 study commissioned by another local Maryland school system. In 2012, another school system's consultant's report recommended the prime rate plus 2 percent as a reasonable ROI, which serves as the basis for our calculations. In ACPS' case, the use of prime plus 2 percent indicated that its various ROIs were still potentially excessive. Finally, a May 2010 MSDE PVA Workgroup commented that the profit (or ROI) to be included in the PVA should reflect what a reasonable investor or businessperson would expect on a long-term investment, and not necessarily the prime rate. Under that assumption, we noted that as of October 2016, current 10 and 30-year US Treasury Note rates, which could be reflective of a reasonable long-term investment option, were 1.8 and 2.5 percent, respectively.

verify the contractor's actual costs of purchasing and maintaining the buses when negotiating the PVA, hourly reimbursements for drivers, the per-mile maintenance fee, fuel costs, and the annual administrative fees. The State of Maryland has established a preference in regulation that all contracts require contractors to make their records available for audit by authorized representatives of the State at all reasonable times.

Recommendation 11

We recommend that ACPS ensure that all contractor payments have a documented and justified basis by ensuring that

- a. reasonable market investment rates are used as a basis for establishing contractor rates for the annual PVA;
- b. actual bus operating costs are used, or supportable cost estimates are developed, as the basis for establishing reasonable contractor rates for per mile maintenance costs; and
- c. bus contracts include a right to audit provision.

Food Services

Background

ACPS has a cooking cafeteria at each of its 21 schools. Most food and related supplies are received and stored at a central warehouse and delivered to the schools as needed. In fiscal year 2017, ACPS had 71 food service positions (consisting of 63 cafeteria positions and 8 administrative and warehouse positions). According to its fiscal year 2017 audited financial statements, food service operation revenues (\$5.2 million) exceeded food service operation expenditures (\$5.1 million) by approximately \$100,000. According to MSDE records, 55 percent of ACPS' students qualified for free and reduced-price meals as of October 31, 2017.

Cash Handling Procedures Were Established for Cafeteria Sales

ACPS' Board of Education has a responsibility to ensure that cafeteria sales are appropriately controlled, recorded, and safeguarded. ACPS' *Food Services Operations Manual* provides a uniform policy for the handling of all cafeteria sales. Specifically, the *Manual* outlines responsibilities for inventory management, cash handling, and cash register sales reconciliations that are applicable to every school.

Since food service operation revenues exceed expenditures and 55 percent of its students qualify for free and reduced-price meals, we did not perform any audit work in the area of food service operations.

School Board Operations

Background

The Allegany County Board of Education (the Board) is composed of five elected members and a non-voting student representative. In its oversight responsibilities, the Board contracted with a certified public accounting firm for independent audits of the ACPS financial statements and federal programs.

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

The Board adopted a detailed ethics policy that conformed to State Law and includes provisions for conflicts of interest and financial disclosure.

Provisions of this policy are applicable to Board members as well as all ACPS employees. ACPS established an Ethics Panel consisting of five members to interpret the ethics policy and provide advice on policy implementation.

According to the ethics policy, annual financial disclosure statements are required to be filed by Board members, candidates for the Board, and the Superintendent by April 30th of each year.

Management of Other Risks

Healthcare Background

ACPS is self-insured and uses a third-party administrator (TPA) to oversee and administer its employee and retiree healthcare plans. Specifically, for medical coverage, ACPS contracts with a TPA to provide administrative services, such as claims processing for participants' medical costs (including drug costs) and for stop-loss coverage. Stop-loss coverage indemnifies ACPS against health insurance claim amounts that exceed a certain threshold for a member. ACPS periodically bids out its health care services with the assistance of a consultant. The most recent solicitation was for plan year 2019.

Medical providers submit claims to the TPA who pays them on behalf of ACPS. ACPS reimburses the TPA for the claims it reports as paid on behalf of ACPS and pays an administrative fee for these services. ACPS hired contractors to verify the eligibility of program participants and their listed dependents and to periodically audit the propriety of claims paid by the TPA. In 2013, a contractor performed a review of 1,769 dependents of plan participants that identified 99 ineligible dependents. The contractor projected that the removal of the ineligible dependents would save the plan over \$2 million over the next 5 years. Subsequent to the audit, ACPS instituted a process to verify the eligibility of employee dependents prior to enrollment in the health care plans. The most recent claims review was conducted in 2017, which disclosed 11

payment errors related to the 100 claims examined. Collectively, ACPS did not deem the payment errors to be significant.

