

Financial Management Practices Audit Report

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**Baltimore County Public Schools**

November 2020

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

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DEPARTMENT OF LEGISLATIVE SERVICES  
OFFICE OF LEGISLATIVE AUDITS  
MARYLAND GENERAL ASSEMBLY

Victoria L. Gruber  
Executive Director

Gregory A. Hook, CPA  
Legislative Auditor

November 19, 2020

Senator Clarence K. Lam, M.D., Senate Chair, Joint Audit and Evaluation Committee  
Delegate Carol L. Krimm, 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 Baltimore County Public Schools (BCPS) 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 BCPS' 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 BCPS needs to improve internal controls and accountability in certain areas, including procurement and disbursements, payroll processing, and information systems. For example, adequate access controls had not been established over its financial management system, and BCPS did not ensure certain personnel and payroll transactions were subject to independent review and approval.

We also found that BCPS' procurement policies were not sufficiently comprehensive. Specifically, BCPS' policies did not define the criteria for necessary contract modifications and did not require a signed contract modification to support changes to contract terms and conditions. For example, BCPS paid an additional \$1.2 million to purchase upgraded anti-theft devices on a \$140.0 million contract for laptop computers without executing a written contract modification. Additionally, BCPS did not have a written policy for documentation of receipt of goods and services prior to payment, as well as for prepayment of services.

Furthermore, procurements were not always made in accordance with established policies or applicable State law. Specifically, BCPS did not ensure that contracts were properly executed prior to payment, as required by its policy and did not

publish the award of four contracts totaling \$23.7 million on *eMaryland Marketplace*, as required by State law. We also determined that BCPS used an intergovernmental cooperative purchasing agreement (ICPA) to purchase 197 school buses totaling \$19.5 million in a manner that was inconsistent with the intent of the ICPA and limited competition. In addition, BCPS did not maintain sufficient supporting documentation of those purchases to enable us to determine whether BCPS received the best value. Due to the lack of available records from both BCPS and the vendor and variability in the buses, we could not readily determine whether the amounts paid were consistent with the pricing in the ICPA.

Significant risks existed within BCPS' computer network. For example, monitoring of security activities over critical systems was not sufficient and its computer network was not properly secured. In this regard, publicly accessible servers were located in the BCPS internal network rather than being isolated in a separate protected network zone to minimize security risks.

In addition, we identified certain practices which, if implemented, could provide opportunities for achieving cost savings in student transportation. Specifically, BCPS had not performed a system-wide route analysis, and some bus routes were operating at less than 50 percent of the desired capacity. BCPS also needs to ensure the reasonableness of payment for employee healthcare, which totaled \$152.2 million during fiscal year 2019.

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 11 of the 12 findings contained in our preceding audit report. We determined that BCPS satisfactorily addressed six of these findings. The remaining five findings are repeated in this report.

We conducted our fieldwork from May 2019 to February 2020. On March 16, 2020, due to the COVID-19 pandemic health crisis, the State Superintendent of Schools decided to close school and administrative buildings to employees and the public for a two-week period. This was eventually extended for the remainder of the 2019-2020 school year with limited access by certain employees. All BCPS buildings were open during the entire period of our fieldwork, so the objectives and scope of our audit were not impacted. To the extent that the COVID-19 crisis continues to impact BCPS operations, certain recommendations in this report may need to be adjusted in the future to ensure proper controls under the modified operations.

BCPS' 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 while there are other aspects of the response that will require further clarification, we do not anticipate that these will require the Joint Audit and Evaluation Committee's attention to resolve. In accordance with our policy, we have redacted the names of any private companies or products mentioned by BCPS in this document.

We wish to acknowledge the cooperation extended to us during our audit by BCPS and its willingness to address the audit issues and to 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 prominent initial "G".

Gregory A. Hook, CPA  
Legislative Auditor



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# Background Information

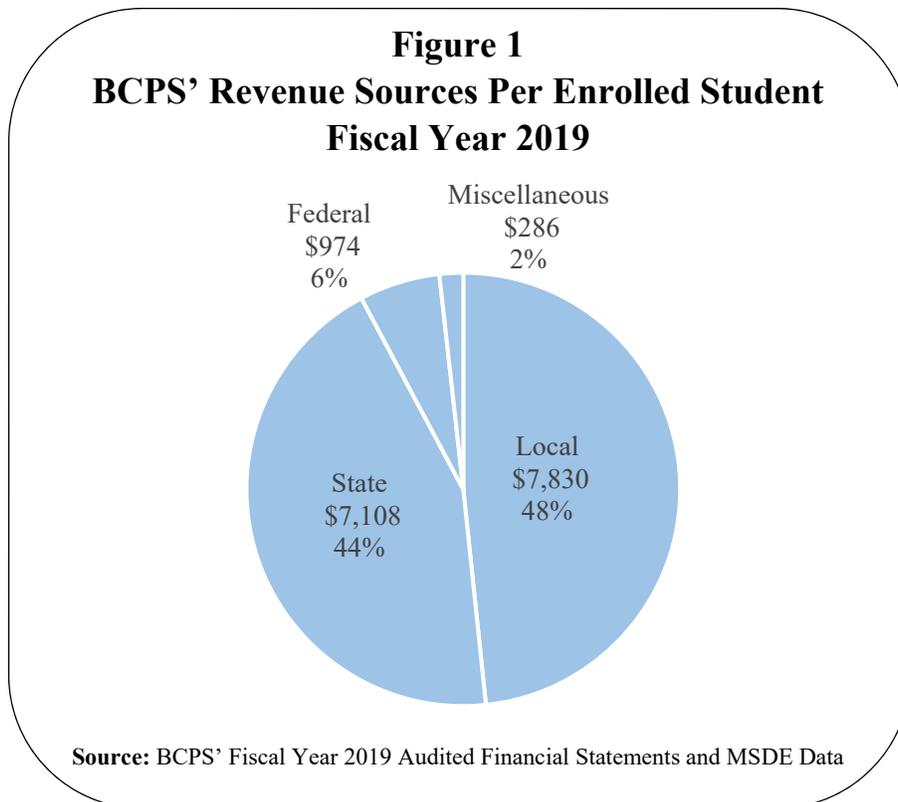
## Statistical Overview

### Enrollment

According to student enrollment records compiled by the Maryland State Department of Education (MSDE), Baltimore County Public Schools (BCPS) ranks 3<sup>rd</sup> in student enrollment among the 24 public school systems in Maryland. Fiscal year 2019 full-time student enrollment was 113,814 students. BCPS has 171 schools, consisting of 107 elementary, 27 middle schools, 24 high schools, and 13 other types of schools (including, vocational, alternative, and special education).

### Funding

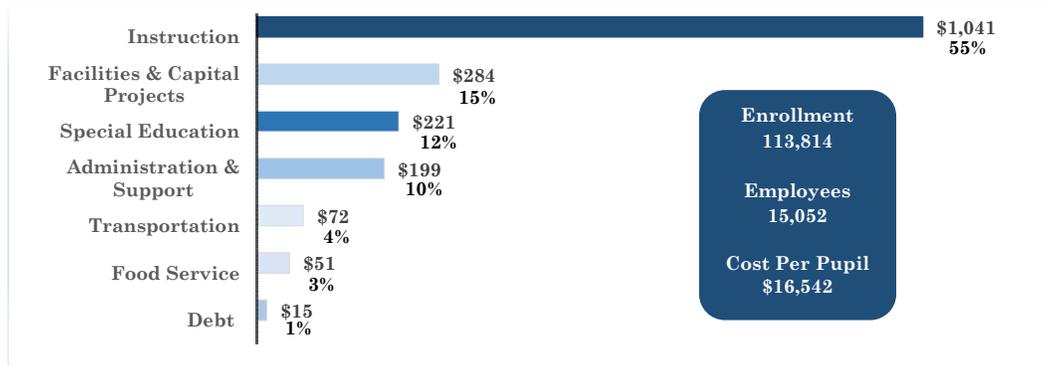
BCPS revenues consist primarily of funds received from Baltimore County, the State, and the federal government. According to the BCPS audited financial statements, revenues from all sources totaled approximately \$1.84 billion in fiscal year 2019, including approximately \$809 million from the State. See Figure 1 below for BCPS' revenue sources per enrolled student in fiscal year 2019 according to its audited financial statements.



## Expenditures

According to BCPS' audited financial statements, fiscal year 2019 expenditures were approximately \$1.88 billion. The largest expenditure category was salaries and wages, including benefits, which accounted for 74 percent of total expenditures during fiscal year 2019. According to MSDE records, during the 2018-2019 school year, BCPS had 15,052 full-time equivalent positions, which consisted of 9,917 instructional and 5,135 non-instructional positions (see Figure 2).

