

BOYERTOWN AREA SCHOOL DISTRICT
BERKS COUNTY, PENNSYLVANIA
PERFORMANCE AUDIT REPORT

SEPTEMBER 2010

The Honorable Edward G. Rendell
Governor
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania 17120

Ms. Gwen Semmens, Board President
Boyertown Area School District
911 Montgomery Avenue
Boyertown, Pennsylvania 19512

Dear Governor Rendell and Ms. Semmens:

We conducted a performance audit of the Boyertown Area School District (BASD) to determine its compliance with applicable state laws, regulations, contracts, grant requirements, and administrative procedures. Our audit covered the period February 27, 2009 through March 2, 2010, except as otherwise indicated in the report. Additionally, compliance specific to state subsidy and reimbursements was determined for the school years ended June 30, 2008 and June 30, 2007. Our audit was conducted pursuant to 72 P.S. § 403 and in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States.

Our audit found that the BASD complied, in all significant respects, with applicable state laws, regulations, contracts, grant requirements, and administrative procedures, except as detailed in one finding noted in this report. In addition, we identified two matters unrelated to compliance that are reported as observations. A summary of these results is presented in the Executive Summary section of the audit report.

Our audit finding, observations and recommendations have been discussed with BASD's management and their responses are included in the audit report. We believe the implementation of our recommendations will improve BASD's operations and facilitate compliance with legal and administrative requirements. We appreciate the BASD's cooperation during the conduct of the audit and their willingness to implement our recommendations.

Sincerely,

/s/

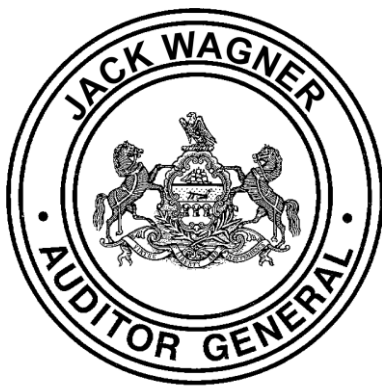
JACK WAGNER
Auditor General

September 20, 2010

cc: **BOYERTOWN AREA SCHOOL DISTRICT** Board Members

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Executive Summary

Audit Work

The Pennsylvania Department of the Auditor General conducted a performance audit of the Boyertown Area School District (BASD). Our audit sought to answer certain questions regarding the District's compliance with applicable state laws, regulations, contracts, grant requirements, and administrative procedures; and to determine the status of corrective action taken by the BASD in response to our prior audit recommendations.

Our audit scope covered the period February 27, 2009 through March 2, 2010, except as otherwise indicated in the audit scope, objectives, and methodology section of the report. Compliance specific to state subsidy and reimbursements was determined for school years 2007-08 and 2006-07.

District Background

The BASD encompasses approximately 99 square miles. According to 2006 local census data, it serves a resident population of 34,803. According to District officials, in school year 2007-08 the BASD provided basic educational services to 7,015 pupils through the employment of 521 teachers, 447 full-time and part-time support personnel, and 23 administrators. Lastly, the BASD received more than \$23.5 million in state funding in school year 2007-08.

Audit Conclusion and Results

Our audit found that the BASD complied, in all significant respects, with applicable state laws, regulations, contracts, grant requirements, and administrative procedures; however, as noted below, we identified one compliance-related matter reported as a finding and two matters unrelated to compliance that is reported as observations.

Finding: Pupil Transportation Reporting Errors Resulted in Reimbursement Underpayments of \$76,755. Our audit found that during the 2006-07 school year, BASD personnel inaccurately reported, to the Department of Education (DE), non-public pupils transported. Furthermore, BASD personnel inaccurately accounted for the number of vehicles. These errors resulted in reimbursement underpayments of \$76,755 (see page 6).

Observation 1: Memorandums of Understanding Not Updated Timely. Our audit of BASD records shows that the current Memorandums of Understanding (MOUs) between the BASD and six police departments were signed and have been updated. However, we found that the MOUs between the BASD and five police departments were not reviewed and re-executed in the two year time period as required by DE (see page 10).

