

Division of Local Government & School Accountability

Ithaca City School District

Transportation State Aid and Information Technology

Report of Examination

Period Covered:

July 1, 2015 — January 10, 2017

2017M-63



Thomas P. DiNapoli

Table of Contents

		Page
AUTHORITY	LETTER	1
EXECUTIVE S	SUMMARY	2
INTRODUCTION	ON	4
	Background	4
	Objectives	5
	Scope and Methodology	5
	Comments of District Officials and Corrective Action	5
TRANSPORTA	TION STATE AID	7
	Recommendation	8
INFORMATIO	ON TECHNOLOGY	9
	User Account Management	9
	Disaster Recovery Plan	10
	Financial Software Access	10
	Recommendations	11
APPENDIX A	Response From District Officials	12
APPENDIX B	Audit Methodology and Standards	15
APPENDIX C	How to Obtain Additional Copies of the Report	16
APPENDIX D	Local Regional Office Listing	17

State of New York Office of the State Comptroller

Division of Local Government and School Accountability

July 2017

Dear School District Officials:

A top priority of the Office of the State Comptroller is to help school district officials manage their districts efficiently and effectively and, by so doing, provide accountability for tax dollars spent to support district operations. The Comptroller oversees the fiscal affairs of districts statewide, as well as districts' compliance with relevant statutes and observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving district operations and Board of Education governance. Audits also can identify strategies to reduce district costs and to strengthen controls intended to safeguard district assets.

Following is a report of our audit of the Ithaca City School District, entitled Transportation State Aid and Information Technology. This audit was conducted pursuant to Article V, Section 1 of the State Constitution and the State Comptroller's authority as set forth in Article 3 of the New York State General Municipal Law.

This audit's results and recommendations are resources for district officials to use in effectively managing operations and in meeting the expectations of their constituents. If you have questions about this report, please feel free to contact the local regional office for your county, as listed at the end of this report.

Respectfully submitted,

Office of the State Comptroller Division of Local Government and School Accountability



State of New York Office of the State Comptroller

EXECUTIVE SUMMARY

The Ithaca City School District (District) is governed by the Board of Education (Board) which is composed of nine elected members. The Board is responsible for the general management and control of the District's financial and educational affairs. The Superintendent of Schools is the District's chief executive officer and is responsible, along with other administrative staff, for the day-to-day management of the District under the Board's direction.

Scope and Objectives

The objectives of our audit were to examine the District's transportation State aid procedures and IT controls for the period July 1, 2015 through January 10, 2017. We extended our audit period back to July 1, 2012 to review prior buses purchased and their corresponding transportation State aid claims. Our audit addressed the following related questions:

- Did District officials apply for all of the transportation State aid to which the District was entitled for the purchase of new buses?
- Did District officials adequately safeguard personal, private and sensitive information on District servers and in the District's financial system from potential abuse or catastrophic loss?

Audit Results

District officials did not apply for all the transportation State aid to which the District was entitled for bus purchases. We found that District officials had not submitted any State aid forms to SED for the 35 buses purchased during our audit period. The District was in danger of losing approximately \$1.7 million in transportation State aid, consisting of \$509,000 that the District would have received from 2013-14 through 2016-17 and \$1.2 million that we project the District would have received from 2017-18 through 2021-22.

In addition, District officials did not adequately safeguard personal, private and sensitive information on District servers. Although District officials properly segregated duties within the financial software, they could better manage network user accounts and improve safeguards of IT resources by developing and implementing a disaster recovery plan. Due to these weaknesses, the District's IT systems are at a greater risk of potential abuse or catastrophic loss. Because of the sensitivity of some of this information, we did not discuss all results in this report, but instead communicated some confidentially to District officials.

Comments of District Officials

The results of our audit and recommendations have been discussed with District officials, and their comments, which appear in Appendix A, have been considered in preparing this report. District officials generally agreed with our recommendations and indicated they planned to take corrective action.