**Figure 2**  
**BCPS Expenditures by Category and Selected Statistical Data**  
**Fiscal Year 2019**  
**(amounts in millions)**



Source: BCPS' Fiscal Year 2019 Audited Financial Statements and MSDE Data

## Oversight

BCPS is governed by a local school board, consisting of seven elected voting members, four appointed voting members, and one student member with limited voting privileges. In accordance with State law, MSDE provides considerable oversight of BCPS through the establishment and monitoring of various financial and academic policies and regulations. MSDE also works with BCPS to comply with the requirements and mandates of federal law. The Baltimore County government exercises authority over BCPS primarily through the review and approval of BCPS' annual operating and capital budgets.

## External Audits

BCPS engages a certified public accounting firm to independently audit its annual financial statements. The audit firm performs procedures to verify the amounts and disclosures in the financial statements. The audit also evaluates the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management. In the related audit reports, the firm stated that the financial statements presented fairly, in all material respects, the financial position of BCPS as of June 30, 2017, 2018, and 2019, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Additionally, in accordance with *Government Auditing Standards*, as part of the audited financial statements the accounting firm also issued separate reports on BCPS' control over financial reporting and its tests of BCPS' compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. This report is an integral part of the annual independent audited annual financial statements. Furthermore, the accounting firm also conducts the Single Audit of BCPS' federal grant programs. The Single Audit is intended to provide assurance to the federal government that adequate internal controls are in place, and the entity is generally in compliance with program requirements.

We reviewed the aforementioned financial statement audits and Single Audit reports for fiscal years 2017 through 2019, and examined the related work papers for fiscal year 2018, which were the latest available at the time we performed our audit fieldwork.

Certain work of the independent certified public accounting firm, which we determined was reliable, covered areas included in the scope of our audit. As a result, we did not conduct audit work related to the following areas:

- State and local governments revenues received via wire transfer
- Accounts receivable
- Federal grant activity
- Food service revenues

The independent accounting firm did not disclose any material deficiencies in these areas.

## **Indictment of Former Superintendent and Resulting Audit**

In January 2018, the former BCPS Superintendent was indicted by a Baltimore County Grand Jury on four counts of perjury. The indictment alleged that, between 2012 and 2015, the former Superintendent accepted payments totaling approximately \$147,000 from various entities, including one doing business with BCPS, without reporting these payments on the 2012, 2013 and 2015 financial disclosure statements. In March 2018, the former Superintendent pled guilty to the four counts and in April 2018, was sentenced to five years (with all but six months suspended) in a correctional facility, two years of probation, and 700 hours of community service.

In response to the aforementioned issue, in May 2018, the Board approved a \$413,550 contract with a public accounting firm to conduct a comprehensive audit of BCPS procurement-related activities, including travel, conference fees, professional memberships and dues, and other charges. The audit was initially to be conducted in accordance with generally accepted auditing standards set forth by the American Institute of Certified Public Accountants (AICPA) as well as other industry standards. However, prior to the contract award, the Board approved an addendum that allowed the vendor to conduct the work under the AICPA's standards on consulting procedures, which is a less stringent standard.

The purpose of the consultant's review was to provide the Board and the Superintendent with information regarding the effectiveness of controls over procurement, as well as compliance with applicable laws, rules, regulations, and policies (such as annual financial disclosures). The contract required the accounting firm to review procurement-related activities that occurred during the period from January 1, 2012 through December 31, 2017 to address the following four objectives:

1. If controls over BCPS procurement and contracting activities were designed and operating effectively and to assess compliance with all applicable federal, state, and local laws.
2. If BCPS employs best practices in its procurement and contracting activities.
3. If the controls over expenditures made for Board members and BCPS executive staff for travel reimbursements, conference fees, and professional memberships and dues were designed and operating effectively and to assess compliance with all applicable federal, state, and local laws.

4. If controls over expenditures included as “other charges” in the budget of the Office of the Superintendent were designed and operating effectively and to assess compliance with all applicable federal, state, and local laws.

The contract included two phases. The first phase required the accounting firm to review 19 contracts selected by the Board which, according to the related request for proposal, were selected based on contract value or the nature of the contract. At a minimum, the review was to include processes for vendor solicitation, evaluation and selection, contract execution and award, contract management and monitoring, and maintenance and retention of contract documents. The second phase, which would only be performed at the request of the Board at the conclusion of the first phase, was to include the review of approximately 180 additional contracts, each valued in excess of \$1 million.

The accounting firm issued its report on the results of first phase in April 2019, and BCPS published the report on its website. The report included one finding that related to the lack of timely filing of employee financial disclosure statements, as well as 12 less significant “observations.” These observations included creating purchase orders after BCPS approved invoices for payment, not maintaining proper procurement documents, the need to update procurement policies, insufficient review and approval of purchasing card transactions and certain travel arrangements, and splitting payment transactions to bypass approval thresholds.

BCPS paid \$219,800 for the first phase of the contract and the Board decided not to perform the second phase of the contract, which expired in June 2019. Given the significance of contract procurement and monitoring related to our objectives for local education agency audits, we decided not to rely on the work of the consultant to reduce the scope of our current audit.

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

Based on our current assessment of significance and risk relative to our audit objectives, our audit included a review to determine the status of 11 of the 12 findings contained in our preceding audit report dated July 2, 2015. We determined that BCPS satisfactorily addressed six of these findings. The remaining five findings are repeated in this report, as noted in the following table.

**Table 1**  
**Status of Preceding Findings**

Preceding Finding	Finding Description	Implementation Status
Finding 1	BCPS did not adequately separate user duties on its automated school procurement system.	<b>Repeated</b> (Current Finding 6)
Finding 2	BCPS did not prepare written determinations that it was in BCPS' best interest to participate in intergovernmental cooperative purchasing agreements.	Not repeated
Finding 3	BCPS' procurement policies did not require competitive procurements for service contracts.	Not repeated
Finding 4	Independent reviews of certain payroll and personnel transactions were lacking and access to the automated system was not properly restricted.	<b>Repeated</b> (Current Findings 5 and 6)
Finding 5	Equipment policies, controls, and record keeping were not adequate.	Not repeated (Not followed up on)
Finding 6	BCPS' network was not adequately secured.	<b>Repeated</b> (Current Finding 9)
Finding 7	Workstations and servers were not sufficiently protected from malware.	Not repeated
Finding 8	Controls over BCPS' network domain accounts, passwords, and administrative access were not sufficient.	Not repeated
Finding 9	Controls over the student information and financial databases were inadequate.	<b>Repeated</b> (Current Finding 8)
Finding 10	BCPS is paying a higher cost per square foot for roof replacements compared to other local school systems, and could not adequately justify the rationale for its practice of using the same roofing contractor for a number of years.	Not repeated
Finding 11	BCPS was not using its automated routing software to develop more efficient routes.	<b>Repeated</b> (Current Finding 10)
Finding 12	BCPS did not ensure the reasonableness of payments for employee and retiree health care costs.	Not repeated

# Findings and Recommendations

## Revenue and Billing Cycle

### Background

Baltimore County Public Schools (BCPS) revenues consist primarily of funds received from Baltimore County, the State, and the federal government.

According to BCPS' audited financial statements, revenues from all sources totaled \$1.84 billion in fiscal year 2019; including approximately \$809 million from the State.

### External Audits

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

### School Activity Funds

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. During fiscal year 2019, school activity fund collections totaled \$12.5 million and the June 30, 2019 fund balance was \$7.4 million.

BCPS' Board of Education (the Board) has a fiduciary responsibility to ensure that school activity funds were used only for intended purposes. The BCPS internal auditor audits school activity funds to determine whether proper controls have been established over collections and disbursements, and whether funds have been properly account for. The internal auditor audits all schools' activity funds on a rotating basis and reports its findings to the school principals and central administrative staff. The findings are also summarized and discussed with the Board's Audit Committee. The resultant internal auditor's reports we reviewed disclosed that internal control weaknesses were not prevalent and were being addressed by school management.

## **Conclusion**

Based on our current assessment of significance and risk relative to our audit objectives, and the consideration of the work performed by the independent certified public accounting firm and BCPS' internal auditor, we relied on this work to provide audit coverage in this area including procedures and controls related to the accounting for and safeguarding of cash receipts with respect to revenue and billing.

## **Federal Funds**

### **Background**

BCPS 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 BCPS' Single Audit, fiscal year 2019 expenditures totaled \$102.9 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**

There were similarities in the work performed by the independent certified public accounting firm that conducted the Single Audits of BCPS' federal grants and the objectives of our audit in this area. In addition to expressing an opinion on BCPS' 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 2017, 2018, and 2019.

