LEBANON SCHOOL DISTRICT LEBANON COUNTY, PENNSYLVANIA PERFORMANCE AUDIT REPORT

DECEMBER 2010

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

Mr. Thomas Schaffer, Board President Lebanon School District 1000 South Eighth Street Lebanon, Pennsylvania 17042

Dear Governor Rendell and Mr. Schaffer:

We conducted a performance audit of the Lebanon School District (LSD) to determine its compliance with applicable state laws, regulations, contracts, grant requirements and administrative procedures. Our audit covered the period December 11, 2008 through July 29, 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 LSD complied, in all significant respects, with applicable state laws, regulations, contracts, grant requirements, and administrative procedures. However, we identified one matter unrelated to compliance that is reported as an observation. A summary of these results is presented in the Executive Summary section of the audit report.

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

Sincerely,

/s/ JACK WAGNER Auditor General

December 27, 2010

cc: **LEBANON 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 Lebanon School District (LSD). 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 LSD in response to our prior audit recommendations.

Our audit scope covered the period December 11, 2008 through July 29, 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 LSD encompasses approximately 5 square miles. According to 2000 local census data, it serves a resident population of 25,297. According to District officials, in school year 2007-08 the LSD provided basic educational services to 4,332 pupils through the employment of 331 teachers, 203 full-time and part-time support personnel, and 26 administrators. Lastly, the LSD received more than \$29.2 million in state funding in school year 2007-08.

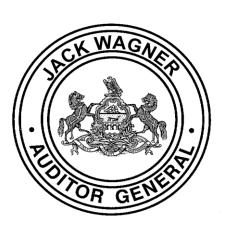
Audit Conclusion and Results

Our audit found that the LSD complied, in all significant respects, with applicable state laws, regulations, contracts, grant requirements, and administrative procedures; however, as noted below, we identified one matter unrelated to compliance that is reported as an observation.

Observation: Unmonitored Vendor
System Access and Logical Access
Control Weaknesses. We determined that a risk exists that unauthorized changes to the LSD's data could occur and not be detected because the LSD was unable to provide supporting evidence that it is adequately monitoring all vendor activity in its system (see page 6).

Status of Prior Audit Findings and

Observations. With regard to the status of our prior audit recommendations to the LSD from an audit we conducted of the 2005-06 and 2004-05 school years, we found that the LSD had taken appropriate corrective action in implementing our recommendations pertaining to a certification deficiency (see page 9). We found that LSD no longer contracts with the vendor identified in our prior audit; as a result, the recommendations made regarding outside vendor access were no longer applicable (see page 9).



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.

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.

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 December 11, 2008 through July 29, 2010, except for the verification of professional employee certification which was performed for the period November 11, 2008 through July 1, 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 (DE) 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.

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 LSD'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:

- ✓ 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 use an outside vendor to maintain its membership data and if so, are there internal controls in place related to vendor access?
- ✓ Did the District take appropriate corrective action to address recommendations made in our prior audits?

Government Auditing Standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings, observations 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.

LSD 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 and pupil transportation.

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.

Our audit examined the following:

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

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

Lastly, to determine the status of our audit recommendations made in a prior audit report released on August 13, 2009, we reviewed the LSD's response to DE dated October 19, 2009. We then performed additional audit procedures targeting the previously reported matters.

Findings and Observations

Observation

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.

Unmonitored Vendor System Access and Logical Access Control Weaknesses

The Lebanon School District (LSD) uses software purchased from the Carbon-Lehigh Intermediate Unit #21 (CLIU) for its critical student accounting applications. The CLIU has remote access into the District's network servers. Additionally, the District's entire computer system, including all its data and the CLIU's software, are maintained on the CLIU's servers, which are physically located at the CLIU's site. The CLIU also provides the District with system maintenance and support.

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 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 does not have current information technology (IT) policies and procedures for controlling the activities of the CLIU, nor does it require the CLIU to sign the District's Acceptable Use Policy.

- 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 passwords every 30 days; to use passwords that are a minimum length of eight characters and include alpha, numeric and special characters; to maintain a password history (i.e., approximately ten passwords); and to lock out users after three unsuccessful attempts.
- 3. The CLIU has unlimited access (24 hours a day/7 days a week) into the District's system.
- 4. The District does not have evidence that it is generating or reviewing monitoring reports of user access and activity on the system (including CLIU and District employees).