Introduction

Background

The Ithaca City School District (District) is located in the City of Ithaca, eight towns in Tompkins County and two towns in Tioga County. The District is governed by the Board of Education (Board), which is composed of nine elected members. The Board is responsible for the general management and control of the District's financial and educational affairs. The Superintendent of Schools is the District's chief executive officer and is responsible, along with other administrative staff, for the District's day-to-day management under the Board's direction.

The District operates 12 schools with approximately 5,300 students and 1,360 full-time and part-time employees. The District's budgeted appropriations for the 2016-17 fiscal year were approximately \$119 million, funded primarily with real property taxes and State aid.

The New York State Education Department (SED) calculates the approved cost for bus purchases based on documentation submitted. The SED-approved cost, less any allowable deduction, is multiplied by the District's annual State share ratio for transportation State aid (which may vary from year to year) to determine the amount of transportation State aid that the District is entitled to each year. During our audit period, District officials purchased 35 buses for \$3.5 million. The District's Transportation Director is responsible for supervising transportation staff, purchasing and maintaining the District's fleet and providing transportation services. Under the Transportation Director's supervision, the transportation clerk is responsible for completing and submitting the required SED forms for the reimbursement of transportation State aid.

In July 2016, the District hired a new chief information officer (CIO), who is responsible for the overall management of the District's information technology (IT) systems. These responsibilities include administering and managing the District's network, including network accounts, and establishing procedures to safeguard the District's IT resources. The District currently has 10 servers and approximately 8,500 laptop computers, desktop computers and tablets.

The District is a component of the Tompkins-Seneca-Tioga Board of Cooperative Educational Services (TST BOCES) and contracts with the TST BOCES Central Business Office for financial services, and

¹ The SED-approved cost is the net purchase price of the bus, which consists of the gross cost of the bus, including options, less any trade-in allowances, federal grants or State grants used to finance the purchase.

the District's financial data is stored on a server at the Central New York Regional Information Center (CNYRIC). The District's senior account clerk is responsible for assigning and approving user access rights for the financial software, and the CNYRIC is responsible for activating and deleting these user access rights.

Objectives

The objectives of our audit were to examine the District's transportation State aid procedures and IT controls. Our audit addressed the following related questions:

- Did District officials apply for all of the transportation State aid to which the District was entitled for the purchase of new buses?
- Did District officials adequately safeguard personal, private and sensitive information on District servers and in the District's financial system from potential abuse or catastrophic loss?

Scope and Methodology

We reviewed the District's transportation State aid and IT internal controls for the period July 1, 2015 through January 10, 2017. We extended our audit period back to July 1, 2012 to review prior buses purchased and their corresponding transportation State aid claims. Our audit also examined the adequacy of certain IT controls. Because of the sensitivity of some of this information, we did not discuss all results in this report, but instead communicated some confidentially to District officials.

We conducted our audit in accordance with generally accepted government auditing standards (GAGAS). More information on such standards and the methodology used in performing this audit are included in Appendix B of this report. Unless otherwise indicated in this report, samples for testing were selected based on professional judgment, as it was not the intent to project the results onto the entire population. Where applicable, information is presented concerning the value and/or size of the relevant population and the sample selected for examination.

Comments of District Officials and Corrective Action

The results of our audit and recommendations have been discussed with District officials, and their comments, which appear in Appendix A, have been considered in preparing this report.

The Board has the responsibility to initiate corrective action. Pursuant to Section 35 of General Municipal Law, Section 2116-a (3)(c) of New York State Education Law and Section 170.12 of the Regulations of the Commissioner of Education, a written corrective action plan (CAP) that addresses the findings and recommendations

in this report must be prepared and provided to our office within 90 days, with a copy forwarded to the Commissioner of Education. To the extent practicable, implementation of the CAP must begin by the end of the next fiscal year. For more information on preparing and filing your CAP, please refer to our brochure, *Responding to an OSC Audit Report*, which you received with the draft audit report. The Board should make the CAP available for public review in the District Clerk's office.

Transportation State Aid

District officials should apply for all State aid made available to the District. To receive transportation State aid, the District must submit a State aid form² to SED accompanied by a detailed purchase order for each new bus within one year from the date of purchase. Upon SED review and approval, the District is then sent an award letter listing the buses that have been approved and the approved costs. District officials should implement procedures to ensure that applications for State aid are submitted timely.