The related reports stated that BCPS 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 auditor identified one significant deficiency that was not considered a material weakness for fiscal year 2017. BCPS generally agreed to take action to correct the deficiency such as revising procedures for reviewing certain grant applications.

### **Medicaid Funds for Eligible Services**

BCPS has established a procedure to identify children eligible for Medicaid-subsidized services and the services rendered. Medicaid is an entitlement program for which certain service costs can be reimbursed to BCPS. Medicaid activity is not covered by the Single Audit of federal grants.

The Maryland State Department of Education's Interagency Medicaid Monitoring Team issued a report in July 2018 of the results of its review of 60 student case files for 24 criteria (including the correct billing of Medicaid for eligible services). The report found that BCPS was 100 percent compliant with twenty criteria, and 88 to 99 percent compliant with the remaining four criteria. According to BCPS records, fiscal year 2019 state and federal reimbursements for Medicaid-subsidized services totaled approximately \$7.3 million.

### **Conclusion**

Based on our current assessment of significance and risk relative to our audit objectives, our audit did not include a review of Medicaid-subsidized services. We relied on the work of the independent certified public accounting firm that conducted the Single Audit for all other work in this area including policies, procedures, and controls with respect to federal grants and expenditures.

## **Procurement and Disbursement Cycle**

### **Background**

According to the audited financial statements and BCPS records, non-payroll disbursements totaled \$480.1 million during fiscal year 2019. BCPS uses a combination of automated and manual processes for requisitions and purchase orders. Manual requisitions are prepared by departments and are subject to departmental approval. The approved requisitions are sent to the Purchasing Department which generally handles the solicitation, bid evaluation, establishment of contracts, and creates the purchase order in the automated system.

BCPS' written procurement policies require that procurements exceeding \$25,000 be competitively bid in accordance with Section 5-112 of the Education Article of the Annotated Code of Maryland and approved by the Board. The policies further require that all purchase orders must be manually approved by the Supervisor of the Purchasing Department, and by the Superintendent for those purchase orders exceeding \$25,000.

Invoices are submitted by vendors directly to the Finance Office. BCPS procedures require the manual comparison of vendor invoices by the Finance Office to the related purchase order prior to payment. The Finance Office uses an automated system to print vendor checks or transfer the funds electronically and to post the payments to the financial records.

## **Finding 1**

### **Procurements were not always made in accordance with established policies or applicable State law.**

#### **Analysis**

Procurements were not always made in accordance with established policies or applicable State law. Our test of 12 contracts<sup>1</sup> totaling \$172.5 million procured during the period from 2016 to 2018, disclosed the following conditions:

- BCPS obtained program evaluation services valued at \$750,000 using a contract from an Illinois school system, which did not have provisions for use by other states and was not competitively procured by that school system. In addition, BCPS negotiated pricing with the vendor that was not included in the original contract. We were advised by BCPS management that they treated this contract as an intergovernmental cooperative purchasing agreement (ICPA). However, as noted above, the Illinois contract did not include any provision for use by other states and therefore, this would not qualify as an ICPA under Maryland State law. Further, without evidence of an original competitive procurement, there was a lack of assurance that BCPS received the best value for the services. BCPS paid this vendor approximately \$221,000 during the period May 2017 through June 2019, when BCPS terminated the contract for convenience because of issues with the automated system being evaluated by the vendor.
- BCPS did not document evaluations for two procurements of instructional materials and related services totaling \$1.5 million. For example, BCPS advised us that the decision to award a \$987,000 contract for a computer science program at two magnet schools was based on its Procurement Committee observing the selected vendor's program at another school system. However, the observation and assessment of the program and other considerations such as a determination that the procurement purchase price provided value was not documented as required. Specifically, the BCPS *Evaluation and Selection of Instructional Materials Policy* requires documentation of the Committee's evaluation of the goods or services considered for procurement, and the reason for selection of the instructional materials. The *Policy* also requires that evaluations consider criteria such as whether the procurement supports the approved curriculum, and provides value in terms of purchase price.

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<sup>1</sup> Five instructional material procurements, four intergovernmental cooperative purchasing agreements, and three competitive sealed bids or proposals.

- BCPS did not publish four contract awards totaling \$23.7 million procured using ICPAs on *eMaryland Marketplace (eMM)*<sup>2</sup>, as required by State law. Publishing awards helps provide transparency over the procurements and includes the winning bidders and the amount of the related awards. BCPS management advised us they were not aware of the requirement to publish contracts procured through an ICPA. According to BCPS records, 11 ICPA contracts were awarded totaling approximately \$10.8 million during fiscal year 2018. State law requires local school administrations to publish a procurement solicitation or notice of contract award greater than \$50,000, which would include items procured under an ICPA.

### **Recommendation 1**

**We recommend that BCPS comply with its established policies and State law when procuring goods and services. Specifically, we recommend that BCPS**

- a. discontinue the practice of procurement from contracts that do not have provisions for use by other entities, or were not competitively procured;**
- b. document the evaluations of potential vendors for procurements of instructional materials; and**
- c. publish ICPA contract awards greater than \$50,000, including those noted above, in *eMMA* as required.**

### **Finding 2**

**BCPS' written policy did not define the criteria for what constitutes a contract modification and did not require a signed contract modification to support changes to contract terms and conditions.**

### **Analysis**

BCPS' written policy did not define the criteria for what constitutes a contract modification and did not require a signed contract modification to support changes to contract terms and conditions. Our review of two contracts disclosed BCPS did not execute written modifications for significant changes made to both contracts, and did not obtain Board approval for changes to the terms of one of these contracts as required by its policy.

In September 2016, BCPS obtained written approval from the Board to pursue modifying a contract with a vendor providing educational services such as streaming content, to also include the purchase of online textbooks, and to extend the contract for two additional years. However, BCPS did not execute a written

<sup>2</sup> *eMM* is an Internet-based, interactive procurement system managed by the Department of General Services (DGS). Effective July 2019, the DGS replaced *eMM* with eMaryland Marketplace Advantage (*eMMA*).

contract modification for these changes with the vendor. As a result, there was no formal agreement for the cost of the new services or for the services to be provided during the extended contract period. According to BCPS records, as of July 2019, expenditures totaling approximately \$1.9 million were made during the period July 2018 through February 2019 (during the extended contract period).

In addition, BCPS changed the term of another contract for computer leases without a formal contract modification and without obtaining the Board approval as required by BCPS policy for contract changes that increase a contract's value by at least \$25,000. Specifically, in April 2018, BCPS awarded a multi-year \$140 million contract for leased computers. Shortly after the contract was awarded, BCPS upgraded the antitheft device that was to be included on each computer increasing the cost of the antitheft device from \$3.50 per computer to \$27.50 per computer. During the period from July 2018 to January 2019, BCPS paid an additional \$1.2 million for the upgraded antitheft devices on 48,882 computers, without modifying the terms of the contract. BCPS personnel advised us that it did not execute a written contract modification or submit the modification to the Board because it did not expect to use the entire allotment of computers during the term of the contract and therefore it was not anticipating exceeding the \$140 million contract value (over the term of the contract).

Our review of several other local school systems disclosed that their policies define the criteria for a contract modification as any written alteration in specifications, delivery point, date of delivery, period of performance, price, quantity, or other provision of any contract accomplished by mutual action of the parties to the contract. In addition, the other local school systems required a signed contract modification to support significant changes to contract terms and conditions.

## **Recommendation 2**

### **We recommend that BCPS**

- a. amend its written policy to establish criteria for contract modifications and require a signed contract modification for significant changes (as defined in the amended policy) to the scope of an existing contract; and**
- b. present contract modifications to the Board for review and approval as required by its policy, including the modification of the contract noted above.**

**Finding 3**

**BCPS did not use an ICPA for purchasing school buses in a manner intended and limited competition for those procurements. BCPS also did not maintain supporting documentation to enable us to determine whether it received the best value.**

**Analysis**

BCPS used an ICPA to purchase school buses in a manner that limited competition, and without sufficient supporting documentation to enable us to determine whether it received the best value. On December 1, 2015, the Board approved a contract through an ICPA<sup>3</sup> to purchase at least 554 buses for \$76.2 million over the eight-year period from December 2015 to September 2023. As noted in the following table, we reviewed 197 school buses purchased under the contract totaling \$19.5 million during fiscal years 2016 through 2019.

Our review disclosed that BCPS did not use the pricing in the ICPA when purchasing the buses nor document the rationale for not using the ICPA pricing. In addition, although the Board had previously approved the use of this ICPA (which included vendor prices), BCPS did not notify the Board of the change in bus pricing. Specifically, in fiscal year 2016 BCPS requested bids directly from each of the three vendors contracted with in the ICPA and awarded a bus order to the vendor with the highest price, which exceeded the lowest bidder's total price by approximately \$139,000 for the 39 buses purchased. In fiscal years 2017 to 2019, BCPS again solicited bids but the specifications were specific to the manufacturer of the bus selected in fiscal year 2016 and, therefore, the bids were awarded to the same vendor selected in 2016.

