



STATE TEACHERS
RETIREMENT SYSTEM
OF OHIO

275 East Broad Street
Columbus, OH 43215-3771
614-227-4090
www.strsoh.org

March 24, 2015

Ms. Bethany Rhodes, Director
Ohio Retirement Study Council
88 E. Broad St., Suite 1175
Columbus, OH 43215

RETIREMENT BOARD CHAIR
ROBERT STEIN

RETIREMENT BOARD VICE CHAIR
CAROL CORRETHERS

EXECUTIVE DIRECTOR
MICHAEL J. NEHF

Dear Bethany:

Pursuant to Substitute Senate Bill 133 and as required by Section 3307.044 of the Ohio Revised Code, enclosed is a report of the actions of the Audit Committee of the State Teachers Retirement Board for calendar year 2014.

Please don't hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael J. Nehf', written over the printed name and title.

Michael J. Nehf
Executive Director

Enclosure



To: Ohio Retirement Study Council (ORSC)
Subject: STRS Ohio Audit Committee Report – 2014
Date: March 24, 2015

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As required by Section 3307.044 of the Ohio Revised Code, the following report outlines the activities of the STRS Ohio Audit Committee and the STRS Ohio Internal Audit Department for the year ending Dec. 31, 2014. This report outlines the following: audit reviews completed during 2014; STRS Ohio Audit Committee meetings and actions; special reviews completed during 2014; and the 2015 Internal Audit Plan. Audit Committee members during 2014 were Craig Brooks (Chair), Tim Myers (Vice Chair), Craig Brooks, Mark Hill, Jim McGreevy, and Bob Stein (non-voting observer).

Audit Reviews Completed During 2014

The attached 2014 Internal Audit Summary lists the audits performed, the scope for each audit, the recommendations to management, management's response and expected implementation dates. The Internal Audit Summaries were mailed to all State Teachers Retirement Board Members in March, June, September and December 2014.

STRS Ohio Audit Committee Meetings and Actions

The Audit Committee met on June 19, 2014, at 9 a.m. Committee members Mr. Price, Mr. Myers, Mr. Brooks, Mr. McGreevy and Mr. Hill were in attendance. Board members Ms. Correthers and Mr. Stein were present as well as senior staff members.

The Committee reviewed and discussed the Quarterly Internal Audit Summary. Mr. Tackett informed the Committee that there were no material findings and that there was full cooperation from management. Management has accepted all recommendations and is in various stages of action-planning or implementation.

The meeting was adjourned at 9:10 a.m.

The Audit Committee met on Aug. 14, 2014. Committee members present were Mr. Myers, Mr. Brooks, Mr. Hill and Mr. McGreevy. Board members Mr. Stein and Ms. Correthers were also in attendance. Mr. Mayerfeld joined the meeting in progress. Staff present included Mr. Nehf, Mr. Snyder, Ms. Hoover, Mr. Tackett and Mr. Vance.

Kevin Rohrs of CliftonLarsonAllen, presented a summary of their plan for the 2013-14 financial statement audit and tentative schedule for issuing an audit report and management letter. Their overall risk assessment on this engagement is moderate, and CliftonLarsonAllen has identified investments, contributions, benefit payments and actuarial assumptions as critical audit areas. STRS Ohio will implement GASB 67 for the year ended June 30, 2014. The final audit report, including management letter, will be presented to the Audit Committee in December.

The meeting adjourned at approximately 9:44 a.m.

The Audit Committee met on Dec. 18, 2014, at 10:10 a.m. Committee members Mr. Brooks, Mr. Myers, Mr. Hill, and Mr. McGreevy were in attendance. Board members Mr. Price and Mr. Stein were present as well as senior staff members.

The committee reviewed and discussed the 2014 Internal Audit Summary. Mr. Tackett informed the committee that there were no material findings and that there was full cooperation from management. Management has accepted all recommendations and is in various stages of action-planning or implementation.

The 2015 Internal Audit Plan was presented for review and discussion. The committee had no changes to the 2015 Internal Audit Plan. There was general discussion related to preventive IT security measures at STRS Ohio since there was a recently publicized security breach at an out-of-state pension system.

Mr. Hill moved, seconded by Mr. McGreevy, to enter executive session under authority of Division (G) (5) of Section 121.22 of the Revised Code for the purpose of discussing matters required to be kept confidential by federal law or state statutes.

Upon roll call the vote was as follows: Mr. Hill, yes; Mr. McGreevy, yes; Mr. Brooks, yes. Motion carried.

