

NORTHERN LEBANON SCHOOL DISTRICT
LEBANON COUNTY, PENNSYLVANIA
PERFORMANCE AUDIT REPORT

AUGUST 2010

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

Mr. Brian A. Wolfe, Board President
Northern Lebanon School District
345 School Drive
P.O. Box 100
Fredericksburg, Pennsylvania 17026

Dear Governor Rendell and Mr. Wolfe:

We conducted a performance audit of the Northern Lebanon School District (NLSD) to determine its compliance with applicable state laws, regulations, contracts, grant requirements, and administrative procedures. Our audit covered the period January 6, 2008 through December 2, 2009, 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 NLSD 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 NLSD's management and their responses are included in the audit report. We believe the implementation of our recommendations will improve NLSD's operations and facilitate compliance with legal and administrative requirements. We appreciate the NLSD's cooperation during the conduct of the audit and their willingness to implement our recommendations.

Sincerely,

/s/

JACK WAGNER
Auditor General

August 27, 2010

cc: **NORTHERN 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 Northern Lebanon School District (NLSD). 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 NLSD in response to our prior audit recommendations.

Our audit scope covered the period January 6, 2008 through December 2, 2009, 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 NLSD encompasses approximately 144 square miles. According to 2000 federal census data, it serves a resident population of 14,984. According to District officials, in school year 2007-08 the NLSD provided basic educational services to 2,605 pupils through the employment of 188 teachers, 128 full-time and part-time support personnel, and 12 administrators. Lastly, the NLSD received more than \$12.2 million in state funding in school year 2007-08.

Audit Conclusion and Results

Our audit found that the NLSD 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: Continued Unmonitored IU System Access and Logical Access

Control Weaknesses. We noted that NLSD personnel should improve controls over remote access to its computers. In particular, controls should be strengthened over Carbon-Lehigh Intermediate Unit #21 (CLIU) and the outside vendor access to the student accounting applications (see page 6).

Status of Prior Audit Findings and

Observations. We noted that the servers holding the NLSD's child accounting data changed from Lancaster-Lebanon Intermediate Unit #13 to CLIU. The outside vendor remained the same. We determined the NLSD continued to have access and control weaknesses at the new location resulting in a continued observation in our current audit report (see page 10).



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 January 6, 2008 through December 2, 2009.

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

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 NLSD'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:

- ✓ Were professional employees certified for the positions they held
- ✓ 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 observation and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observation and conclusions based on our audit objectives.

NLSD's 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, pupil transportation, and comparative financial information.

Our audit examined the following:

- Records pertaining to bus driver qualifications, professional employee certification, and financial stability.
- Items such as Board meeting minutes and pupil membership records.

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

Lastly, to determine the status of our audit recommendations made in a prior audit report released on May 14, 2009. We then performed additional audit procedures targeting the previously reported matters.

Findings and Observations

Observation

Continued Unmonitored IU 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.

The Northern Lebanon School District (NLSD) uses software purchased from an outside vendor for its critical student accounting applications (membership and attendance). Additionally, the District changed intermediate units in which the District’s entire computer system, including all its data and the above vendor’s software are maintained. The District changed from Lancaster-Lebanon Intermediate Unit #13 (LLIU) to Carbon-Lehigh Intermediate Unit #21 (CLIU). The District has remote access into CLIU’s network servers. CLIU and the outside vendor also provide the District with system maintenance and support.

During our prior audit, we found that the NLSD had seven weaknesses pertaining to the LLIU and the outside vendor access into the NLSD’s system. Based on our current year audit procedures, we determined that a risk still exists whereas unauthorized changes to the NLSD’s data could occur and not be detected. This stems from the NLSD’s inability to provide supporting evidence that they are adequately monitoring all CLIU and outside vendor activity in their system. However, since the NLSD still has manual compensating controls in place to verify the integrity of the membership and attendance information in its database, that risk is mitigated. Membership reconciliations are performed between manual records and reports generated from the student accounting system.

Reliance on manual compensating controls becomes increasingly problematic if the NLSD would ever move into an entirely paperless future with decentralized direct entry of data into their systems. Continued unmonitored CLIU and outside vendor system access and logical access control weaknesses could lead to unauthorized changes to the NLSD’s membership information and result in the NLSD not receiving the funds to which it was entitled from the state.

During our current audit, we found the NLSD had the following weaknesses over CLIU and outside vendor access to the NLSD's system:

1. Does not have current information technology (IT) policies and procedures for controlling the activities of CLIU and the outside vendor, nor does it require the CLIU and the outside vendor to sign the District's Acceptable Use Policy.
2. Does not require written authorization before adding, deleting, or changing a userID.
3. Has certain weaknesses in logical access controls. We noted that the District's system parameter settings do not require all users, including the CLIU and the outside vendor, to change their passwords every 30 days; to use passwords that are a minimum length of eight characters and include alpha numeric and special characters; and to maintain a password history (i.e., approximately ten passwords).
4. The CLIU and the outside vendor have unlimited access (24 hours a day/7 days a week) into the District's system.
5. Does not have evidence they are generating or reviewing monitoring reports of user access and activity on the system (including CLIU, the outside vendor and District employees). There is no evidence the District is performing procedures in order to determine which data the CLIU and the outside vendor may have altered or which CLIU and the outside vendor employees accessed their system.