BCPS transportation management personnel advised us that it chose the buses sold by the one vendor because it had experienced mechanical issues in the past with the make of buses sold by one of the other vendors and the size of the buses sold by the third vendor were too large to fit in their repair garages. However, BCPS could not provide adequate documentation to support these assertions.

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<sup>3</sup> Frederick County Public Schools acting as the lead purchasing agency contracted with three vendors that each represent one of the three principal school bus manufacturers in the United States. The contract allows LEAs to purchase from any of those vendors at prices specified in the contract. LEAs may customize their bus purchases since the three winning vendors provided pricing for several specific types of buses (such as, 48, 64, and 70 passenger buses) and various options on these buses.

**Table 2**  
**Summary of School Buses Purchased**  
**Fiscal Year 2016 to Fiscal Year 2019**

Bus Size	Number of Buses Purchased	Total Cost	Average Cost per Bus
30 Passenger with AC & Wheelchair Lift	6	\$617,616	\$102,936
48 Passenger with AC & Wheelchair Lift	43	\$4,540,654	\$105,596
64 Passenger with Diesel Engine	95	\$8,828,610	\$92,933
64 Passenger with Gasoline Engine	3	\$377,644	\$125,881
64 Passenger with AC, Wheelchair Lift & Diesel Engine	8	\$857,108	\$107,139
64 Passenger with AC, Wheelchair Lift & Gasoline Engine	14	\$1,554,928	\$111,066
77 Passenger	28	\$2,689,200	\$96,043
	<b>197</b>	<b>\$19,465,780</b>	<b>\$98,811</b>

Source: BCPS' Records

Our review disclosed that the use of just one manufacturer may not have been cost effective. Specifically, BCPS purchased 95 64-passenger buses ranging in price from \$89,952 to \$94,645 during fiscal years 2016 through 2019. BCPS could not explain the basis for these costs, such as the base price and the options received. Due to the lack of available records from both BCPS and the vendor and variability in the buses, we could not readily determine whether the amounts paid were consistent with the pricing in the ICPA.

For example, BCPS paid an average of \$93,000 for a 64-passenger bus when based on our review of the ICPA price list, a 64-passenger bus from the selected manufacturer had a base price of \$80,505. BCPS could not document the specific options and costs to account for the difference in cost. In addition, BCPS purchased twenty-eight 77-passenger buses totaling \$2.7 million (\$96,043 per bus) which were not included in the ICPA and could not support the basis for the amount paid or the pricing specifications of the buses purchased.

Consequently, we are unable to determine any benefit of the ICPA to BCPS. It appears the ICPA prices were not used, which would have been one of the benefits of using the ICPA; and for subsequent bus purchases, BCPS simply solicited bids for buses from the three principal bus manufactures. Nevertheless,

the lack of appropriate documentation, means that we could not determine whether BCPS bus purchases provided the best value.

### **Recommendation 3**

**We recommend that BCPS**

- a. adhere to ICPA terms and conditions, including pricing;**
- b. document the justification of material changes to procurement methods and the basis for procurement decisions (awards) and retain this documentation for future reference; and**
- c. notify the Board of material changes to procurement methods.**

### **Finding 4**

**BCPS did not have a written policy requiring the documentation of the receipt of goods and services prior to making the related payment and permitted the prepayment of vendors for services without a formal policy. Further, BCPS did not ensure that contracts were always properly executed prior to payment.**

### **Analysis**

BCPS did not have a written policy requiring the documentation of the receipt of goods and services prior to making payments, as well as for prepayment of services. Further, BCPS did not ensure that contracts were properly executed prior to payment, as required by its policy. BCPS personnel advised us that it documents the receipt of goods and services with the approval of certain invoices; however, our test disclosed instances where there was a lack evidence to ensure the good and services were documented as being received prior to approving the invoices for payment. We tested 50 payments totaling \$22.0 million made during the period from 2016 to 2019 and noted the following conditions:

- Seven payments totaling \$1.3 million lacked documentation that the related goods or services were properly received. In addition, BCPS prepaid one vendor \$636,000 for professional development and support services at two magnet schools and did not document that it verified the services were subsequently provided. BCPS management advised us that staff at the schools was responsible for ensuring that services were provided in accordance with the contract. However, the two schools could not provide us with any documentation to support monitoring or verification efforts or that the services were provided.
- In certain instances, BCPS paid vendors before the related contracts were finalized. Specifically, BCPS paid one vendor \$270,000 for services rendered

eight months before the vendor signed the related contract. BCPS allowed another vendor to provide research services approximately three months prior to executing an agreement with the vendor, although no payments were made prior the contract being executed.

BCPS policy states that no vendor, consultant, or contract manager shall initiate work until a contract has been properly executed and a purchase order has been issued.

#### **Recommendation 4**

##### **We recommend that BCPS**

- a. develop written policies requiring the formal documentation of the receipt of goods and services prior to making the related payments, as well as for the condition(s) required to be met prior to making prepayments, if prepayments are deemed necessary; and**
- b. ensure that contracts and related agreements are properly executed prior to receiving services or making payments.**

## **Human Resources and Payroll**

### **Background**

Payroll expense represents the largest single cost component in the BCPS budget. According to BCPS records, fiscal year 2019 salary, wage, and benefit costs totaled \$1.4 billion, or 74 percent of the total operating expenditures. According to Maryland State Department of Education reports, during the 2018-2019 school year BCPS had 15,052 full-time positions, including 9,917 instructional and 5,135 non-instructional positions.

BCPS uses an automated system to maintain human resources information, record employee time, 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**

**BCPS did not ensure certain personnel and payroll transactions processed were subject to independent review and approval, resulting in overpayments to six employees totaling \$70,839 going undetected.**

**Analysis**

BCPS did not ensure certain personnel and payroll transactions were subject to independent review and approval, resulting in certain overpayments going undetected.

- Although system reports of certain transactions, such as salary grade or step changes, were generated each pay period for review, the report did not include new employees added to the system. In addition, the reports were initially received by an employee that processed the original transactions in the system before being forwarded to an independent supervisory employee for review and verification. Consequently, the reports could be subject to alteration to conceal improper transactions.

Our test of 20 judgmentally selected payroll transactions during calendar years 2016 through 2019 noted 3 employees that had been overpaid. Two of these employees had been demoted to lower paying positions, but their pay rate was not properly adjusted<sup>4</sup>. Our expanded testing of payments made during calendar years 2015 through 2018 to 13 other demoted employees identified 3 more overpayments. All 6 overpayments, totaling \$70,839, were not detected during the subsequent supervisory review, and were previously unknown to BCPS prior to our test performed in November 2019. The overpayments were made during March 2015 through June 2019. A similar condition regarding the lack of review of personnel transactions was commented upon in our preceding audit report.

- Time entered into the electronic timekeeping system by approximately 5,000 employees was not always approved by an employee's immediate supervisor as required by the BCPS *Payroll Handbook*. Specifically, our review of the supervisory review of transactions during two pay periods in March and June 2019 disclosed that the immediate supervisor did not approve the hours worked for 175 and 132 employees, respectively. Rather, BCPS payroll personnel with no direct knowledge of the hours worked approved these records, and the approved records were not subsequently verified by the immediate supervisor. Consequently, assurance was lacking that the time

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<sup>4</sup> For example, an assistant principal demoted to a teacher.

reported was proper. Gross wages for these employees during the tested pay periods totaled \$311,848 and \$238,260, respectively.

### **Recommendation 5**

**We recommend that BCPS**

- a. perform comprehensive independent reviews of all critical personnel and payroll transactions (repeat);**
- b. review payroll transactions for potential overpayments and pursue recovery of improper payroll payments, including the overpayments noted above; and**
- c. ensure that appropriate supervisory approval of all electronic time records is performed, as required.**

## **Equipment Control and Accountability**

### **Background**

According to BCPS' audited financial statements, the undepreciated value of its capital equipment inventory totaled \$83.3 million as of June 30, 2019. BCPS maintains centralized automated records for equipment with a cost of \$5,000 or more (including assets capitalized for financial statement purposes). BCPS also maintained a separate database of certain computer hardware assigned to schools<sup>5</sup>.

### **Conclusion**

Based on our current assessment of significance and risk relative to our audit objectives, our audit did not include a review of policies, procedures, and controls with respect to the equipment area of operations.