Observation 2: Continued Unmonitored Vendor System Access and Logical Access Control Weaknesses. We noted that BASD personnel should improve controls over remote access to its computers. In particular, controls should be strengthened over outside vendor access to the student accounting applications (see page 12).

Status of Prior Audit Findings and Observations. With regard to the status of our prior audit recommendations to the BASD from an audit we conducted of the 2005-06 and 2004-05 school years, we found the BASD had not taken appropriate corrective action in implementing our recommendations pertaining to nonpublic pupil transportation. See current finding (see page 6).

However, we found BASD did take appropriate corrective action in implementing our recommendations pertaining to its student accounting applications in all areas but one. BASD hired a new vendor and we conducted a review of their procedures. See current observation (see page 12).

Audit Scope, Objectives, and Methodology

Scope

What is a school performance audit?

School performance audits allow the Department of the Auditor General to determine whether state funds, including school subsidies, are being used according to the purposes and guidelines that govern the use of those funds. Additionally, our audits examine the appropriateness of certain administrative and operational practices at each Local Education Agency (LEA). The results of these audits are shared with LEA management, the Governor, the PA Department of Education, and other concerned entities.

Our audit, conducted under authority of 72 P.S. § 403, is not a substitute for the local annual audit required by the Public School Code of 1949, as amended. We conducted our audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States.

Our audit covered the period February 27, 2009 through March 2, 2010.

Regarding state subsidy and reimbursements, our audit covered school years 2007-08 and 2006-07.

While all districts have the same school years, some have different fiscal years. Therefore, for the purposes of our audit work and to be consistent with Department of Education reporting guidelines, we use the term school year rather than fiscal year throughout this report. A school year covers the period July 1 to June 30.

Objectives

What is the difference between a finding and an observation?

Our performance audits may contain findings and/or observations related to our audit objectives. Findings describe noncompliance with a law, regulation, contract, grant requirement, or administrative procedure. Observations are reported when we believe corrective action should be taken to remedy a potential problem not rising to the level of noncompliance with specific criteria.

Performance audits draw conclusions based on an evaluation of sufficient, appropriate evidence. Evidence is measured against criteria, such as, laws, regulations, and defined business practices. Our audit focused on assessing the BASD's compliance with applicable state laws, regulations, contracts, grant requirements, and administrative procedures. However, as we conducted our audit procedures, we sought to determine answers to the following questions, which serve as our audit objectives:

- ✓ Did the District use an outside vendor to maintain its membership data and if so, are there internal controls in place related to vendor access?
- ✓ Is the District's pupil transportation department, including any contracted vendors, in compliance with applicable state laws and procedures?
- ✓ Are there any declining fund balances which may impose risk to the fiscal viability of the District?

- ✓ Did the District pursue a contract buyout with an administrator and if so, what was the total cost of the buy-out, reasons for the termination/settlement, and do the current employment contract(s) contain adequate termination provisions?
- ✓ Were there any other areas of concern reported by local auditors, citizens, or other interested parties which warrant further attention during our audit?
- ✓ Is the District taking appropriate steps to ensure school safety?
- ✓ Did the District take appropriate corrective action to address recommendations made in our prior audits?

Methodology

What are internal controls?

Internal controls are processes designed by management to provide reasonable assurance of achieving objectives in areas such as:

- Effectiveness and efficiency of operations;
- Relevance and reliability of operational and financial information;
- Compliance with applicable laws, regulations, contracts, grant requirements and administrative procedures.

Government Auditing Standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding, observations and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our finding, observations and conclusions based on our audit objectives.

BASD management is responsible for establishing and maintaining effective internal controls to provide reasonable assurance that the District is in compliance with applicable laws, regulations, contracts, grant requirements, and administrative procedures. Within the context of our audit objectives, we obtained an understanding of internal controls and assessed whether those controls were properly designed and implemented.

Any significant deficiencies found during the audit are included in this report.

In order to properly plan our audit and to guide us in possible audit areas, we performed analytical procedures in the areas of state subsidies/reimbursement, pupil membership and pupil transportation.