According to ACPS records, health care expenditures totaled \$20.2 million in fiscal year 2017, including administrative fees and stop-loss individual coverage totaling \$1.5 million. Our review disclosed that ACPS had adequate procedures in place for the review of administrative fees and stop-loss billings.

Audit Scope, Objectives, and Methodology

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

We had two broad audit objectives:

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

In planning and conducting our audit of ACPS, we focused on 11 major financial-related areas of operations as approved on December 6, 2016 by the Joint Audit Committee of the Maryland General Assembly in accordance with the enabling legislation. The scope of the work performed in each of these areas was based on our assessments of significance and risk. Therefore, our follow-up on the status of findings included in our preceding audit report on ACPS dated January 29, 2013 was limited to those findings that were applicable to the current audit scope for each of the 11 areas.

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

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

records, and observations of ACPS 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, 2015 to February 28, 2018. Generally, transactions were selected for testing based on auditor judgment, which primarily considers risk. Unless otherwise specifically indicated, neither statistical nor non-statistical audit sampling was used to select the transactions tested. Therefore, the results of the tests cannot be used to project those results to the entire population from which the test items were selected. For certain areas within the scope of the audit, we relied on the work performed by the independent accounting firm that annually audits ACPS' financial statements and conducts the federal Single Audit.

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

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

ACPS' 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 findings were communicated to ACPS that were not deemed significant and, consequently, did not warrant inclusion in this report.

We conducted our fieldwork from March 2018 to September 2018. The ACPS response to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise ACPS regarding the results of our review of its response.

APPENDIX



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Members of the Board of Education

Robert S. Farrell, President
David A. Bohn, DC, Vice President
Wayne T. Foote
Tammy M. Fraley
Debra L. Frank

Superintendent of Schools

David A. Cox, Ed.D.

Gregory A. Hook, CPA
Department of Legislative Services
Office of Legislative Audits
301 West Preston Street, Room 1202
Baltimore, MD 21201

Dear Mr. Hook:

Attached please find a paper copy of Allegany County Public Schools Agency Response Form from the June 2019 draft Financial Management Practices Audit Report for Allegany County Public Schools. We have also emailed a copy of our responses to response@ola.state.md.us.

If you have any questions about any of our responses, please do not hesitate to call me.

Sincerely,

A handwritten signature in blue ink, appearing to read "David A. Cox", written over a horizontal line.

Dr. David A. Cox
Superintendent of Schools

Allegany County Public Schools

Agency Response Form

Procurement and Disbursement Cycle

Finding 1

ACPS did not adequately restrict users' capabilities in its automated procurement and accounts payable system and certain transactions were not subjected to independent review or supported by required documents.

We recommend that ACPS strengthen its controls over procurements and disbursements (repeat). Specifically, we recommend that ACPS

- a. restrict user's capabilities to those needed to perform their job duties, and separate employee duties to eliminate incompatible procurement and disbursement processing functions (repeat);
- b. perform a periodic documented independent review of procurement and disbursement system access;
- c. ensure that an independent supervisory employee reviews and approves purchase orders (repeat);
- d. ensure that all required documents (for example, receiving reports) are obtained prior to the completion of payment processing;
- e. consider the use of the document approval and tracking features of the automated procurement and accounts payable system;
- f. ensure that changes to the vendor information recorded in the automated system are verified to appropriate source documentation by an independent employee (repeat); and
- g. ensure that an independent employee conducts a documented comparison of transactions and checks processed to the related supporting documentation (repeat).

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	The timing of the audit along with recent launch of a new financial system made it more difficult to meet the audit program requirements.		
Recommendation 1a	Agree	Estimated Completion Date:	9/30/19
Please provide details of corrective action or explain disagreement.	With the implementation of a new system basically corresponding with the start of the legislative audit, we recognized that there may be some incompatible functions in the beginning with the launch of the new system. ACPS is committed to strengthening its internal controls where appropriate and as part of that is in the process of reviewing employee roles to ensure it limits incompatibility and utilizes exception reporting within the system to verify that "superusers" are not able to circumvent system controls.		