## **Information Technology**

### **Background**

The BCPS Department of Information Technology (DoIT) maintains and administers the BCPS computer network, computer operations, and certain information systems applications. BCPS operates a wide area network, with internet connectivity, which connects the individual schools' local networks to the computer resources located at the BCPS data center. DoIT supports instructional software/web-services, the student information system, e-mail, data backup, technology management tools, and application hosting. In addition, the BCPS

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<sup>5</sup> Laptop computers assigned to students are not recorded as equipment on BCPS' records since they are leased from a vendor.

Department of Administrative Services, Office of Business Management Information Systems maintains and supports certain financial-related systems, including the financial management information system.

**Finding 6**

**BCPS did not ensure that employee access to its automated financial systems was appropriate and adequately controlled, resulting in employees with unnecessary or incompatible access.**

**Analysis**

BCPS did not ensure employee access to its automated financial-related systems (such as, procurement, account payable, human resources, and payroll) was appropriate and adequately controlled, resulting in employees with unnecessary or incompatible access. BCPS maintains several automated systems to process critical financial activity that have the capability for online controls. Our review disclosed that BCPS did not use these controls to adequately limit user access, resulting in the following conditions:

- Our test of certain critical procurement and accounts payable access capabilities assigned to 68 employees disclosed 8 employees had the ability to process purchase orders without independent approval. Two of these employees could also process disbursements, and one could also update vendor information. Three other employees could process disbursements without independent approval.
- Our test of certain critical access capabilities for the automated system primarily used to order supplies for schools disclosed that 315 employees could initiate and approve requisitions without independent approval. These requisitions automatically generated purchase orders to the vendor without any additional independent review or approvals. During the period from May 10, 2017 through June 18, 2019, 128 employees initiated and approved requisitions for 3,203 purchase orders totaling approximately \$1.1 million without any independent review and approval. A similar condition was commented upon in our preceding audit report.
- Our test of certain critical human resource and payroll access capabilities assigned to 209 employees disclosed that 5 employees who processed payroll transactions also had unnecessary access to human resources functions, (such as adding employees). Additionally, 2 other employees had incompatible human resource and payroll functions even though they did not require system access to perform their job responsibilities. A similar condition regarding

incompatible system access to human resources and payroll capabilities has been commented upon in our two preceding audit reports.

### **Recommendation 6**

**We recommend that BCPS**

- a. periodically review employee access capabilities to ensure all access is appropriate and incompatible duties are segregated (repeat); and**
- b. correct any unnecessary or improper capabilities, including those noted above.**

### **Finding 7**

**Sensitive BCPS personally identifiable information was maintained in a manner that did not provide adequate security safeguards.**

### **Analysis**

Sensitive personally identifiable information (PII) was maintained in a manner that did not provide adequate safeguards. BCPS used a significant computer application, which contained sensitive PII recorded within two separate databases, which existed without adequate security safeguards. As of October 23, 2019, the database with the largest such record volume contained 92,295 unique sensitive information records, which were maintained in a manner that made the information vulnerable to improper disclosure. BCPS personnel advised us that this information was subject to certain data transfer controls. However, we determined that the controls involving data transfer and other procedures did not adequately safeguard the information. Detailed sensitive aspects of this finding were omitted from this report; however, the related detailed information was previously shared with BCPS for purposes of implementing the following recommendation.

Best practices identified in the State of Maryland *Information Technology Security Manual* require that agencies protect confidential data using adequate safeguards and/or other substantial mitigating controls.

### **Recommendation 7**

**We recommend that BCPS implement appropriate information security safeguards for its sensitive PII.**

**Finding 8**

**For two critical systems' databases, security and audit event logging and monitoring procedures were not adequate, and unnecessary elevated system privileges were granted to numerous user accounts.**

**Analysis**

For two critical systems' databases, security and audit event logging and monitoring procedures were not adequate, and unnecessary elevated system privileges were granted to numerous user accounts.

- One system's database configuration did not include logging of eight categories of critical security and audit related events. For such activity already recorded, we were advised that the associated logs were not retained for adequate time periods, and that reviews of the logs were not performed on a regular basis to identify unusual or improper activities. The second critical system's database configuration also did not include logging of the same eight categories of critical security and audit related events. Furthermore, although BCPS personnel advised us that reviews of other significant logged database events were performed, BCPS was unable to provide documentation substantiating the performance of these reviews.
- Neither of the systems' databases were configured to log direct changes (such as insert, update, and delete) made to critical system tables for subsequent reporting and monitoring. Accordingly, effective monitoring did not exist over sensitive activities related to these systems and their related databases.
- Numerous user accounts had unnecessary modification access to the information within both systems' databases. For both systems, improper database roles were assigned to 34 user accounts, effectively granting the highest possible administrative privilege level available to these accounts over the respective databases.

These conditions could result in unauthorized or inappropriate activities (affecting the integrity of the production databases' information) going undetected by management. Best practices identified in the State of Maryland *Information Technology Security Manual* require that information systems must generate audit records for all security-relevant events, and procedures must be developed to routinely (for example, real-time or weekly) review audit records for indications of inappropriate activities and report findings to appropriate officials for prompt resolution.

Similar conditions regard controls for logging critical systems' security and audit event activity and direct changes to database information were commented upon in our preceding audit report. A similar condition regarding assigned database roles, for one of the two systems' databases, was also commented upon in our preceding audit report.

Detailed sensitive aspects of this finding were omitted from this report; however, the related detailed information was previously shared with BCPS for purposes of implementing the following recommendations.

### **Recommendation 8**

**We recommend that BCPS implement appropriate database monitoring controls over the aforementioned critical systems. Specifically, we recommend that BCPS**

- a. log all significant database security, audit related event, and processing activities, including direct changes to critical database tables, and generate reports that include this related database activity (repeat);**
- b. ensure that individuals perform regular, independent documented reviews of the aforementioned reports and retain the information for reference purposes (repeat); and**
- c. restrict assignment of critical database administration roles to only those personnel requiring such access for their job responsibilities (repeat).**

### **Finding 9**

**Twenty-six publicly accessible servers were improperly located within the internal network, intrusion detection prevention system coverage for untrusted traffic did not exist, and BCPS network resources were not secured against improper access from students using wireless connections and high school computer labs.**

### **Analysis**

The BCPS computer network was not adequately secured. We noted three conditions affecting network security.

- Twenty-six publicly accessible servers were located within the BCPS 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.

- Intrusion detection prevention system (IDPS) coverage did not exist for untrusted encrypted traffic entering the BCPS network. BCPS operated a network appliance having integrated IDPS; however, the appliance was configured to only analyze unencrypted traffic. Additionally, server host-based intrusion prevention system coverage was not utilized for this untrusted encrypted traffic. We identified 21 firewall rules that allowed encrypted traffic from any source to 29 unique network destinations within BCPS' internal network without IDPS coverage. The aforementioned absence of IDPS coverage creates network security risk as such traffic could contain undetected malicious data. Best practices in the State of Maryland *Information Technology Security Manual* 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.
- BCPS did not adequately secure its critical internal network resources from improper network-level access by BCPS students using wireless connections and high school students using computer lab workstations. Wireless network access existed for BCPS students within the various schools locations; however, BCPS did not use adequate network-level traffic filtering to properly limit such access. Additionally, within BCPS' 24 high schools, the network traffic originating from students using computer labs' workstations was not filtered to control such access. Accordingly, per the aforementioned wireless and computer labs access, students were allowed unnecessary network-level access to administrative servers within both BCPS' data center and the individual schools locations. Student BCPS network access via wireless connections and from high schools computer labs should be limited via filters 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 must 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 9**

**We recommend that BCPS**

- 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 IDPS coverage should be applied to its network for all untrusted traffic, including encrypted traffic, and implement this coverage; and**
- c. limit student network-level access from wireless connections and high school computer labs to only authorized local school and system instructional network resources.**

## **Facilities Construction, Renovation, and Maintenance**

### **Background**

BCPS employs a staff of 1,291 employees to maintain its 171 schools (including vocational, alternative, and special education) and a number of other facilities (such as administrative and support offices). According to its fiscal year 2019 Capital Budget Plan, necessary construction, major renovations, and systemic improvements to BCPS' facilities over the next six years (fiscal years 2019 to 2024) are estimated to cost approximately \$835.5 million.

### **BCPS Capital Projects Were Competitively Procured and Related Expenditures Were Generally Properly Supported**

Our review of five construction-related procurements made during fiscal years 2016 through 2017, totaling \$105 million, disclosed they were competitively procured and the contracts were properly awarded. Our test of 10 invoices totaling \$11 million for these contracts disclosed that the invoices were properly reviewed and approved, and the amounts invoiced were in accordance with the related contract terms.

