



STATE TEACHERS  
RETIREMENT SYSTEM  
OF OHIO

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

March 15, 2014

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

RETIREMENT BOARD CHAIR  
DALE PRICE

RETIREMENT BOARD VICE CHAIR  
ROBERT STEIN

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 2013.

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

Sincerely,

A handwritten signature in black ink that reads 'Michael J. Nehf'.

Michael J. Nehf  
Executive Director

Enclosure



To: Ohio Retirement Study Council (ORSC)  
Subject: STRS Ohio Audit Committee Report – 2013  
Date: March 15, 2014

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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, 2013. This report outlines the following: audit reviews completed during 2013; STRS Ohio Audit Committee meetings and actions; special reviews completed during 2013; and the 2014 Internal Audit Plan. Audit Committee members during 2013 were Dale Price (Chair), Tim Myers (Vice Chair), Craig Brooks, Mark Hill, Jim McGreevy, and Bob Stein (non-voting observer).

### **Audit Reviews Completed During 2013**

The attached 2013 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 2013.

### **STRS Ohio Audit Committee Meetings and Actions**

June 20, 2013 — The Audit Committee met on Jun. 20, 2013, at 8:15a.m. Committee members Mr. Hill, Mr. Myers, Mr. Brooks, Ms. Hayden and Mr. Stein were in attendance. Board members Mr. McGreevy and Mr. Price were present as well as senior staff members.

The Committee reviewed and discussed the June 2013 Quarterly Internal Audit Summary. Mr. Tackett informed the Committee that there were no material findings and that there was full cooperation from management. There was brief discussion of Internal Audit's suggested changes related to the types and frequency of the Enterprise Risk Management (ERM) information that will be presented to the STRS Ohio Board by Mr. Nehf. Beginning in September of 2013, the Board will be updated annually on key ERM issues.

Additionally, Dave Tackett informed the Committee that Internal Audit will be performing investment compliance reviews, in consultation with Callan, to report on general compliance with relevant Investment Department and STRS Ohio Board policies and procedures.

Mr. Myers moved, seconded by Mr. Stein, to enter into executive session under authority of Division (G) (1) of Section 121.22 of the Revised Code for the purpose of discussing appointment, employment or compensation of a public employee or official.

Upon roll call the vote was as follows: Mr. Myers, yes; Mr. Stein, yes; Mr. Brooks, yes; Ms. Hayden, yes; Mr. Hill, yes. Motion carried.

The Committee entered into executive session to discuss the results of the Quality Assessment Review of the STRS Ohio Internal Audit Department that was performed by P2E Consulting, LLC.

Public session resumed and the Audit Committee meeting was adjourned at 9:15a.m.

Aug. 15, 2013 — The Audit Committee met on Aug. 15, 2013. Committee members Mr. Hill, Mr. Myers, Mr. Brooks, Mr. Stein and Ms. Hayden were present. Board members Mr. McGreevy and

Mr. Price were also in attendance. Staff present included Mr. Nehf, Mr. Slater, Mr. Tackett, Mr. Snyder and Mr. Vance.

Kevin Rohrs of CliftonLarsonAllen, presented a summary of their plan for the 2012–13 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. The final audit report, including management letter, will be presented to the Audit Committee in December.

The meeting adjourned at approximately 9:15 a.m.

Dec. 12, 2013 – The Audit Committee met on Dec. 12, 2013, at 9:00 a.m. Committee members Mr. Hill, Mr. Myers, Mr. Brooks, Ms. Hayden and Mr. Stein were in attendance. Board members Mr. McGreevy and Mr. Price were present as well as senior staff members.

The Committee reviewed and discussed the 2013 Internal Audit Summary. Mr. Tackett informed 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 2014 Internal Audit Plan was presented for review and discussion. The plan was accepted and approved by the Audit Committee.

Mr. Myers moved, seconded by Mr. Stein, to enter into executive session under authority of Division (G) (1) of Section 121.22 of the Revised Code for the purpose of discussing appointment, employment or compensation of a public employee or official.

Upon roll call the vote was as follows: Mr. Myers, yes; Mr. Stein, yes; Mr. Brooks, yes; Ms. Hayden, yes; Mr. Hill, yes. Motion carried.

The Committee entered into executive session to hear a report from the external auditors, CliftonLarsonAllen, on the results of their audit of the STRS Ohio financial statements for the fiscal year ended June 30, 2013.

Public session resumed and the Audit Committee meeting was adjourned at 9:53a.m.

### **Special Reviews/Projects**

P2E Consulting performed an External Quality Assessment of the STRS Ohio Internal Audit Department. The principal objectives of the QA were to assess Internal Audit's conformance to the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing (standards), evaluate Internal Audit's effectiveness in carrying out its mission (as set forth in its charter and expressed in the expectations of STRS' management), and identify opportunities to enhance its management and work processes, as well as its value to STRS Ohio.