Public session resumed and the Audit Committee meeting was adjourned at 10:31 a.m.

Special Reviews/Projects

There were no special reviews, projects or engagements.

2015 Internal Audit Plan

The 2015 Internal Audit Plan was approved by the STRS Ohio Board on Dec. 18, 2014. A copy of the 2015 Plan is enclosed.

If you have any questions or need further information, please feel free to call me at (614) 227-2821.

Respectfully submitted,



David S. Tackett, CFA, CPA, CIA
Chief Audit Executive



2014 Internal Audit Summary

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Closed Audits					
Associate Payroll*	State and Federal Tax Regulations Access to Payroll Database Accuracy of Associate Gross/Net Pay Final Payments to Terminated Employees Immigration Guidelines/Compliance	Audit Did Not Result In Recommendations	N/A	N/A	N/A
Associate Travel	Prior Authorization Compliance with Travel Policy Approval/Payment of Travel Expense	Audit Did Not Result in Recommendations	N/A	N/A	N/A
Board Expenses	Preapproval of Travel Accuracy of Reimbursements Compliance with Rules/Policies	Audit Did Not Result in Recommendations	N/A	N/A	N/A
Call Center*	Associate Training Scheduling of Call Center Associates Monitoring of Associates	Create documented policies and procedures that outline how and when to create and use the Key Performance Indicator Report that aids in the tracking and management of Call Center performance	Agree	Yes	11/13/2013
Derivatives*	Derivative Exposure Report Currency Forward Settlements SWAP Settlements Equity SWAP Collateral Segregation of Duties	Audit Did Not Result in Recommendations	N/A	N/A	N/A
Educational Assistance	Compliance with Policy	Obtain G/L information from the Finance Dept. to aid in year-end reconciliations	Agree	Yes	12/31/2013
Fixed Income	Compliance Approved Brokers/Commissions Accuracy of Pricing Due Diligence Monitoring of External Managers	Audit Did Not Result In Recommendations	N/A	N/A	N/A
Investment Compliance	Identification of Key Policies Review of Controls Applicable Laws/Regulations Controls for Laws/Regulations	Revise the Investment Staff Guidelines and Procedures to include details and supporting documentation on how key activities related to the monitoring of external managers will be accomplished/controlled	Agree	Yes	8/1/2014
Investment Performance	Review of PBI Memos Accuracy of PBI Awards Investment Policy Compliance	Audit Did Not Result In Recommendations	N/A	N/A	N/A

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
IT Change Control**	Proper Authorizations	Ensure that a comprehensive change-management procedure is documented to outline all stages of the process	Agree	Yes	2/28/2014
	Proper Testing				
	Proper Approvals	All user and ITS testing should be formally documented, authorized and approved by users and ITS prior to migration to production	Agree	Yes	2/28/2014
	Proper Monitoring				
IT Change Control**	Proper Segregation of Duties	Create a documented roll-back plan for all changes	Agree	Yes	3/31/2014
		Individuals responsible for making changes should be limited to development/test environments and functionally separated from production systems (Practicality, cost-benefit consideration resulted in Internal Audit accepting an alternative solution of increased monitoring)	Agree	Yes	6/30/2014
IT Operations**	Data Backup and Recovery	Regularly perform and document evidence of successful system restores and data recoveries along with testing procedures	Agree	Yes	8/1/2014
	Job Scheduling and Administration				
IT Security/ Access**	Polices and Incidents				
	Password Settings	Uniformly apply password security standards across all IT systems (Logical Access - Password Configuration)	Agreed ¹	Yes	6/30/2014
	User Access				
	Physical Access	Annually complete STaRS access reviews (Logical Access- Periodic Access Reviews)	Agreed	Yes	6/04/2013
	Logical Access	Develop policy/procedures to manage the monitoring and review of access to ITS critical areas (Physical Access - ITS Critical Areas and User Access)	Agreed	Yes	10/31/2013
	Privileged Access	Log Maximis and STaRS MSS & ESS unsuccessful login attempts and monitor regularly to identify potential suspicious activity	Agreed	Yes	10/31/2013
Other Staff Expenses	Set 'login' and 'rlogin (remote login)' values for root accounts to "False" to reduce the risks associated with elevated/privileged or unauthorized systems access		Agreed	Yes	6/04/2013
	Compliance with Policies	Audit Did Not Result in Recommendations	N/A	N/A	N/A
Other Staff Expenses	Accuracy of Board Reporting				
	Compliance with Policies	Update the Policy for Approval of Administrative Expenses	Agree	Yes	6/4/2014
Purchasing Practices*	Due Diligence/Efficient Use of Resource	Document the various levels of purchasing authority to the lowest signee	Agree	Yes	1/02/2014
	Receipt/Tracking of Goods and Services	Consider the potential benefits of partnering with other organizations for purchasing purposes	Agree	Yes	10/1/2013
	Segregations				
Real Estate 2013*	Property Management Fees	Reevaluate the Budget Asset Management process to determine the appropriateness of benchmarking used by Real Estate Dept. to award PBIs to asset managers	Agree	Yes	8/12/2014
	Site Inspections				
	External Compliance Reviews	Revise the Asset Management Manual to include the process for monitoring and verifying monthly property management fees	Agree	Yes	8/12/2014
	Tenant Surveys				
Securities Lending*	Compliance with Investment Policy				
	Compliance	Revise Investment Guidelines to explain the purpose and objectives of reviewing the SSAE 16 Report (Service Organization Control Report)	Agree	Yes	6/30/2014
	Accuracy of Income				
	Approved Borrowers				
Securities Lending*	Quality of Collateral				
	Counterparty Risk				