Our audit examined the following:

- Records pertaining to pupil transportation, bus driver qualifications and financial stability.
- Items such as Board meeting minutes.

Additionally, we interviewed selected administrators and support personnel associated with BASD operations.

Lastly, to determine the status of our audit recommendations made in a prior audit report released on August 6, 2009, we performed additional audit procedures targeting the previously reported matters.

Findings and Observations

Finding

Criteria and Public School Code section relevant to the finding:

Transportation data must be maintained in accordance with Chapter 23 of the State Board of Regulations titled “Pupil Transportation” and DE guidelines and instructions, since this data determines the district’s transportation subsidies.

The number of days transported, miles vehicles travel with and without pupils, pupil data such as public hazardous and public nonhazardous, and the amount paid to contractors are all integral parts of the transportation formula. In addition, nonpublic pupil data generates a portion of the transportation subsidy.

Section 2509.3 of the Public School Code provides, in part:

That each school district shall be paid the sum of \$385 for each nonpublic school pupil transported.

Pupil Transportation Reporting Errors Resulted in Reimbursement Underpayments of \$76,755

Our audit of the District’s contracted pupil transportation records found discrepancies in reports submitted to the Department of Education (DE) for the 2006-07 school year. The discrepancies resulted in reimbursement net underpayments of \$76,755.

District personnel:

- Incorrectly reported the number of days transported for two contracted vehicles;
- Failed to report any vehicle information for ten contracted vehicles;
- Underreported miles for vehicles traveled with pupils by a net of 432.5 miles for the ten contracted vehicles not reported;
- Underreported miles for vehicles traveled without pupils by a net of 256.6 for the ten contracted vehicles not reported;
- Overstated public hazardous pupil data by 14;
- Understated public nonhazardous pupil data by 199; and
- Overstated nonpublic pupil data by 80.

In addition, the amount paid to the contractors was overstated because the District incorrectly included costs for field trip and athletic trip runs; only costs for transportation to and from school should be reported. Although this had no effect on the reimbursement amount in this case, errors in reporting such costs could result in incorrect reimbursement in the future.

The errors were caused by the transportation software package and the lack of a system of review to ensure accurate reporting.

As a result of the reporting errors, the District was underpaid \$76,755 for the 2006-07 school year. This was comprised of a public subsidy underpayment of \$107,555 and a nonpublic subsidy overpayment of \$30,800.

DE has been provided reports detailing the errors for use in recalculating the District's transportation reimbursement.

Recommendations

The *Boyertown Area School District* should:

1. Review mileage records, pupil counts, and contractor payment data for vehicles providing transportation to and from school to ensure accurate reporting of data that is in compliance with DE reporting guidelines.
2. Review records of the number of children attending nonpublic schools for whom transportation was provided for accuracy.
3. Implement a system of final review to ensure accurate reporting of transportation data to DE.
4. Review transportation reports submitted for subsequent years and submit revisions, if necessary.

The *Department of Education* should:

5. Adjust the District's transportation allocations and pay the \$76,755 to resolve the finding.

Management Response

Management stated the following:

The net result of the transportation information reporting error produced an underpayment of transportation reimbursement in the amount of \$76,755.

State audit discovered the district's End of Year (EOY) report missed claiming ten reportable vehicles producing an underpayment of transportation subsidy of \$107,555.02.

Cause of the Problem

Upon investigating this issue with the District's transportation software provider, Bus Tracks, the company response is as follows: "We have discovered a potential error when creating the PDE EOY file for reimbursement purposes. Depending upon the original order in which buses were entered, it is possible that some of the buses may have been dropped from the final EOY file."

Suggested Correction

Bus Tracks will analyze the cause of the problem and explore possible solutions to remedy the issue pertaining to accuracy of the software reporting. In addition to the software improvements, the Transportation Supervisor will verify all monthly EOY reports against the bus contractor data to be certain all vehicles are included. The Transportation Supervisor will continue to verify all work submitted to the State via the web site.

The State audit discovered an over-reporting of the number of non-public students transported resulting in an overpayment of transportation subsidy in the amount of \$30,800.