### **Processes Are in Place to Minimize Energy Costs**

BCPS has processes in place to minimize energy costs. For example, BCPS maintains an energy conservation office consisting of three full-time employees and uses energy management systems to monitor heating and air conditioning from a central location to control temperature settings. In addition, BCPS participates in a consortium with other Baltimore-area entities to purchase energy at the best possible terms for members of the consortium. BCPS also entered into three energy savings performance contracts. The first contract began in 2013 and covers 29 schools and facilities, and the other two contracts began in 2017 and cover over 150 schools and facilities. These contracts are expected to generate \$154.9 million in energy savings through 2038. BCPS contracted with a third-party firm to verify that the guaranteed savings from these contracts are realized.

Even with these efforts, BCPS energy usage increased by 3.7 percent from fiscal years 2018 to 2019 according to reports prepared by BCPS (which we did not audit). Based on discussions with BCPS employees, this increase could potentially be attributed to the continued installation of air conditioning systems in numerous BCPS schools. Further, BCPS had not yet received the maximum benefit of the energy savings performance contracts since most of BCPS' facilities were still in the installation phase during this period for two of the contracts.

### **Conclusion**

Our audit did not disclose any significant deficiencies in the design or operation of BCPS' internal control over the facilities construction, renovation, and processes to promote energy efficiency. Our audit also did not disclose any significant instances of noncompliance with applicable laws, rules, or regulations. Based on our assessment of significance and risk relative to our objectives, we did not review BCPS' processes for promoting and performing facility maintenance.

## **Transportation Services**

### **Background**

According to statistics compiled by the Maryland State Department of Education (MSDE), BCPS has approximately 84,000 students eligible to receive transportation services. BCPS reported that 15.4 million route miles were traveled to transport students for the 2018-2019 school year. These students were transported on 670 system-owned buses and 138 contractor-owned buses. Since the majority of BCPS' transportation fleet is system-owned buses (over 80 percent), we did not perform a detailed review of contractor operations. According to BCPS' audited financial statements, fiscal year 2019 transportation costs totaled \$72.2 million.

### **Finding 10**

**BCPS did not use its automated bus routing software to periodically perform a system-wide analysis of routes and related bus capacities to maximize efficiency and had not established comprehensive bus routing procedures.**

### **Analysis**

BCPS had not used its automated bus routing software tool to perform a system-wide analysis of bus routes and related bus capacities to maximize the efficiency of its bus routes and address bus routes with low ridership. In addition, BCPS had not established comprehensive bus routing procedures that specified target bus

capacities, ridership goals, and student ride-time limits providing BCPS with parameters to design more efficient bus routes.

Although BCPS owns an automated bus routing software tool, it did not fully use this tool to perform a periodic system-wide analysis to identify alternative routes, route consolidations, or bus stop consolidations that might reduce costs. During our audit fieldwork, BCPS contracted with the software vendor to perform a partial system route analysis, consisting of one of its five transportation regions. In lieu of a system-wide analysis, BCPS transportation department employees advised us that its routine route analysis process primarily involved the manual review of existing individual bus routes annually and, as needed, throughout the year, and manual modifications to accommodate students' school assignments and to address road construction and other issues. Consequently, routes may be inefficiently designed and could result in significantly underutilized capacity on individual buses and in operating more buses than necessary to fulfill BCPS' transportation needs.

Our review of the routing system data for 552 of the regular morning bus routes on 185 buses for the 2018-2019 school year, disclosed that that 183 routes were designed to transport students at less than 75 percent of customary capacity goals<sup>6</sup>, including 38 routes that were designed to transport students at less than 50 percent of the bus capacity based on bus size. While we recognize that Baltimore County includes some rural areas (such as, the northern section of the county), which can make it difficult to maximize ridership in all cases, our analysis primarily focused on more densely populated regions, based on destination schools.

A similar condition has been commented upon in our preceding two audit reports.

### **Recommendation 10**

**We recommend that BCPS take steps to use its buses more efficiently.**

**Specifically, we recommend that BCPS**

- a. use automated bus routing software to periodically perform a system-wide analysis of bus routes to maximize the ridership on its bus routes (repeat); and**
- b. establish comprehensive bus routing procedures that specify target bus capacities, ridership goals, and student ride-time limits.**

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<sup>6</sup> It is customary for school systems to use bus capacities that are lower than the manufacturer stated capacities and for these capacities to differ between school levels. For example, the customary capacities we used for our calculation were 54 students for a 64-passenger manufacturer stated capacity bus transporting elementary school students and 44 students for a 64-passenger bus transporting middle and high school students.

## **Food Services**

### **Background**

According to the audited financial statements, food service operating expenditures totaled \$50.7 million in fiscal year 2019, and were primarily funded with federal funds totaling \$35.6 million, food sales totaling \$12.7 million, and State sources totaling \$1.5 million. According to MSDE records, in fiscal year 2019 BCPS had 623 food service positions for its 171 schools, consisting of 550 cafeteria positions and 73 administrative positions.

According to MSDE records, 44 percent of BCPS' students qualified for free and reduced-price meals as of October 31, 2018. Four BCPS schools participate in the federal Community Eligibility Provision (CEP)<sup>7</sup>, which is a meal service option that allows schools that are in high poverty districts to serve meals to all students at no cost without collecting applications for free and reduced-price meals. In fiscal year 2019, BCPS was reimbursed for approximately 86 percent of its cost related to its four participating schools through the CEP.

### **External Audits**

There were similarities between the work of the independent certified public accounting firm that audited the BCPS financial statements and the objectives of our audit of food service activities.

### **Conclusion**

Based on our current assessment of significance and risk to our audit objectives, and the work performed by the independent certified public accounting firm, our audit did not include a review of policies, procedures, and controls with respect to the food services financial area of operations.

## **School Board Oversight**

### **Background**

The Baltimore County School Board (the Board) is composed of seven elected members and four members appointed by the Governor serving four-year terms as well as one student member with partial voting rights who serves a one-year term. As noted in the Background Information section, the Board contracted with a certified public accounting firm for independent audits of the BCPS financial

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<sup>7</sup> Through CEP, schools are reimbursed for meals using a formula based on the percentage of students eligible for free meals because of their participation in other specific means-tested programs (such as the Supplemental Nutrition Assistance Program and Temporary Assistance for Needy Families).

statements and federal programs. To assist in its oversight of various areas of BCPS operations and governance, the Board has established five committees (Audit, Building and Contracts, Curriculum, Legislative and Governmental Relations, and Policy).

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

The BCPS Board has a detailed ethics policy that conforms to State law and was approved by the State Ethics Commission. The policy is applicable to both Board members and BCPS employees and includes provisions for conflicts of interest and financial disclosures by Board members and certain employees.

Specifically, annual financial disclosure statements are required to be filed by Board members, candidates for the Board, the Superintendent, and other administrators (such as Community Superintendents, Chief Financial Officer, Purchasing Manager, Chief Human Resources Officer, and Principals) by April 30<sup>th</sup> of each year.

In accordance with the policy, BCPS established an Ethics Panel consisting of five members appointed by the Board to interpret ethics policies and provide advice on policy implementation. The Panel also reviews and rules on any reported complaints of ethics violations. Our review of the records for Board members and BCPS employees required to submit financial disclosure forms for calendar years 2015 through 2018 disclosed that there were no significant issues with the forms tested.

## **Management of Other Risks**

### **Finding 11**

**Claims payments totaling approximately \$152.2 million during fiscal year 2019 were not reviewed for propriety.**

### **Analysis**

Claim payments for employee, dependent, and retiree health care costs, which totaled approximately \$152.2 million during fiscal year 2019 were not reviewed for propriety. BCPS participates in a contract between the Baltimore County government and a health insurer that provides a self-insurance program for employee, dependent, and retiree health insurance. As of June 30, 2019, health insurance benefits were provided to approximately 40,000 enrolled BCPS employees, dependents, and retirees through the County's contract. Under the current arrangement, BCPS paid for its share of health insurance, based on its prior years' claims and anticipated enrollment.

However, BCPS claims were not independently reviewed to ensure that the billed services were actually provided or covered by the self-insured health plans, and that services were appropriately priced. For example, neither BCPS nor the County conducted, or contracted for, independent audits of paid claims. Consequently, there is a lack of assurance regarding the propriety of billed services.

**Recommendation 11**

**We recommend that BCPS work with the County to ensure paid claims are reasonable by independently verifying, or contracting for periodic independent audits, to assess the accuracy and validity of claims.**

## **Audit Scope, Objectives, and Methodology**

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

In planning and conducting our audit of BCPS, we focused on 11 major financial-related areas of operations as approved on December 6, 2016 by the Joint Audit and Evaluation 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 BCPS dated July 2, 2015 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 BCPS 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 BCPS. We also interviewed personnel at BCPS 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 BCPS 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 April 30, 2019. 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 BCPS' financial statements and conducts the federal Single Audit, as well as the BCPS internal auditor.