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Unused Sick/Vacation Leave	Compliance Accuracy of Payments Disposition	Audit Did Not Result In Recommendations	N/A	N/A	N/A
Active Audits					
AIX/Windows Security v	Verify FTP Login is Restricted Disabled Default Accounts Registry Access Permissions Domain/AD Model Account Lockout Settings Update Access Review Groups	Draft Report Under Management Review	N/A	N/A	N/A
Alternative Investments*	Opportunistic/Diversified: Due Diligence Monitoring Valuations	Draft Under Mgmt. Review	N/A	N/A	N/A
Alternative Investments*	Private Equity: Due Diligence Monitoring Valuations	Audit In Progress	N/A	N/A	N/A
Database Security (Oracle)	Security and Password Configurations Access to Database Listeners Default Accounts and Passwords Host-Based Authentication Methods General Password Settings	Audit In Progress	N/A	N/A	N/A
Disability Benefits	Reexamination Schedules Medical Invoice Payments Statement of Employment/Earnings Terminated Benefits - Notification Benefit Calculations	Audit In Progress	N/A	N/A	N/A
Domestic Equities*	Compliance with Investment Policy Monitoring of External Portfolio Managers	Audit in Progress	N/A	N/A	N/A
Financial Reporting	Role-Based Security/Segregation Adjusting Journal Entries Disaster Recovery Audit Trail Integrity	Audit in Progress	N/A	N/A	N/A
Health Care	Records Retention/Management Issues Monitoring and Resolution Disbursement Reconciliations Segregation of Duties	Audit Initiates 12/19/2014	N/A	N/A	N/A
International Investing*	External Manager Fees Monitoring of External Managers Foreign Tax Reclamations Sub-Custodian Controls	Review the foreign tax reclaim process to reduce the risk of inaccurate or insufficient calculations and collection of receivable funds Work with custodial bank to develop and deliver appropriate month-end reports	Final Rpt Under Mgmt. Review	N/A	N/A

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Liquidity Reserves	Compliance Income Purchases/Sales	Audit Initiates 12/22/2014	N/A	N/A	N/A
Member Data Management*	Third-Party Access to Member Data Transmission of Member Data/Security Third-Party Operations/Control Contractual Agreements	Require routine sign-off of data owners to verify accuracy of tracking information related to the sharing and security of member data.	Agree	No	2/28/2015
Member Income Taxes	Withholding Change Reconciliations Tax Interface Reconciliations Segregation of Duties	Review segregation of duties for shared access to STARS processing screens	Agree	No	3/31/2015
Member Withdrawals	Compliance Refund Estimates/Payments Non-Zero Accounts Segregation of Duties	Audit In Progress	N/A	N/A	N/A
Personal Investment Disclosure	Compliance with Policies Accuracy/Completeness Monitoring	Audit In Progress	N/A	N/A	N/A
Post-Retirement Benefits	Death Match Annuity Certain Expirations Overpayments/Collections Disbursement Compliance	Audit Initiated	N/A	N/A	N/A
Service Retirement Benefits	Departmental Process Documentation Benefit Calculations Management of Overpayments Segregation of Duties	Draft Report Stage	N/A	N/A	N/A
Survivor Benefits	Benefit Calculations Student Benefits Segregation of Duties	Draft Report Stage	N/A	N/A	N/A