Allegany County Public Schools

Agency Response Form

Recommendation 1b	Agree	Estimated Completion Date:	7/15/19
Please provide details of corrective action or explain disagreement.	ACPS agrees that system access should be reviewed annually at a minimum.		
Recommendation 1c	Agree	Estimated Completion Date:	4/1/20
Please provide details of corrective action or explain disagreement.	ACPS will implement this recommendation in the future. The system has robust automated purchase order functionality available and it will be phased in in the future. This is something that the district was working towards prior to the OLA recommendation.		
Recommendation 1d	Agree	Estimated Completion Date:	4/1/20
Please provide details of corrective action or explain disagreement.	This recommendation will be completed along with item C. above. Again it has been on our radar and will be phased in in the future.		
Recommendation 1e	Agree	Estimated Completion Date:	4/1/20
Please provide details of corrective action or explain disagreement.	The district plans to phase in the document approval and tracking features within the new software system.		
Recommendation 1f	Agree	Estimated Completion Date:	7/15/19
Please provide details of corrective action or explain disagreement.	This function will be assigned to a new staff member independent of the Accounts Payable process. System access within A/P to change vendor information or create new vendors will be eliminated from their profiles.		
Recommendation 1g	Agree	Estimated Completion Date:	7/15/19
Please provide details of corrective action or explain disagreement.	We feel this does occur, however, the individual tasked with this function also has certain rights within the system that OLA felt made this a matter of incompatibility. We are removing this individual's rights relative to making payments with the A/P system so that they are more independent.		

Allegany County Public Schools

Agency Response Form

Finding 2

ACPS did not assess the benefits of using an intergovernmental cooperative purchasing agreement (ICPA), nor did it ensure that the ICPA contract was awarded through a competitive procurement process, as required by State law.

We recommend that ACPS comply with State law by

- a. ensuring that a written determination is prepared of the benefits of using ICPAs and,
- b. obtaining documentation that the ICPA contract was competitively procured by the originating agency.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.			
Recommendation 2a	Agree	Estimated Completion Date:	10/1/19
Please provide details of corrective action or explain disagreement.	ACPS is committed to complying with all applicable federal and state laws and will make a written determination of the benefits of using any ICPA going forward as required by law.		
Recommendation 2b	Agree	Estimated Completion Date:	8/15/19
Please provide details of corrective action or explain disagreement.	ACPS will obtain documentation that any contract it uses was competitively procured by the originating entity going forward.		

Allegany County Public Schools

Agency Response Form

Finding 3

Contracts were not always properly procured in accordance with established procurement policy or applicable State law.

We recommend that ACPS

- establish and publicize the vendor bid evaluation criteria prior to soliciting bids, and document evaluation results in support of the related contract awards;
- competitively bid all procurements unless adequate justification is appropriately documented for limiting the vendors solicited (repeat);
- comply with State procurement law by using *eMaryland Marketplace*; and
- obtain required contract approvals in accordance with its policies.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.			
Recommendation 3a	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS agrees		
Recommendation 3b	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS agrees that competitive bids by their nature typically provide better pricing. The district agrees that it should document justification should it limit the vendors submitted.		
Recommendation 3c	Agree	Estimated Completion Date:	10/31/19
Please provide details of corrective action or explain disagreement.	ACPS will send this recommendation to the policy committee so that purchasing guidelines can be updated and by policy require the district post major procurements on eMaryland Marketplace so the district will be compliant with Maryland law.		
Recommendation 3d	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS agrees, however, there are times that contracts are for agreed upon pricing that usage sometimes surpasses the thresholds for signature, but ACPS will try to monitor those instances and secure the appropriate signatures when the threshold is met.		

Allegany County Public Schools

Agency Response Form

Finding 4

ACPS did not execute a contract modification with its automated student information system vendor for cloud hosting and data back-up services, which resulted in a lack of contract provisions to protect its interests.

We recommend that ACPS

- ensure that contract modifications are executed as required and specify the services to be provided and related fees to be paid;
- ensure that security and operational controls are established for cloud-based hosting of automated systems and the related data, which include ensuring protection and timely back-up of critical data, and that a provision be made for liquidated damages in the event that the vendor fails to adequately safeguard the ACPS data; and
- require hosting vendors to obtain an appropriate annual SOC review and provide a copy to ACPS.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	ACPS understands the concerns of the OLA, but also would like to point out that is has had a long term relationship with the vendors of concern.		
Recommendation 4a	Agree	Estimated Completion Date:	9/30/19
Please provide details of corrective action or explain disagreement.	ACPS will review all IT vendor contracts.		
Recommendation 4b	Agree	Estimated Completion Date:	12/31/19
Please provide details of corrective action or explain disagreement.	ACPS believes that this does currently occur with its contracts, with the exception of the contract concerns OLA provided relative to a particular vendor. ACPS will review that vendor and execute a contract that addresses the concerns of safeguarding the system and related data.		
Recommendation 4c	Agree	Estimated Completion Date:	9/30/19
Please provide details of corrective action or explain disagreement.	ACPS is in agreement.		