Cause of the Problem

This finding was discovered in the last State audit. The Bus Tracks software has a General Category section in the student file where the student status for secondary, elementary, kindergarten and non-public are noted via check boxes in the file. This data is used to generate the student count for the transportation report. Each student is to have only one of the check boxes completed. The software would take random students and add a second check mark in this category section instead of limiting only one check per student. Per Bus Tracks, the check boxes in the student status should be set to toggle, preventing multiple status codes from being checked. However, the software was improperly selecting multiple status codes randomly in student files which produced the over-reporting of students in the EOY report.

Suggested Correction

Bus Tracks has addressed the toggle issue in the software and reporting generated from the system should be accurate. The Transportation Supervisor has also established a manual student count system utilizing a spreadsheet to prevent errors and provide the proper data for the state auditors.

Observation No. 1 →

Memorandums of Understanding Not Updated Timely

Criteria and Public School Code section relevant to the observation:

Section 1303-A(c) provides:

All school entities to develop a memorandum of understanding with local law enforcement that sets forth procedures to be followed when an incident involving an act of violence or possession of a weapon by any person occurs on school property. Law enforcement protocols shall be developed in cooperation with local law enforcement and the Pennsylvania State Police.

Additionally, the Basic Education Circular issued by the Department of Education entitled Safe Schools and Possession of Weapons contains a sample MOU to be used for school entities. Section VI, General Provisions, item B of this sample states:

This Memorandum may be amended, expanded or modified at any time upon written consent of the parties, but in any event must be reviewed and re-executed within two years of the date of its original execution and every two years thereafter.

Our audit of the District's records found that the current Memorandums of Understanding (MOUs) between the District and six police departments to include the Pennsylvania State Police were signed and have been updated. However, we found that 5 of the 6 MOUs were not reviewed and re-executed within the two year time period. The District updated and signed those MOUs after we contacted them in advance of this audit.

The failure to update the MOUs with all local law enforcement agencies could result in a lack of cooperation, direction, and guidance between District employees and law enforcement agencies if an incident occurs on school property, at any school sponsored activity, or any public conveyance providing transportation to or from a school or school sponsored activity. This internal control weakness could have an impact on law enforcement notification and response, and ultimately the resolution of a problem situation.

Recommendations

The *Boyertown Area School District* should:

1. In consultation with the solicitor, continue to review, update and re-execute the current MOUs between the District and local law enforcement.
2. Adopt a policy requiring the administration to review and re-execute the MOUs every two years.

Management Response

Management stated the following:

School administration will review, update, and re-execute the current MOUs between the school district and local law enforcement every two years as required by PDE.

Observation No. 2

Continued Unmonitored Vendor System Access and Logical Access Control Weaknesses

What is logical access control?

“Logical access” is the ability to access computers and data via remote outside connections.

“Logical access control” refers to internal control procedures used for identification, authorization, and authentication to access the computer systems.

Our prior audit found unmonitored vendor system access and logical access control weaknesses. The District subsequently contracted with a new vendor. Our current audit found continued weaknesses over vendor access with the new vendor.

The District uses software purchased from an outside vendor for its critical student accounting applications (membership and attendance). Additionally, the District’s entire computer system, including all its data and the above vendor’s software are maintained on the vendor’s servers which are physically located at the vendor’s location. The District has remote access into the vendor’s network servers. The vendor also provides the District with system maintenance and support.

Based on our current year procedures, we determined that a risk exists that unauthorized changes to the District’s data could occur and not be detected because the District was unable to provide supporting evidence that they it is adequately monitoring all vendor activity in its system. However, since the District has adequate manual compensating controls in place to verify the integrity of the membership and attendance information in its database, that risk is mitigated.

Reliance on manual compensating controls becomes increasingly problematic if the District would ever experience personnel and/or procedure changes that could reduce the effectiveness of the manual controls.

Unmonitored vendor system access and logical access control weaknesses could lead to unauthorized changes to the District’s membership information and result in the District not receiving the funds to which it was entitled from the state.