Unannounced/Unplanned Audits or Reviews

Petty Cash	Reconciliations Proper Audit Trail Segregation of Duties	Audit Did Not Result in Recommendations	N/A	N/A	N/A
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Off-Audit Plan Work

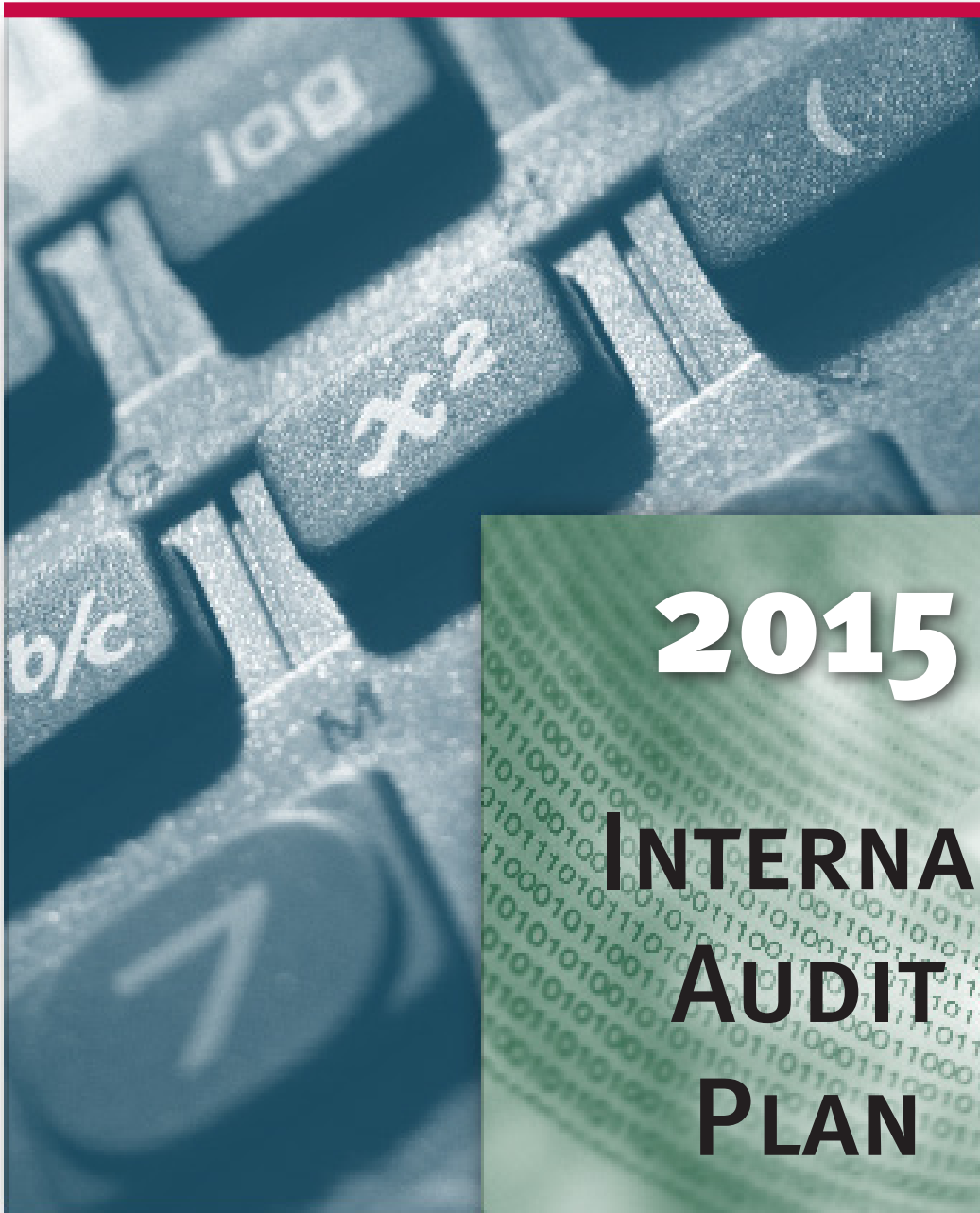
Area	Subject/Project	Description
Internal Audit/I.T.S.	STARS Redesign Project	Work with I.T.S. and other internal business units to develop a process for STARS to perform annual user-access reviews
Multi-departmental	Authentication for ESS & MSS Project	Work with Web authentication group to research tools and techniques to better safeguard member and employer accounts
Multi-departmental	ACL (Audit Command Language - audit software) for Eligibility Files	Work with I.T.S. and other internal business units to develop CAATs (computer-assisted audit techniques) to run for continuous audit purposes
Multi-departmental	DLP (Data Loss Prevention)	Participate on the DLP Committee to implement, monitor and evaluate the data loss production as it should work at STRS
Multi-departmental	STARS Disaster Recovery	Participate in disaster recovery testing/review for 2014