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Human Resources and Payroll

Finding 5

ACPS did not ensure employee access to human resources and payroll systems was appropriate and adequately controlled.

We recommend that ACPS

- a. periodically (such as annually) ensure that human resources and payroll system capabilities assigned to employees are appropriate, including removing human resources functions unnecessarily assigned to the two employees identified above;
- b. perform a documented independent supervisory review of all critical human resources and payroll transactions processed (including hourly wages and terminated employees), to ensure that they are supported by appropriate documentation (repeat); and
- c. ensure the supervisory approval of critical payroll documents, such as personnel transaction forms and time sheets, is properly documented.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	The district will be implementing a new payroll system by year end 2019 and will implement these changes throughout the new system.		
Recommendation 5a	Agree	Estimated Completion Date:	7/15/19
Please provide details of corrective action or explain disagreement.	ACPS agrees that annually it will review access for HR and payroll employees relative to system capabilities.		
Recommendation 5b	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS currently does this, but agrees that it should be better documented to ensure an appropriate audit trail exists.		
Recommendation 5c	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS is in agreement. HR has recently started signing off on all assignment forms. Also, there was one instance where one department had not properly approved their payroll documents. This practice has changed for that department. Also, payroll signs off on the accuracy of the payroll documents for that department as well.		

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Equipment Control and Accountability

Finding 6

ACPS had not established comprehensive equipment policies, adequate record keeping practices, and controls over equipment.

We recommend that ACPS ensure

- a. comprehensive written policies and procedures are established to govern the accounting and safeguarding of its equipment, that address the issues cited above, including the segregation of employee duties; and
- b. independent supervisory approval is obtained and documentation is verified before property records are updated (repeat).

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.			
Recommendation 6a	Agree	Estimated Completion Date:	1/1/20
Please provide details of corrective action or explain disagreement.	Allegany is a small district and segregation of duties can be difficult. However, the district will consider alternatives that provide better segregation of duties. The district also agrees that policies relating to equipment both regular and sensitive should be updated and modified to reflect best practices.		
Recommendation 6b	Agree	Estimated Completion Date:	7/15/19
Please provide details of corrective action or explain disagreement.	There were instances that supervisory approval was not obtained prior to equipment/property records being updated. However, to that end, the technicians are the local experts on the needs of the schools. However, supervisory approval will be sought prior to moving forward in the future.		

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Information Technology

Finding 7

ACPS lacked assurance that adequate information technology security and operational controls existed over its financial and student information systems, which were hosted, operated, and maintained by service providers.

We recommend that ACPS, for its financial and student information systems

- a. obtain and review copies of SOC 2 Type 2 reports annually and ensure that these reviews, at a minimum, cover the security and availability trust criteria including all related critical security controls; and
- b. ensure that these reviews adequately address all necessary critical security and operational concerns and that the service provider implements all critical report recommendations.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	ACPS acknowledges that the SOC 2 Type 2 reports will be requested annually to adequately address staff and student security concerns.		
Recommendation 7a	Agree	Estimated Completion Date:	9/30/19
Please provide details of corrective action or explain disagreement.	ACPS is in agreement. This is the same issue as finding five. ACPS will review, store, and approve the documents for future audits.		
Recommendation 7b	Agree	Estimated Completion Date:	9/30/19
Please provide details of corrective action or explain disagreement.	ACPS is in agreement. ACPS will review, store, and approve the documents for future audits.		

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Finding 8

Certain publicly accessible servers were improperly located within the internal network, intrusion detection prevention system coverage was not adequate or complete, and ACPS network resources were not secured against improper access from students using either ACPS owned or their personal devices.