Recommendations

The *Northern Lebanon School District* should:

1. Establish separate IT policies and procedures for controlling the activities of vendors/consultants and have the CLIU and the outside vendor sign this policy, or the District should require the CLIU and the outside vendor to sign the District's Acceptable Use Policy

2. Develop policies and procedures to require written authorization when adding, deleting, or changing a userID.
3. Implement a security policy and system parameter settings to require all users, including the CLIU and the outside vendor, to change their 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).
4. Only allow access to its system when the CLIU and the outside vendor, needs access to make pre-approved changes/updates or requested assistance. This access should be removed when the CLIU and the outside vendor has completed its work. The procedure would also enable the monitoring of CLIU and the outside vendor changes.
5. Generate monitoring reports (including firewall logs) of the CLIU, the outside vendor and employee access and activity on its system. Monitoring reports should include the date, time, and reason for access, changes(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. The District does not have policies and procedures for controlling the activities of CLIU. The district has requested that CLIU staff members who access our powerschool server sign our District acceptable use policy. CLIU will not comply with this request. It is their opinion that since the server resides in their physical location their staff members do not need to sign the NLSA acceptable use policy.

2. The District superintendent's secretary will create a spreadsheet that is used to track when user accounts are created, disabled, or changed. The spreadsheet will also include the dates of any and all changes.
3. The District is in the process of implementing an administrative guideline for setting passwords. Testing is tentatively set to begin in March 2010 to require users to change their password every 30 days with full implementation of all stated requirements to be launched at the start of the 2010/11 school year.
4. CLIU needs 24/7 access to the server for those times when there are emergencies that need immediate access at any time.
5. The District has made and continues to make a feature request to CLIU and Pearson for a logging feature that captures all transactions.

Auditor Conclusion

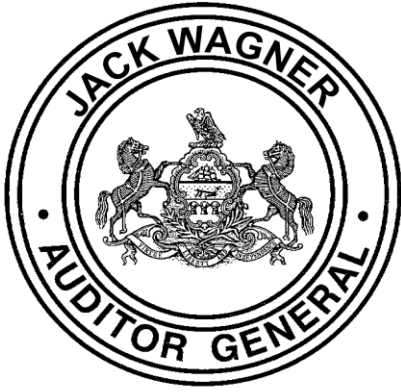
We appreciate the District's corrective action plan; however, we continue to recommend that the District adopt policies and procedures for controlling the activities of CLIU.

Status of Prior Audit Findings and Observations

Our prior audit of the Northern Lebanon School District (NLSD) for the school years 2005-06 and 2004-05 resulted in one reported observation. The observation pertained to unmonitored intermediate unit system access into the NLSD child accounting database. 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 observation. As shown below, we found that the servers holding the District’s child accounting data changed from Lancaster-Lebanon Intermediate Unit #13 (LLIU) to Carbon-Lehigh Intermediate Unit #21 (CLIU). The outside vendor remained the same. We determined the District continued to have access and control weakness at the new location resulting in a continued observation in our current audit report.

<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. Observation: Unmonitored Vendor System Access and Logical Access Control Weaknesses</i></u></p> <ol style="list-style-type: none"> 1. Include provisions for authentication for the District’s Acceptable Use Policy. 2. Establish separate information technology policies and procedures for controlling the activities of vendors/consultants and have the LLIU sign this policy, or the District should require the LLIU to sign the District’s Acceptable Use Policy. 3. Maintain documentation to evidence that terminated employees are properly removed from the system in a timely manner. 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 minimum length of eight characters and include alpha, numeric and special characters. Also, the District 	<p>Background:</p> <p>Our prior audit of the NLSD found that 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 vendor’s software are maintained on LLIU’s servers which are physically located at LLIU. The District has remote access into LLIU’s network servers. LLIU also provides the District with system maintenance and support.</p>	<p>Current Status:</p> <p>We followed up on the NLSD’s critical student accounting applications and found that the servers containing the NLSD membership information changed locations from LLIU to CLIU. Therefore, we again completed a review of the NLSD student accounting applications and found that the District continued to have access and control weaknesses (see page 6).</p>

<p>should maintain a password history that will prevent the use of a repetitive password (i.e., last ten passwords).</p> <p>5. Only allow access to its system when the LLIU needs access to make pre-approved changes/updates or requested assistance. This access should be removed when the LLIU has completed its work. This procedure would also enable the monitoring of LLIU changes.</p> <p>6. Generate monitoring reports (including firewall logs) of the LLIU and employee access and activity on its 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 the data was not improperly altered. The District should also ensure it is maintaining evidence to support this monitoring and review.</p> <p>7. Maintain the servers with the membership/attendance data in a restricted/secure area in order to detect/deter unauthorized physical access to the membership/attendance data.</p>		
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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:

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