District officials did not apply for all the transportation State aid to which the District was entitled for bus purchases. We reviewed all 35 of the District's new bus purchases during our audit period and found that District officials had not submitted any State aid forms to SED for these buses. The projected approved cost of the 35 buses purchased totaled approximately \$3.6 million. The District was in danger of losing approximately \$1.7 million in transportation State aid, consisting of \$509,000 that the District would have received from 2013-14 through 2016-17 and \$1.2 million that we project the District would have received from 2017-18 through 2021-22.

Figure 1: Bus Purchase Cost and Transportation State Aid				
Fiscal Year	Buses Purchased	Projected Approved Bus Cost	Projected Transportation State Aid ^a	
2012-13	2	\$134,581	N/A	
2013-14	8	\$730,282	\$12,658	
2014-15	9	\$905,407	\$81,348	
2015-16	8	\$870,625	\$166,509	
2016-17	8	\$966,114	\$248,399	
2017-18	N/A	N/A	\$339,270	
2018-19	N/A	N/A	\$326,611	
2019-20	N/A	N/A	\$257,922	
2020-21	N/A	N/A	\$172,761	
2021-22	N/A	N/A	\$90,871	
Total	35	\$3,607,009	\$1,696,349	

Districts receive transportation State aid over a five-year period (if the bus is purchased during the first six months of the fiscal year – July 1 through December 31) or a six-year period (if the bus is purchased during the last six months of the fiscal year – January 1 through June 30) beginning 12 months after the purchase order date. For example, for a bus purchased during July 2016, a district would begin receiving transportation State aid during the 2017-18 fiscal year and would continue to receive aid on this bus purchase through the 2021-22 fiscal year.

Form SA-16 – Application for Approval of Bus Purchase for Purposes of State Aid

This occurred because District officials did not establish procedures to ensure that applications were submitted for all transportation State aid to which the District was entitled. More specifically, due to staff turnover, applications for transportation State aid were not submitted. Furthermore, due to a lack of reconciliation of expected aid to actual aid received, District officials failed to notice the lost State aid.

We notified District officials that they had not received transportation State aid for the 35 buses purchased from 2012-13 through 2016-17. As a result, District officials prepared and submitted separate State aid forms to SED for each of the 35 buses. SED reviewed the submitted documentation and informed District officials that the buses would be approved for transportation State aid. As of February 2, 2017, SED has approved the transportation State aid for 27 of these buses.

Although SED notified District officials that it will approve the transportation State aid for the buses, the failure to submit State aid forms for all new bus purchases in a timely manner resulted in delayed payments of State aid totaling \$509,000 from 2013-14 through 2016-17. This would have allowed District officials to reduce the real property tax levies during those years by the same amount.

Recommendation

1. District officials should implement procedures to ensure the preparation and submission of transportation State aid documentation, and the performance of an annual reconciliation of expected aid to actual aid received.

Information Technology

Computer systems and electronic data are valuable resources that school officials rely on for making financial decisions, processing transactions, maintaining records and reporting to State and federal agencies. The potential consequences of a computer system failure range from inconvenient to severe. Accordingly, school officials are responsible for minimizing the risk of unauthorized access to these systems, and to develop guidelines or plans to minimize or prevent the loss of equipment and data or to recover data in the event of a disaster.

District officials did not adequately safeguard personal, private and sensitive information (PPSI) on District servers. Although District officials properly segregated duties within the financial software, they could better manage network user accounts and improve safeguards of IT resources by ensuring that unnecessary accounts are disabled or removed in a timely manner, and developing and implementing a disaster recovery plan. Without adequately safeguarding IT information, the District's IT systems are at a greater risk of potential abuse or catastrophic loss. Because of the sensitivity of some of this information, we did not discuss all results in this report, but instead communicated some confidentially to District officials.

User Account Management

The District collects and maintains PPSI, including employee and student addresses, employee Social Security numbers and student grades. District officials rely on servers and other IT assets to store this information and to share it amongst various users on the District's network. Access to PPSI on District servers is managed using network user accounts. To minimize the risk of unauthorized access, network user accounts should be limited to those individuals who currently need access to perform their job duties or school assignments. District officials should review enabled network user accounts regularly to verify that accounts of terminated or transferred users³ have been disabled or removed.