*Audits were listed as "Under Mgmt. Review", "In Progress", "Audit Initiated", or had not implemented recommendation(s) at the time of the last Annual Audit Summary presentation

**Not on the 2013 Audit Plan. IT Auditor hired after Audit Plan preparation. Future 2013 IT audits will be highlighted with any other off-plan audit work performed

√Not on the 2014 Audit Plan. IT audit coverage need determined, and work performed, during the year (post 2014 Audit Plan creation).

"Agreed 1" (IT Security/Access): Consideration of industry practices, employer and member needs, and the intended benefits will be discussed by multi-departmental stakeholders. There is agreement that increased security measures should be discussed. Internal Audit accepted management's response to this recommendation and will follow-up on a future date.



2015

**INTERNAL
AUDIT
PLAN**

STATE TEACHERS RETIREMENT SYSTEM OF OHIO
275 East Broad Street
Columbus, OH 43215-3771

614-227-4090
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INTERNAL AUDIT DEPARTMENT

Mission Statement

To work in partnership with associates to conduct value-added independent appraisals of policies and procedures to contribute to the continuous improvement of STRS Ohio.

Vision Statement

To be recognized as an innovative department that, through independent appraisals and partnered solutions, strives for quality enhancements and the elimination of non-value-added processes.

To create an environment that encourages teamwork, innovation, open communication, empowerment and personal and professional growth.

Guiding Principles

To achieve our mission and vision, we will:

- Prepare a comprehensive, practical, planned program of audit coverage consistent with STRS Ohio's mission, vision and guiding principles.
- Perform audits in compliance with the International Standards for the Professional Practice of Internal Auditing.
- Verify the adequacy and effectiveness of STRS Ohio's systems of administrative, operating and financial controls.
- Understand the associates' business from their perspective.
- Produce objective, clear, concise, constructive and timely reports.
- Maintain contemporary professional proficiency through continuing education and training.
- Seek to continuously improve our team, tools and processes.
- Develop professional expertise for potential career opportunities within STRS Ohio.

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2015 INTERNAL AUDIT SCHEDULE

Audit Area	Description of Audit Area	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Child Care Center	Compliance with State Licensing State Inspections Tuition Payments Enrollment												
Benefit Payment Process	Accuracy of Monthly Forecast General Reconciliations G/L Postings Segregation of Duties												
OEC Reporting	Compliance												
Accounts Payable	Vendor Approval Process Vendor Payment History Compliance with Policy Segregation of Duties												
Attendance Reporting	Accuracy Compliance with Policy												
Fixed Assets	Tracking, Reporting, and Monitoring Depreciation Disposition												
Proxy Voting	Proxy Voting for Active Investments Compliance with Proxy Voting Policy												
Derivatives	Semi-Annual Derivative Exp. Report Currency Forward Settlements Equity Swap Settlements Counterparty Risk Equity SWAP Collateral Segregation of Duties												
Investment Performance	Review of PBI Memos Accuracy of PBI Awards Investment Policy Compliance												
Fixed Income Investments	Due Diligence Approved Brokers/Commissions Accuracy of Pricing Interest Income Monitoring of External Managers Compliance with Investment Policies												

2015 INTERNAL AUDIT SCHEDULE

Audit Area	Description of Audit Area	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Fixed Assets — Computer Equipment	Purchasing Accuracy of Inventory Records Disposition												
IT Security: HIPAA	Awareness & Education Project Planning Electronic Transactions General Security												
Building Maintenance	Purchases of Goods and Services Preventive Maintenance Associate Training Quality Assurance												
Postage	Compliance with Policies/Procedures Disbursements												
Real Estate	Property Management Fees Site Inspections External Compliance Reviews Tenant Surveys Compliance with Investment Policy												
Board Expenses	Preapproval of Travel Accuracy of Reimbursements Compliance with Rules/Policies												
Alternative Investments	Due Diligence Proper Notification and Approval Monitoring Valuations												