We recommend that ACPS

- relocate all publicly accessible servers to a separate protected network zone to limit security exposures to the internal network segment (repeat);
- perform a documented review and assessment of its network security risks and identify how preventive mode IDPS coverage should be applied to its network for all untrusted traffic, including encrypted traffic, and implement this coverage; and
- restrict student network-level access to only authorized local school and headquarters instructional network resources.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.			
Recommendation 8a	Agree	Estimated Completion Date:	12/2020
Please provide details of corrective action or explain disagreement.	ACPS is moving all locally hosted servers to the cloud. All remaining ACPS servers will be completed by the end of next year.		
Recommendation 8b	Agree	Estimated Completion Date:	9/15/19
Please provide details of corrective action or explain disagreement.	IDPS coverage has been purchased by the district with the intention of going live in summer 2019.		
Recommendation 8c	Agree	Estimated Completion Date:	9/2020
Please provide details of corrective action or explain disagreement.	ACPS has started to implement updated policies on both network switches and wireless access points. This will limit student access to network resources.		

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Finding 9

Certain ACPS computer workstations were running outdated software or lacking malware protection software.

We recommend that ACPS

- a. promptly install all critical security-related software updates for commonly vulnerable applications on all computers, and
- b. ensure that malware protection software is installed on all computers and that the related signatures are kept up-to-date.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.			
Recommendation 9a	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	ACPS purchased a software maintenance product to keep all computers up to date with critical security patches.		
Recommendation 9b	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	We agree that malware protection is needed for all PC's, however it is not supported or recommended by a manufacturer for its products. ACPS will investigate purchasing a specific software product for additional malware protection.		

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Transportation Services

Finding 10

ACPS had not implemented certain practices to promote more efficient use of bus operations.

We recommend that ACPS

- a. develop formal, comprehensive written policies and procedures that include student ride times, ridership goals, and any other factors affecting bus routing decisions (repeat); and
- b. use its automated bus routing software to periodically perform a system-wide analysis of its bus routes, to maximize the ridership on its bus routes (repeat).

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	It is important to understand and acknowledge that the district does review individual bus routes periodically and makes the appropriate changes accordingly.		
Recommendation 10a	Agree	Estimated Completion Date:	1/1/20
Please provide details of corrective action or explain disagreement.	ACPS agrees that it could bolster some of the existing policies and procedures, where possible.		
Recommendation 10b	Agree	Estimated Completion Date:	1/1/20
Please provide details of corrective action or explain disagreement.	ACPS does utilize bus routing software to supplement the knowledge of the transportation department employees, bus drivers, and assistants. However, bus routing software cannot in and of itself consider all factors in making bus routes, especially in a rural district, so it is a piece of data used by the transportation department in determining bus routes. ACPS agrees that bus routes, especially those with low ridership, should be scrutinized and reviewed periodically and we feel they are. Another item to consider is that ACPS must provide a "seat" on the appropriate bus for all students within that ridership area. There are cases that students are taken to school by parents, friends, themselves and others that would make it appear that ridership on a bus is low, but there is an obligation to have a seat for every student, whether they regularly ride the bus or never have.		

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Finding 11

Certain elements used to determine payments to bus contractors did not reflect market conditions, actual costs, or were not properly documented.

We recommend that ACPS ensure that all contractor payments have a documented and justified basis by ensuring that

- a. reasonable market investment rates are used as a basis for establishing contractor rates for the annual PVA;
- b. actual bus operating costs are used, or supportable cost estimates are developed, as the basis for establishing reasonable contractor rates for per mile maintenance costs; and
- c. bus contracts include a right to audit provision.

Agency Response			
Analysis			
Please provide additional comments as deemed necessary.	It is important to understand and acknowledge that relative to both PVA and the cost of maintenance, the district is competitive with what other districts in the state reimburse for these items.		
Recommendation 11a	Agree	Estimated Completion Date:	Complete
Please provide details of corrective action or explain disagreement.	As a result of the Fed increasing rates, this will no longer be an issue. However, if rates should decline, the district will change its policy and use the prime rate at the time of purchase plus 2% when setting the PVA going forward.		
Recommendation 11b	Agree	Estimated Completion Date:	7/1/19
Please provide details of corrective action or explain disagreement.	Bus maintenance in western Maryland is different than other parts of the state. Allegany and Garrett counties face not only significant grade elevation differences, but also are impacted by salt and abrasives used for snow removal that may impact mechanical parts and systems. The district agrees that it will request access through the "right to audit" provision to better understand the actual costs of bus maintenance.		
Recommendation 11c	Agree	Estimated Completion Date:	7/1/19
Please provide details of corrective action or explain disagreement.	ACPS will begin putting that provision in all bus contracts going forward.		

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