Recommendations

The Lebanon School District should:

- 1. Establish separate IT policies and procedures for controlling the activities of vendors/consultants and have the CLIU sign this policy, or require the CLIU 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 passwords on a regular basis (i.e., every 30 days). Passwords should be a minimum length of eight characters and 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. Allow access to their system only when the CLIU needs access to make pre-approved changes/updates or requested assistance. This access should be removed when the CLIU has completed its work. This procedure would also enable the monitoring of CLIU changes.

4. Generate monitoring reports (including firewall logs) of CLIU 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 data was not improperly altered. The District should also ensure it is maintaining evidence to support this monitoring and review.

Management Response

Management stated the following:

- 1. We have a Security Agreement for vendor access. When we have our new AUP complete we will ask Carbon-Lehigh to have their staff sign.
- 2. The District is actively investigating processes and procedures for having users change their passwords on a regular basis. We have a consultant working on the problem. A policy will be written to support the findings of this investigation.
- 3. We would expect this of a hosted solution. We are paying them for their expertise. Our current SIS [Student Information System] data is housed at Carbon-Lehigh IU. We have reviewed their security and visited their Server center. The district expects access to our data 24/7. Individual accounts have been setup for CLIU tech support instead of a general master account and password, which was past practice at LLIU [Lancaster-Lebanon Intermediate Unit #13].
- 4. Because of this review we have found a way to check the logs who is doing what on our server.

Auditor Conclusion

We still maintain that unauthorized changes could occur with the vendor having 24/7 access. We recommend arranging for vendor system access in advance and for a limited period of time. Finally, LSD should begin to generate and monitor logs on a regular basis. The observation will stand as written.

Status of Prior Audit Findings and Observations

Our prior audit of the Lebanon School District (LSD) for the school years 2005-06 and 2004-05 resulted in one reported finding and one observation. The finding pertained to certification deficiencies and the observation pertained to unmonitored vendor system access and logical access control weaknesses. As part of our current audit, we determined the status of corrective action taken by the District to implement our prior recommendations. We analyzed the LSD Board's written response provided to the Department of Education (DE), performed audit procedures, and questioned District personnel regarding the prior finding and observation. As shown below, we found that the LSD did implement recommendations related to the certification finding. We further noted that because the LSD changed software vendors our specific recommendations regarding unmonitored vendor system access and logical access control weaknesses were no longer applicable.

School Years 2005-06 and 2004-05 Auditor General Performance Audit Report				
Prior Recommendations	Implementation Status			
I. Finding: Certification Deficiencies	Background:	Current Status:		
1. Ensure all professional employees have current certificates. 2. Require all professional personnel obtain the required certification for their positions. 3. DE should adjust the District's allocations to recover the appropriate subsidy forfeitures.	Our prior audit of professional employees' certification and assignments for the period May 24, 2005 through November 10, 2008, was performed to determine compliance with the Public School Code and DE's Bureau of School Leadership and Teacher Quality's Certification and Staffing Policies and Guidelines. We found five deficiencies which resulted in subsidy forfeitures of \$12,996.	Our current audit found the District has ensured that all professional employees have current certificates and have made it a priority to have certified employees. We found that the employees cited in our prior audit either have proper certification for their assignments or are properly supervised. DE adjusted the District's allocations to recover the subsidy forfeitures of \$12,996 on December 31, 2009.		

II. Observation: Unmonitored Vendor System Access and Logical Access Control Weaknesses

1. Include in its contract with the Lancaster-Lebanon Intemediate Unit #13 (LLIU) a non-disclosure agreement for the LSD's proprietary information.

Background:

Our prior audit found that the LSD used software purchased from the LLIU for its critical student accounting applications. Additionally, the LSD's entire computer system, including all its data and the above software, were maintained on LLIU's servers which are physically located at LLIU. The LSD had remote access into LLIU's network servers, with LLIU providing system maintenance and support.

Current Status:

Subsequent to our prior audit, the contract with the vendor was terminated. Therefore, our specific recommendations were no longer applicable. However, our current review of controls covering the new contractor again found weaknesses, and resulted in the recommendations

In addition, the LSD's legal counsel should review any major contract before the LSD enters into an agreement.

- 2. Establish separate information technology policies and procedures for controlling the activities of vendors and consultants and have the vendor sign this policy, or require the LLIU to sign the LSD's Acceptable Use Policy.
- 3. Include in it Acceptable Use Policy provisions for authentication (e.g., password security and syntax requirements). Further, all employees should be required to sign this policy.
- 4. 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 be a characters and include alpha, numeric, and the LSD 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).

We determined that a risk existed that unauthorized changes to the LSD's data could occur and not be detected because the LSD was unable to provide supporting evidence that it was adequately monitoring all vendor activity in its system.

contained in the observation in our current audit report (see page 6).

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

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.