RISK FACTORS

Risk Factor	Risk Factor Description	Weighting
A	Adequacy and Effectiveness of the System of Internal Controls	9
B	Major Changes in Technology, Operations, the Organization or the Economy	8
C	Dates and Results of Previous Audits	7
D	Recent or Relevant Changes in Key Personnel	6
E	Complexity or Volatility of Activities	5
F	Asset Size or Transaction Volume	4

RISK ASSESSMENT SCALE

The risk assessment scale is a 9-point system with graduations of risk as follows:

Risk Factor Description	Score
Extremely Risky	9
Very Risky	7
Risky	5*
Slightly Risky	3
Not Risky	1

* If no previous audit was performed, the auditable area was assessed a 5 — Risky.

ASSIGNMENT OF RISK RATING

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
ADMINISTRATION							
Associate Payroll	2	2	2	2	2	3	13
Associate Travel Expenses	2	1	1	2	2	2	10
Attendance Reporting	3	2	3	2	2	3	15
Benefit Payment Process	3	4	3	3	3	3	19
Board Expenses	2	1	1	2	2	2	10
Building Maintenance	2	2	2	4	2	2	14
Business Continuity Plan	3	3	3	3	4	3	19
Child Care Center	2	2	2	2	2	2	12
Educational Assistance Program	2	2	2	2	2	2	12
Fixed Assets — Computer Equipment	3	3	3	3	3	3	18
Flexible Spending Plans	2	2	3	2	2	2	13
Insurance/Risk Management	2	2	1	2	2	2	11
OEC Reporting	1	2	1	2	2	1	9
Other Staff Expenses	2	2	2	1	1	1	9
Personal Investment Disclosure	3	2	4	2	3	2	16
Postage	3	2	2	2	2	3	14
Purchasing Practices	3	2	3	2	2	3	15
STRS Ohio Self Insurance Plan	3	3	3	2	3	3	17
Unused Sick and Vacation Leave	2	1	2	2	2	1	10

*See Page 3 for description of risk factors.

ASSIGNMENT OF RISK RATING

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
FINANCE							
Accounts Payable	2	2	2	2	2	2	12
Annual Reporting	2	3	2	2	2	2	13
Contribution Reporting	2	3	2	2	2	3	14
Financial Reporting (STRS Ohio)	3	3	2	2	4	4	18
Fixed Assets	3	2	3	4	2	2	16
Member Income Taxes	4	4	2	2	3	4	19
Member Withdrawals	2	3	2	2	2	3	14
Petty Cash/Café Operations	2	2	2	3	1	1	11
Purchasing Service Credit by Payroll Deduction	2	4	2	2	3	2	15
INFORMATION TECHNOLOGY SERVICES							
AIX/ Windows Security	5	3	5	1	5	5	24
Database Security	5	3	5	1	5	5	24
Internet/Intranet Security	2	3	3	2	3	3	16
I.T. Operations	5	3	5	1	5	5	24
I.T. Security: Change Control	5	3	3	3	5	5	24
I.T. Security: Logical/Physical Access	5	3	3	1	5	5	22
I.T. Security: HIPAA	5	3	5	1	5	5	24
INVESTMENTS							
Alternative Investments	4	4	3	2	4	4	21
Derivatives	3	4	2	3	4	3	19
Domestic Equities	3	4	2	2	4	5	20
Fixed Income	2	4	2	3	3	3	17
International Investing	5	5	4	5	4	5	28
Investment Performance	2	2	2	2	3	2	13
Liquidity Reserves	2	3	2	2	2	2	13
Proxy Voting	2	2	2	2	2	1	11
Real Estate	3	4	3	3	3	3	19
Securities Lending	2	4	2	2	3	4	17

*See Page 3 for description of risk factors.

ASSIGNMENT OF RISK RATING

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
MEMBER BENEFITS							
Annual Statements	3	4	2	2	2	2	15
Member Services Center	2	2	2	1	2	2	11
Defined Contribution Plan	2	2	2	2	2	2	12
Disability Benefits	3	3	2	2	2	3	15
Health Care	3	3	2	2	3	4	17
Member Data Management	3	4	4	2	2	2	17
Benefit Services (Post Retirement)	3	4	2	2	2	2	15
Purchasing Service Credit	2	3	2	2	3	2	14
Members Records Management	2	2	2	2	2	2	12
Reemployed Retirees	3	4	3	3	2	2	17
Service Retirement Benefits	2	4	2	3	3	4	18
Survivor Benefits	3	3	2	3	2	3	16

*See Page 3 for description of risk factors.