District officials could improve the management of network user accounts. The District had 10,885 user accounts on its network. Of these, 5,173 (48 percent) had not been used to log on to the District network in at least six months. In fact, 4,546 had never been used and another 170 were last used in 2014 or earlier (three or more years before our audit testing). We also found that, of the 1,730 non-student accounts created for individual users, 728 (42 percent) could not be

³ Users can include current employees and students, vendors, BOCES employees and other individuals with access deemed necessary by District officials.

tied to current District employees. This occurred because District officials did not have processes in place to notify IT personnel of changes to employees' employment status or students' enrollment status.

The CIO and Assistant Director of Technology indicated that some of the accounts are for current District or third-party personnel that need access, and that they are currently reviewing and disabling unnecessary accounts. However, as any account on a network is a potential entry point for attackers, unnecessary accounts should be disabled or removed as soon as they are no longer needed to decrease the risk of unauthorized access. Of particular risk are user accounts for former employees, as these could potentially be used by those individuals for malicious activities. Further, unnecessary accounts create additional work to manage access, along with the risk of errors that could result in users being inadvertently granted more access than needed.

Disaster Recovery Plan

A disaster recovery plan describes how District officials will deal with potential disasters. Such disasters may include any sudden, unplanned catastrophic event (e.g., fire, computer virus or inadvertent employee action) that compromises the availability or integrity of the IT system and data. Contingency planning averts or minimizes the damage that disasters could cause to operations. Such planning consists of precautions to minimize the effects of a disaster so staff will be able to maintain or quickly resume day-to-day operations. Typically, a disaster recovery plan involves an analysis of business processes and continuity needs, including a significant focus on disaster prevention. The plan should also address the roles of key individuals and be distributed to all responsible parties, tested periodically and updated as needed.

The Board has not adopted a comprehensive disaster recovery plan. Consequently, the District does not have a plan that specifically addresses IT, that includes details on the records and data that are essential to preserve during a disaster or that designates alternate work locations. In the event of disaster, District personnel have no guidelines or plan to minimize or prevent the loss of equipment and data or to recover data. Without a comprehensive disaster recovery plan, the District could lose important financial data and suffer a serious interruption in District operations.

Financial Software Access

Effective controls over access rights to a financial software application should allow users access to only those computerized functions that are consistent with their job responsibilities and should prevent users from being involved in multiple aspects of financial transactions. An individual who has financial system administrative rights can add

new users, create and change user access rights, configure certain system settings and override management controls. Accordingly, the financial system administrator at the CNYRIC should not be involved in all aspects of the District's financial operations. District officials must ensure that user access rights are appropriate to employees' job descriptions and levels of responsibility and that those rights are promptly adjusted or deactivated when employees' responsibilities change.

The financial administrator at the CNYRIC provides financial software access to applicable users at the discretion of the senior account clerk, who does not have financial system administrative rights. We reviewed 10 out of 123 users' access rights to the financial software application and found, generally, that user access rights were properly aligned with their job duties.

Recommendations

The Board, with the CIO's assistance, should:

- 2. Establish procedures to ensure user accounts no longer needed are disabled or removed in a timely manner. At minimum, procedures should require user access rights be periodically reviewed to ensure they align with job responsibilities.
- 3. Adopt, distribute and periodically test and update a comprehensive disaster recovery plan that identifies how essential data will be preserved during a disaster and identifies alternate work locations.

The CIO should:

4. Ensure IT Department personnel periodically review network user accounts in conjunction with other department heads and disable or remove any accounts deemed unnecessary.

APPENDIX A

RESPONSE FROM DISTRICT OFFICIALS

The District officials' response to this audit can be found on the following pages.