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 BCPS 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.

BCPS' 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. As provided in *Government Auditing Standards*, there are five components of internal control: control environment, risk assessment, control activities, information and communication, and monitoring. Each of the five components, when significant to the audit objectives, and as applicable to BCPS, were considered by us during the course of this audit.

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 BCPS that were not deemed significant and, consequently, did not warrant inclusion in this report.

We conducted our fieldwork from May 2019 to February 2020. On March 16, 2020, due to the COVID-19 pandemic health crisis, the State Superintendent of Schools decided to close school and administrative buildings to employees and the public for a two-week period. This was eventually extended for the remainder of the 2019-2020 school year with limited access by certain employees. All BCPS buildings were open during the entire period of our fieldwork, so the objectives and scope of our audit were not impacted. To the extent that the COVID-19 crisis continues to impact BCPS operations, certain recommendations in this report may need to be adjusted to ensure proper controls under the modified operations.

The BCPS 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 BCPS regarding the results of our review of its response.

## APPENDIX

# BALTIMORE COUNTY PUBLIC SCHOOLS

Darryl L. Williams, Ed.D. ♦ Superintendent ♦ 6901 North Charles Street ♦ Towson, MD ♦ 21204

ELECTRONICALLY VIA E-MAIL AND FIRST-CLASS MAIL

November 18, 2020

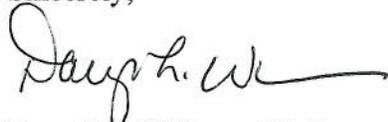
Gregory A. Hook, CPA  
Legislative Auditor  
Department of Legislative Services  
Office of Legislative Audits  
Maryland General Assembly  
301 West Preston Street, Room 1202  
Baltimore, Maryland 21201

Re: Baltimore County Public Schools' Legislative Audit

Dear Mr. Hook:

Baltimore County Public Schools is pleased to have worked with your staff during the course of the audit. I have reviewed your report, concur with the findings, and will actively work with my staff to implement appropriate corrective actions as outlined in our responses.

Sincerely,



Darryl L. Williams, Ed.D.  
Superintendent

dlw/bls

Copies to:

Dr. Brian Scriven, Chief Administrative and Operations Officer  
Ms. George Sarris, Executive Director, Department of Fiscal Services  
Mr. Mychael Dickerson, Chief of Staff

# Baltimore County Public Schools

## Agency Response Form

### Procurement and Disbursement Cycle

#### Finding 1

Procurements were not always made in accordance with established policies or applicable State law.

We recommend that BCPS comply with its established policies and State law when procuring goods and services. Specifically, we recommend that BCPS

- a. discontinue the practice of procurement from contracts that do not have provisions for use by other entities, or were not competitively procured;
- b. document the evaluations of potential vendors for procurements of instructional materials; and
- c. publish ICPA contract awards greater than \$50,000, including those noted above, in *eMMA* as required.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 1a</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<b><u>BCPS will comply with this recommendation.</u></b> The BCPS Office of Purchasing has already strengthened the internal documentation requirement for use of a cooperative contract. Procedure 3210.001 was revised in March 2015 to include contracted services. In May 2016, the office began to work on the solicitation procedure to ensure a standardized process for solicitations for services. The Due Diligence Checklist was updated in October of 2018 to include all documentation to support a piggybacking decision under established policies and State law, and retain all associated documentation.		
<b>Recommendation 1b</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<b><u>BCPS has engaged in corrective procedures to ensure the documentation of the evaluations of potential vendors for procurements of instructional materials.</u></b> Specifically, there is now an established shared resource in which the Curriculum and Instruction team captures the process documents in accordance with our Policy and Rule 6002. This shared resource is available to our purchasing team agent as an added check-and-balance system. Our purchasing team agent		

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	verifies documentation prior to materials being placed on public display or the development of a contract exhibit. The respective Executive Director also utilizes a reference sheet referred to as our 4X4 that summarizes the information within the shared resource documentation in preparation for contract exhibits presentation. Lastly, training was conducted with multiple levels of the Curriculum and Instruction leadership in collaboration with the Office of Purchasing to level set expectations, processes and accountability related to proper procedure and documentation of procurement within the respective policy and rule.		
<b>Recommendation 1c</b>	Agree	<b>Estimated Completion Date:</b>	03/31/2021
<b>Please provide details of corrective action or explain disagreement.</b>	<b>BCPS has posted all solicitations on eMaryland Marketplace and will also post a Notice of Award for awards as required in the State Finance and Procurement Article 17-502, except for Materials of Instruction.</b>		

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## Agency Response Form

**Finding 2**  
**BCPS' written policy did not define the criteria for what constitutes a contract modification and did not require a signed contract modification to support changes to contract terms and conditions.**

We recommend that BCPS

- a. amend its written policy to establish criteria for contract modifications and require a signed contract modification for significant changes (as defined in the amended policy) to the scope of an existing contract; and
- b. present contract modifications to the Board for review and approval as required by its policy, including the modification of the contract noted above.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 2a</b>	Agree	<b>Estimated Completion Date:</b>	06/30/2021
Please provide details of corrective action or explain disagreement.	<b>BCPS will amend Purchasing Procedure 3240.002 to align with Board Policy 3215 and Superintendent Rule 3215 to provide clear guidance on contract modifications to the specifications, delivery point, period of performance, price, quantity or other provision of a contract.</b>		
<b>Recommendation 2b</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<b>BCPS will comply with all Board policies, superintendent rules and purchasing procedures and advise the Board of the modification made to the above-referenced contract.</b>		

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**Finding 3**  
 BCPS did not use an ICPA for purchasing school buses in a manner intended and limited competition for those procurements. BCPS also did not maintain supporting documentation to enable us to determine whether it received the best value.

We recommend that BCPS

- a. adhere to ICPA terms and conditions, including pricing;
- b. document the justification of material changes to procurement methods and the basis for procurement decisions (awards) and retain this documentation for future reference; and
- c. notify the Board of material changes to procurement methods.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 3a</b>	Agree	<b>Estimated Completion Date:</b>	04/15/2020
Please provide details of corrective action or explain disagreement.	<b><u>BCPS will improve review of procurement specification to maximize potential competition.</u></b> The specifications for BCPS school bus purchases in FY2017-2019 were not well drafted and did limit competition. The FY2020 procurement was properly conducted using generic specifications and pricing directly from the ICPA to maximize competition.		
<b>Recommendation 3b</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<b>BCPS does not anticipate any future changes to procurement methods and will document and retain any such changes for future reference if they were to occur.</b>		
<b>Recommendation 3c</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<b>BCPS will notify the Board of material changes to procurement methods.</b>		

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**Finding 4**

BCPS did not have a written policy requiring the documentation of the receipt of goods and services prior to making the related payment and permitted the prepayment of vendors for services without a formal policy. Further, BCPS did not ensure that contracts were always properly executed prior to payment.

We recommend that BCPS

- a. develop written policies requiring the formal documentation of the receipt of goods and services prior to making the related payments, as well as for the condition(s) required to be met prior to making prepayments, if prepayments are deemed necessary; and
- b. ensure that contracts and related agreements are properly executed prior to receiving services or making payments.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 4a</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2021
Please provide details of corrective action or explain disagreement.	<p><b><u>BCPS will develop a formal procedure to document the receipt of goods and services prior to payment and to formalize the current guidelines for prepayments that correspond to generally accepted accounting principles.</u></b> Currently, all warehouse purchase orders (PO) require a 3-way match of PO, invoice and delivery receipt. Due to the lack of a central receiving facility for all schools and offices, these POs have historically required a two-way system match between the PO and invoice. Most school and office receipts are acknowledged by email or written approval on the invoice.</p> <p>The workflow being established in the ERP upgrade of the Accounts Payable and Purchasing systems will require a 3-way match including a PO, a receiving document that will be created by the school/office, and the entry of an invoice.</p> <p>Schools and offices will be trained to create a receiving document that will be transmitted to Accounts Payable or, alternatively, will confirm the receipt of goods/services and provide approval to pay through a workflow email notification system.</p>		

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	The procedures will be drafted to align with the workflow being designed for the recently upgraded purchasing and accounts payable systems which are in the final phase of development. All users will be trained to implement the procedure.		
<b>Recommendation 4b</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
<b>Please provide details of corrective action or explain disagreement.</b>	<b>BCPS will ensure that where written contracts and related agreements are required, a contract will be properly executed prior to issuing a purchase order or making payments.</b>		

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## Agency Response Form

### Human Resources and Payroll

**Finding 5**  
 BCPS did not ensure certain personnel and payroll transactions processed were subject to independent review and approval, resulting in overpayments to six employees totaling \$70,839 going undetected.