During our review, we found the District had the following weaknesses over vendor access to the District's system:

1. The District's Acceptable Use Policy does not include provisions for authentication (password security and syntax requirements).
2. The District has certain weaknesses in logical access controls. We noted that the District's system parameter settings do not require all users, including the vendor, to change their passwords every 30 days; to maintain a password history (i.e., approximately ten passwords) (district only); to lock out users after three unsuccessful attempts and to log off the system after a period of inactivity (i.e., 60 minutes maximum).
3. The vendor has unlimited access (24 hours a day/7 days a week) into the District's system.

Recommendations

The *Boyertown Area School District* should:

1. Ensure that the District's Acceptable Use Policy includes provisions for authentication (password security and syntax requirements).
2. Implement a security policy and system parameter settings to require all users, including the vendor, to change their passwords on a regular basis (i.e., every 30 days). The District should maintain a password history that will prevent the use of a repetitive password (i.e., last ten passwords); lock out users after three unsuccessful attempts and log users off the system after a period of inactivity (i.e., 60 minutes maximum).
3. Only allow access to their system when the vendor needs access to make pre-approved changes/updates or requested assistance. This access should be removed when the vendor has completed its work. This procedure would also enable the monitoring of vendor changes.

Management Response

Management stated the following:

1. Currently, the Boyertown Area School District's Acceptable Use Policy (AUP) does not include provisions for password syntax and security. We will determine the necessary changes to add these password provisions and make a recommendation to the School District's Board of Directors to amend the AUP.
2. Boyertown Area School District's current Student Information System (SIS) is hosted by SunGard Public Sector in Bethlehem, PA. The SIS holds our student membership and accounting data. Currently, the SIS is not capable of enforcing password syntax and change requirements. We will work with the hosting vendor to identify a solution to facilitate the enforcement of our password syntax and change policies.
3. The hosting vendor for the District's SIS is responsible for managing and maintaining the server and database infrastructure required to host the District's SIS. As such, the hosting vendor requires 24/7 physical and network access to the SIS database and server hardware. It is not feasible for a District employee to manage physical and network access to the hosting vendor according to the Auditor's recommendation. However, the hosting vendor does not view change membership or attendance without permission from an authorized District employee. In the event that a change is needed, the details of the change are recorded and tracked by the vendor and documentation is sent to the appropriate District employee contact.

Status of Prior Audit Findings and Observations

Our prior audit of the Boyertown Area School District (BASD) for the school years 2005-06 and 2004-05 resulted in one reported finding and one reported observation. The finding pertained to nonpublic pupil transportation, and the observation pertained to its student accounting applications. As part of our current audit, we determined the status of corrective action taken by the District to implement our prior recommendations. We performed audit procedures, and questioned District personnel regarding the prior finding and observation. As shown below, we found that the BASD did not implement recommendations related to nonpublic pupil transportation and its student accounting applications.

<i>School Years 2005-06 and 2004-05 Auditor General Performance Audit Report</i>		
<i>Prior Recommendations</i>	<i>Implementation Status</i>	
<p><u><i>I. Finding: Errors in Reporting Nonpublic Pupils Transported Resulted in a Net Overpayment of \$10,010</i></u></p> <ol style="list-style-type: none"> 1. Ensure that the District's software accurately determines the number of nonpublic pupils transported. 2. Review reports for subsequent years and submit revised reports if errors are found. 3. The Department of Education (DE) should adjust the District's allocations to correct the net overpayment of \$10,010. 	<p>Background:</p> <p>Our prior audit of the BASD's transportation records for the 2005-06 and 2004-05 school years found that the number of nonpublic pupils transported was understated by 4 pupils and overstated by 30 pupils respectively, resulting in a net overpayment of \$10,010.</p>	<p>Current Status:</p> <p>We followed up on the BASD's transportation reports and found that BASD did not take appropriate corrective action as recommended.</p> <p>The District's software did not accurately determine the number of nonpublic pupils transported and subsequent years reports had not been reviewed and submitted. This is a finding in our current report (see page 6).</p>