RISK FACTORS WEIGHTED

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
ADMINISTRATION							
Associate Payroll	18	16	14	12	10	12	82
Associate Travel Expenses	18	8	7	12	10	8	63
Attendance Reporting	27	16	21	12	10	12	98
Benefit Payment Process	27	32	21	18	15	12	125
Board Expenses	18	8	7	12	10	8	63
Building Maintenance	18	16	14	24	10	8	90
Business Continuity Plan	27	24	21	18	20	12	122
Child Care Center	18	16	14	12	10	8	78
Educational Assistance Program	18	16	14	12	10	8	78
Fixed Assets — Computer Equipment	27	24	21	18	15	12	117
Flexible Spending Plans	18	16	21	12	10	8	85
Insurance/Risk Management	18	16	7	12	10	8	71
OEC Reporting	9	16	7	12	10	4	58
Other Staff Expenses	18	16	14	6	5	4	63
Personal Investment Disclosure	27	16	28	12	15	8	106
Postage	27	16	14	12	10	12	91
Purchasing Practices	27	16	21	12	10	12	98
STRS Ohio Self Insurance Plan	27	24	21	12	15	12	111
Unused Sick and Vacation Leave	18	8	14	12	10	4	66

*See Page 4 for description of risk assessment scale.

RISK FACTORS WEIGHTED

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
FINANCE							
Accounts Payable	18	16	14	12	10	8	78
Annual Reporting	18	24	14	12	10	8	86
Contribution Reporting	18	24	14	12	10	12	90
Financial Reporting (STRS Ohio)	27	24	14	12	20	16	113
Fixed Assets	27	16	21	24	10	8	106
Member Income Taxes	36	32	14	12	15	16	125
Member Withdrawals	18	24	14	12	10	12	90
Petty Cash/Café Operations	18	16	14	18	5	4	75
Purchasing Service Credit by Payroll Deduction	18	32	14	12	15	8	99
INFORMATION TECHNOLOGY SERVICES							
AIX/ Windows Security	45	24	35	6	25	20	155
Database Security	45	24	35	6	25	20	155
Internet/Intranet Security	18	24	21	12	15	12	102
I.T. Operations	45	24	35	6	25	20	155
I.T. Security: Change Control	45	24	21	18	25	20	153
I.T. Security: Logical/Physical Access	45	24	21	6	25	20	141
I.T. Security: HIPAA	45	24	35	6	25	20	155
INVESTMENTS							
Alternative Investments	36	32	21	12	20	16	137
Derivatives	27	32	14	18	20	12	123
Domestic Equities	27	32	14	12	20	20	125
Fixed Income	18	32	14	18	15	12	109
International Investing	45	40	28	30	20	20	183
Investment Performance	18	16	14	12	15	8	83
Liquidity Reserves	18	24	14	12	10	8	86
Proxy Voting	18	16	14	12	10	4	74
Real Estate	27	32	21	18	15	12	125
Securities Lending	18	32	14	12	15	16	107

*See Page 4 for description of risk assessment scale.

RISK FACTORS WEIGHTED

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
MEMBER BENEFITS							
Annual Statements	27	32	14	12	10	8	103
Member Services Center	18	16	14	6	10	8	72
Defined Contribution Plan	18	16	14	12	10	8	78
Disability Benefits	27	24	14	12	10	12	99
Health Care	27	24	14	12	15	16	108
Member Data Management	27	32	28	12	10	8	117
Benefit Services (Post Retirement)	27	32	14	12	10	8	103
Purchasing Service Credit	18	24	14	12	15	8	91
Member Records Management	18	16	14	12	10	8	78
Reemployed Retirees	27	32	21	18	10	8	116
Service Retirement Benefits	18	32	14	18	15	16	113
Survivor Benefits	27	24	14	18	10	12	105

*See Page 4 for description of risk assessment scale.