We recommend that BCPS

- a. perform comprehensive independent reviews of all critical personnel and payroll transactions (repeat);
- b. review payroll transactions for potential overpayments and pursue recovery of improper payroll payments, including the overpayments noted above; and
- c. ensure that appropriate supervisory approval of all electronic time records is performed, as required.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 5a</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<p><b><u>BCPS has implemented a refined methodology by which salaries are calculated for administrative reassignments from 12-month to 10-month instructional positions and added a second level review by an independent Human Resources administrator.</u></b> The remainder of the employee's full 12-month salary to be earned will be entered into the pay parameters of the Human Resources system software. The Department of Fiscal Services/Office of Payroll will provide the Division of Human Resources/Office of Certification with the subject employee's year-to-date earnings for the current fiscal year. This amount will be subtracted from the employee's current full negotiated salary and the remainder entered in the pay parameters for a 10-month employee.</p>		
<b>Recommendation 5b</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2020
Please provide details of corrective action or explain disagreement.	<p><b>BCPS has fully reviewed similar payroll transactions and found no other overpayments. The CASE Master Agreement prevents BCPS from recovering the overpayments under the terms of the bargaining unit agreement.</b></p>		

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	14.2 In the event of a salary error, neither the Board nor CASE may claim salary adjustments for any more than the fiscal year in which the error is detected. When an administrator has been overpaid, he/she must be paid at the correct rate of pay for two (2) pay periods before repayment deductions begin. However, at the teacher's request, repayment deductions may begin immediately.		
<b>Recommendation 5c</b>	Agree	<b>Estimated Completion Date:</b>	02/01/2021
<b>Please provide details of corrective action or explain disagreement.</b>	<b><u>BCPS will regularly report timesheets to administrators with a list of timesheets that not been properly approved.</u></b> Administrators and managers will be provided with regular reporting data to enforce compliance in conjunction with existing employee performance standards.		

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## Agency Response Form

### Information Technology

**Finding 6**  
 BCPS did not ensure that employee access to its automated financial systems was appropriate and adequately controlled, resulting in employees with unnecessary or incompatible access.

We recommend that BCPS

- a. periodically review employee access capabilities to ensure all access is appropriate and incompatible duties are segregated (repeat); and
- b. correct any unnecessary or improper capabilities, including those noted above.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 6a</b>	Agree	<b>Estimated Completion Date:</b>	09/15/2021
Please provide details of corrective action or explain disagreement.	<p>In 2015, it was expected that the ERP system upgrade would permit restricted individual access to certain employee compensation fields in the Human Resources Advantage system. This proved infeasible and so <b><u>in 2019, a position was transferred from the Office of Payroll in the Department of Fiscal Services to the Office of Certification in the Division of Human Resources.</u></b> All data fields related to annual salaries, hourly rates and stipends are now adequately segregated between the two offices so that only Human Resources staff may modify employee compensation.</p> <p><b><u>BCPS will develop a Standard Operating Procedure for regularly providing managers with a list of all employees, the employees' system access, and the approvers of all functions.</u></b> In addition to regular reporting, an immediate notification system will be implemented to require review by the system administrators for each employee hire, transfer, termination, promotion and demotion to ensure that employee system access is properly aligned with job responsibilities. A transactional log will be provided to an independent administrator for regular review.</p> <p><b><u>Eighteen employees were identified by OLA with inappropriate access. Eleven user profiles have been revised as recommended and</u></b></p>		

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### Agency Response Form

	<b><u>the remaining 7 user profiles will be revised within 30 days.</u></b> Broadly defined user roles will be reviewed and restricted in accordance with minimum requirements for each position with provisions for cross training needed to provide continuity of operations.		
<b>Recommendation 6b</b>	Agree	<b>Estimated Completion Date:</b>	9/15/2021
<b>Please provide details of corrective action or explain disagreement.</b>	<b><u>BCPS will conduct an immediate review of all employee system access.</u></b> BCPS is phasing out the online catalogue product for purchasing school supplies. This system permitted 128 account managers to initiate and approve purchases without secondary review and approval. An internally hosted replacement catalogue is in development and will require the use of procurement cards. A new procurement card program is being simultaneously deployed that will require online documentation and approval of every transaction and provide an electronic database of same.		

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## Agency Response Form

**Finding 7**  
**Sensitive BCPS personally identifiable information was maintained in a manner that did not provide adequate security safeguards.**

**We recommend that BCPS implement appropriate information security safeguards for its sensitive PII.**

<b>Agency Response</b>			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>	BCPS is investigating ways to protect data that will allow for security as well as system responsiveness.		
<b>Recommendation 7</b>	Agree	<b>Estimated Completion Date:</b>	06/30/2022
<b>Please provide details of corrective action or explain disagreement.</b>	BCPS will investigate potential, cost effective options to develop a plan to implement controls over sensitive PII.		

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### Finding 8

For two critical systems' databases, security and audit event logging and monitoring procedures were not adequate, and unnecessary elevated system privileges were granted to numerous user accounts.

We recommend that BCPS implement appropriate database monitoring controls over the aforementioned critical systems. Specifically, we recommend that BCPS

- a. log all significant database security, audit related event, and processing activities, including direct changes to critical database tables, and generate reports that include this related database activity (repeat);
- b. ensure that individuals perform regular, independent documented reviews of the aforementioned reports and retain the information for reference purposes (repeat); and
- c. restrict assignment of critical database administration roles to only those personnel requiring such access for their job responsibilities (repeat).

Agency Response			
<b>Analysis</b>			
<b>Please provide additional comments as deemed necessary.</b>	BCPS has modified these database servers to comply with auditor recommendations by removing and disabling administrator account access. In addition, BCPS has enabled logging and created an SOP for log review.		
<b>Recommendation 8a</b>	Agree	<b>Estimated Completion Date:</b>	06/30/2020
<b>Please provide details of corrective action or explain disagreement.</b>	BCPS enabled the recommended log entries.		
<b>Recommendation 8b</b>	Agree	<b>Estimated Completion Date:</b>	06/30/2020
<b>Please provide details of corrective action or explain disagreement.</b>	BCPS has created an SOP to direct log review.		
<b>Recommendation 8c</b>	Agree	<b>Estimated Completion Date:</b>	06/30/2020
<b>Please provide details of corrective action or explain disagreement.</b>	BCPS has removed unnecessary accounts.		

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## Agency Response Form

**Finding 9**  
 Twenty-six publicly accessible servers were improperly located within the internal network, intrusion detection prevention system coverage for untrusted traffic did not exist, and BCPS network resources were not secured against improper access from students using wireless connections and high school computer labs.

We recommend that BCPS

- 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 IDPS coverage should be applied to its network for all untrusted traffic, including encrypted traffic, and implement this coverage; and
- c. limit student network-level access from wireless connections and high school computer labs to only authorized local school and system instructional network resources.

Agency Response			
<b>Analysis</b>			
Please provide additional comments as deemed necessary.			
<b>Recommendation 9a</b>	Agree	<b>Estimated Completion Date:</b>	09/30/2021
Please provide details of corrective action or explain disagreement.	<b>BCPS has removed all the ‘no longer needed’ rules from the firewall and load balancer. BCPS is relocating publicly accessible servers into the DMZ as well as migrating some systems to cloud based solutions.</b>		
<b>Recommendation 9b</b>	Agree	<b>Estimated Completion Date:</b>	09/30/2021
Please provide details of corrective action or explain disagreement.	<b>BCPS has budgeted for a thorough network review and will implement security measures based on those recommendations.</b>		
<b>Recommendation 9c</b>	Agree	<b>Estimated Completion Date:</b>	01/31/2022
Please provide details of corrective action or explain disagreement.	<b>BCPS is implementing network directory attribute assignment to route student traffic and preclude access to non-instructional internal resources.</b>		

AUDIT TEAM

**Mark S. Hagenbuch, CPA**  
Audit Manager

**Richard L. Carter, CISA**  
**R. Brendan Coffey, CPA, CISA**  
Information Systems Audit Managers

**Lauren E. Franchak, CPA**  
**Nelson W. Hopkins, CPA**  
Senior Auditors

**Edward O. Kendall, CISA**  
**Edwin L. Paul, CPA, CISA**  
Information Systems Senior Auditors

**Stephen R. Alexander**  
**Thea A. Chimento**  
**Daniel P. Nuccio, CPA, CFE**  
**Kush C. Patel**  
**Gary B. Staples**  
Staff Auditors

**Dominick R. Abril**  
**Peter W. Chong**  
**Malcolm J. Woodard**  
Information Systems Staff Auditors