<p><u>II. Observation:</u> <u>Unmonitored Vendor</u> <u>System Access and Logical</u> <u>Access Control Weaknesses</u></p> <ol style="list-style-type: none"> 1. Establish separate information technology (IT) policies and procedures for controlling the activities of vendors/consultants and have the vendor sign this policy, or the District should require the vendor to sign the District's Acceptable Use Policy. 2. Implement a security policy and system parameter settings to require all users, including the vendor, to change their passwords on a regular basis (i.e., every 30 days). Passwords should include alpha, numeric and special characters. Also, the District should maintain a password history that will prevent the use of a repetitive password (i.e, last ten passwords); and lock out users after three unsuccessful attempts. 3. Generate monitoring reports (including firewall logs) of vendor and employee access and activity on the system. Monitoring reports should include the date, time, and reason for access, change(s) made and who made the change(s). The District should review these reports to determine that the access was appropriate and that 	<p>Background:</p> <p>We determined a risk exists that unauthorized changes to the BASD's child accounting data could occur and not be detected because the BASD was unable to provide supporting evidence that it is adequately monitoring all vendor activity in its system. Ten weaknesses were noted in the BASD's information technology internal control policies and procedures.</p>	<p>Current Status:</p> <p>We followed up on the BASD's IT controls/access and found that BASD did take appropriate corrective action as recommended in all but one area. A new review was performed during our current audit due to a new vendor (see Observation No. 2). We found continued weaknesses and our recommendations will be addressed in our current audit.</p>
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<p>data was not improperly altered. The District should also ensure it is maintaining evidence to support this monitoring and review.</p> <p>4. Establish policies and procedures to analyze the impact of proposed changes in relation to other business-critical functions.</p> <p>5. Back up the application(s) before placing program changes into production to ensure it could recover if problems are encountered.</p> <p>6. Ensure the servers with membership/attendance data are maintained in a restricted/secure area in order to detect/deter unauthorized physical access to the membership/attendance data.</p> <p>7. Develop and maintain a list of authorized individuals with access to the hardware (servers) that contains the membership/attendance data.</p> <p>8. Ensure that fire detectors and fire extinguishers are installed in the computer room. The District should also ensure servers are kept in a temperature controlled room.</p> <p>9. Ensure the vendor performs regular backups of the system.</p>		
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10. Ensure the vendor stores back-up tapes in a secure, off-site location.		
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Distribution List

This report was initially distributed to the superintendent of the school district, the board members, our website address at www.auditorgen.state.pa.us, and the following:

The Honorable Edward G. Rendell
Governor
Commonwealth of Pennsylvania
Harrisburg, PA 17120

The Honorable Thomas E. Gluck
Acting Secretary of Education
1010 Harristown Building #2
333 Market Street
Harrisburg, PA 17126

The Honorable Robert M. McCord
State Treasurer
Room 129 - Finance Building
Harrisburg, PA 17120

Senator Jeffrey Piccola
Chair
Senate Education Committee
173 Main Capitol Building
Harrisburg, PA 17120

Senator Andrew Dinniman
Democratic Chair
Senate Education Committee
183 Main Capitol Building
Harrisburg, PA 17120

Representative James Roebuck
Chair
House Education Committee
208 Irvis Office Building
Harrisburg, PA 17120

Representative Paul Clymer
Republican Chair
House Education Committee
216 Ryan Office Building
Harrisburg, PA 17120

Ms. Barbara Nelson
Director, Bureau of Budget and
Fiscal Management
Department of Education
4th Floor, 333 Market Street
Harrisburg, PA 17126

Dr. David Wazeter
Research Manager
Pennsylvania State Education Association
400 North Third Street - Box 1724
Harrisburg, PA 17105

Dr. David Davare
Director of Research Services
Pennsylvania School Boards Association
P.O. Box 2042
Mechanicsburg, PA 17055

This report is a matter of public record. Copies of this report may be obtained from the Pennsylvania Department of the Auditor General, Office of Communications, 318 Finance Building, Harrisburg, PA 17120. If you have any questions regarding this report or any other matter, you may contact the Department of the Auditor General by accessing our website at www.auditorgen.state.pa.us.