2015 INTERNAL AUDIT WORK PLAN

Audit Area	Priority	Dept.	Risk Score	Last Audit	Estimated Audit Date	Risk Codes
International Investing	HIGH	I	183	2013		F, I, C, O
Alternative Investments	HIGH	I	137	2014	Oct-15	F, I, C, O
Domestic Equities	HIGH	I	125	2014		F, I, C, O
Real Estate	HIGH	I	125	2013	Jun-15	F, I, C, O
Derivatives	HIGH	I	123	2013	Mar-15	F, I, C, O
Fixed Income	HIGH	I	109	2013	Apr-15	F, I, C, O
Liquidity Reserves	HIGH	I	86	2014		F, I, C, O
AIX/ Windows Security	MED.	ITS	155	2014		F, I, C, O, PS
Database Security	MED.	ITS	155	2014		F, I, C, O, PS
I.T. Security: Change Control	MED.	ITS	155	2013		F, I, C, O, PS
I.T. Security: Logical/Physical Access	MED.	ITS	153	2013		F, I, C, O, PS
I.T. Security: HIPAA	MED.	ITS	155	N/A	May-15	F, I, C, O, PS
Business Continuity Plan	MED.	A	122	2014		F, I, C, O
Member Data Management	MED.	MB	117	2013		PS, C
Financial Reporting (STRS Ohio)	MED.	F	113	2014		I, C, O
Service Retirement Benefits	MED.	MB	113	2013		I, C, O
Health Care	MED.	MB	108	2014		I, C, O
Annual Statements	MED.	MB	103	2013		I, C, O
I.T. Operations	MED.	ITS	102	2013		F, I, C, O, PS
Contribution Reporting	MED.	F	90	2012		I, C, O
Annual Reporting	MED.	F	86	2013		I, C, O
Accounts Payable	MED.	F	78	2012	Feb-15	I, C, O
Defined Contribution Plan	MED.	MB	78	2012		I, C, O
Risk Management/ Insurance	MED.	A	71	2013		F, I, C, O
Benefit Payment Process	LOW	A	125	2011	Mar-15	I, C, O
Member Income Taxes	LOW	F	125	2014		I, C, O

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- O: Operational = Risk related to operational efficiencies/inefficiencies
- PS: Public Sensitivity = No material financial impact but high public sensitivity

2015 INTERNAL AUDIT WORK PLAN

Audit Area	Priority	Dept.	Risk Score	Last Audit	Estimated Audit Date	Risk Codes
Fixed Assets — Computer Equipment	LOW	A	117	2012	May-15	I, C, O
Reemployed Retirees	LOW	MB	116	2012		I, C, O
STRS Ohio Self Insurance Plan	LOW	A	111	2012		I, C, O
Securities Lending	LOW	I	107	2013		I, C, O
Fixed Assets	LOW	F	106	2012	Feb-15	I, C, O
Benefit Services (Post Retirement)	LOW	MB	103	2014		I, C, O
Purchasing Service Credit by Payroll Deduction	LOW	F	99	2012		I, C, O
Purchasing Practices	LOW	A	98	2013		I, C, O, PS
Attendance Reporting	LOW	A	98	2010	Feb-15	I, C, O
Survivor Benefits	LOW	MB	92	2014		I, C, O
Postage	LOW	A	91	2012	Jun-15	I, C, O
Purchasing Service Credit	LOW	MB	91	2012		I, C, O
Building Maintenance	LOW	A	90	2012	May-15	I, C, O
Member Withdrawals	LOW	F	90	2014		I, C, O
Personal Investment Disclosure	LOW	A	106	2014		I, C
Disability Benefits	LOW	MB	99	2014		I, C, O
Flexible Spending Programs	LOW	A	85	2013		I, C, O
Associate Travel Expenses	LOW	A	63	2014		I, C, O, PS
Investment Performance	LOW	I	83	2014	Apr-15	I, C, O
Associate Payroll	LOW	A	82	2013		I, C, O
Board Expenses	LOW	A	63	2014	Sep-15	I, C, O, PS
Educational Assistance Program	LOW	A	78	2013		I, C, O
Child Care Center	LOW	A	78	2011	Jan-15	I, C, O
Member Records Management	LOW	MB	78	2012		C, O
Other Staff Expenses	LOW	A	63	2014		I, C, O, PS

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2015 INTERNAL AUDIT WORK PLAN

Audit Area	Priority	Dept.	Risk Score	Last Audit	Estimated Audit Date	Risk Codes
Petty Cash/Café Operations	LOW	F	75	2014		I, C, O, PS
Proxy Voting	LOW	I	74	2012	Mar-15	I, C
Member Services Center	LOW	MB	72	2013		C, O
Unused Sick and Vacation Leave	LOW	A	66	2013		I, C, O
OEC Reporting	LOW	A	58	2008	Feb-15	I, C, O, PS

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