ITHACA CITY SCHOOL DISTRICT



400 Lake Street, P.O. Box 549, Ithaca, New York 14851-0549

Luvelle Brown, Ed.D.Superintendent of Schools

Tel: (607) 274-2101 Fax: (607) 274-2279 E-mail: luvelle.brown@icsd.k12.ny.us

July 14, 2017

H. Todd Eames, Chief Examiner Office of the State Comptroller State Office Building, Room 1702 44 Hawley Street Binghamton, New York 13901-4417

Dear Mr. Eames,

Please accept this correspondence as the official Audit Response as well as the Corrective Action Plan from Ithaca City School District relating to the Report of Examination on the Transportation State Aid and Information Technology (2017M-063) conducted by your office for the period of July 1, 2015 through January 10, 2017. The Ithaca City School District is extremely grateful to have worked with your staff during the time that they were conducting the audit. We also welcome the recommendation made by your office to continue to examine the implementation of stronger procedures to ensure the preparation and submission of transportation State aid documentation, and the performance of an annual reconciliation of expected aid to actual aid received. We also agree with the recommendation to establish procedures to ensure a more timely review, disabling, and removal of user accounts at the Ithaca City School District as well as to adopt a comprehensive disaster recovery plan that identifies how essential data will be preserved during a disaster and identifies alternate work locations.

To that end, the School Business Official has closed the communication gap between the transportation office and the business office by utilizing a file sharing and joint calendar system to ensure that deadlines are met and proper documents are shared in a timely manner. The Board of Education will review State Aid information at each of its monthly Finance Committee Meetings. State Aid calendars, anticipated revenue charts, and additional state aid analysis tools developed by both the ICSD Treasurer and the School Business will be utilized in these meetings to not only

ICSD: 6000+ Thinkers

build an understanding of State Aid, but to also track deadlines. Summaries of these meetings will be given regularly at Board of Education meetings for the greater public.

In regards to Technology, the District Chief Information Officer, along with the technology services team have already taken a number of actions that address the outlined concerns. They have reviewed network user accounts in conjunction with other department heads and disabled or removed any accounts deemed unnecessary by refining ICSD exit forms and performing scheduled reviews of existing accounts.

The District Chief Information Officer along with the technology services team, plans to establish procedures to ensure user accounts no longer needed are disabled or removed in a timely manner. At minimum, procedures will be approved by the Board of Education and require user access rights be periodically reviewed to ensure they align with job responsibilities. The Board of Education will adopt a comprehensive disaster recovery plan that identifies how essential data will be preserved during a disaster and identifies alternate work locations. This plan will be distributed and periodically tested and updated.

The Board of Education and the District Administration remain committed to maintaining and improving the procedures, policies, and action planning of the District.

Sincerely,

Dr. Luvelle Brown Superintendent of Schools Mr. Robert Ainslie President, BOE

APPENDIX B

AUDIT METHODOLOGY AND STANDARDS

To achieve our audit objectives and obtain valid evidence, we performed the following procedures:

- We interviewed District officials and reviewed various transportation State aid documents and SED regulations to gain an understanding of the procedures related to the transportation State aid process for the purchase of new buses.
- We reviewed all of the District's new bus purchases during our audit period to determine if the
 District had submitted State aid forms to SED to receive transportation State aid for these new
 bus purchases.
- Using the purchase order, invoice cost and SED interest rate for 2016-17, we calculated the projected SED-approved cost amortized over five years for each bus purchased.
- We deducted the calculated value of certain non-allowable deductions from the projected SEDapproved cost for each year and multiplied this result by the State share ratio for transportation State aid to calculate the projected transportation State aid the District is entitled to receive each year.
- We calculated the effect of the transportation State aid on the District's real property tax levies.
- We calculated the total amount of transportation State aid from 2013-14 through 2016-17.
- We interviewed District IT personnel to obtain an understanding of the District's network environment and related IT controls.
- We used an audit script to analyze and assess network user accounts and security settings applied to those accounts.
- We compared all users within the financial software to active employee lists of the District, TST BOCES and CNYRIC to determine if all users were active employees. We also determined if all users within the financial software had appropriate network access.
- We judgmentally selected a sample of 10 financial software users and compared their privileges within the software to their daily responsibilities to determine if access rights were properly segregated.

We conducted this performance audit in accordance with GAGAS. 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.

APPENDIX C

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