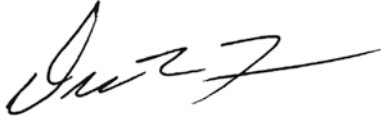
P2E Consulting found that the STRS Ohio Internal Audit Department generally conforms with the Standards and Code of Ethics. "Generally Conforms" means that the Internal Audit Department has a charter, policies, and processes that are judged to be in conformance with the Standards. This is the highest level of opinion offered under the IIA quality assessment guidelines.

## **2014 Internal Audit Plan**

The 2014 Internal Audit Plan was approved by the STRS Ohio Board on Dec. 12, 2013. A copy of the 2014 Plan is enclosed.

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. Tackett", with a long horizontal flourish extending to the right.

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



### 2013 Internal Audit Summary

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
<b>Closed Audits</b>					
Annual Statements*	Accuracy of Member Information	Audit did not result in recommendations	N/A	N/A	N/A
	Accuracy and Security of Statements				
	External Contracts				
	Segregation of Duties				
Annual Reporting	Annual Reporting Procedures	Audit did not result in recommendations	N/A	N/A	N/A
	Access to Annual Reporting Screens				
Board Expenses	Preapproval of Travel	Audit did not result in recommendations	N/A	N/A	N/A
	Accuracy of Reimbursements				
	Compliance with Rules/Policies				
Building Maintenance*	Purchases of Goods and Services	Document the completion of quality assurance efforts performed by supervisory staff	Agree	Yes	8/29/2013
	Preventive Maintenance	Maintain documentation of compliance with ongoing educational requirements for Building Services staff	Agree	Yes	8/29/2013
	Associate Training				
	Quality Assurance	Review and monitor departmental absences and determine how to improve statistics (as they compare to STRS Ohio averages)	Agree	Yes	8/29/2013
Contribution Reporting*	Foundation Management	Audit did not result in recommendations	N/A	N/A	N/A
	Employee Contribution Management				
	G/L Postings				
	Segregation of Duties				
	Annual Report Management				
Defined Contribution Plan*	Processing Plan Selection Forms	Conduct periodic, documented reviews of NRS services to determine quality of services, reasonableness and competitiveness of pricing	Agree	Yes	1/25/2013
	NRS Contract Compliance				
	Accuracy of Member Statements				
	Segregation of Duties				
Early Retirement Incentive Credit*	Eligibility Requirements	ITS and Finance perform cost/benefit analysis to determine if there is a more efficient way to verify accuracy of interest charges for ERI billings	Agree	Yes	9/30/2013
	ERI Cost Calculations				
	ERI Internal Accrual Calculations				
	Compliance with Ohio Revised Code				
	Segregation of Duties				
Enterprise Risk Mgmt.	Review of Risk Management Process	Formalize ERM policies and procedures	Agree	Yes	3/31/2013
	Review of Reporting of Key Risks	Report key Enterprise Risks annually to the State Teachers Retirement Board	Agree	Yes	9/30/2013
	Review of Management of Key Risks				
Fixed Assets*	Tracking, Reporting, and Monitoring	Finance to include vehicles maintained and monitored by Office Services in physical inventory reviews to improve segregation of duties	Agree	Yes	2/13/2013
	Depreciation				
	Disposition				

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Flexible Spending Program	Withholdings Disbursements	Audit did not result in recommendations	N/A	N/A	N/A
Insurance/Risk Mgmt.	Compliance Carrier Ratings Accuracy of Premium Payments Adequacy of Existing Insurance Policies Segregation of Duties	Update the job description of the Director, Portfolio Services, to include the duties of Risk Manager to better reflect current responsibilities. Or, determine if risk management duties should be performed by another position/area.	Agree	Yes	10/16/2013
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
Personal Investment Disclosure*	Compliance with Policy Accuracy/Completeness	Changes to the Personal Investment Disclosure process require consultation with the STRS Ohio Legal and Human Resource Services depts. and dissemination to all STRS Ohio associates	Agree	Yes	1/14/2013
		Management should review the investment disclosure requirements to identify areas that can be improved	Agree	Yes	1/14/2013
Petty Cash	Cafeteria Cash/Physical Security	Perform quarterly (random dates) reconciliations of cash balances	Agree	Yes	3/7/2013
	Cafeteria Deposits	Document the identity of associates performing cash reconciliations in cash ledger	Agree	Yes	3/7/2013
	Segregation of Duties				
	Cash Reconciliation				
	Petty Cash Disbursements				
Cafeteria Operations - Ohio Sales Tax					
Postage	Compliance with Policies/Procedures	Ensure competitive rates by periodically researching cost of competitor products and services for Communications Services	Agree	Yes	3/5/2013
	Disbursements	Office Services provide detailed documents supporting all expense warrants	Agree	Yes	01/09/2013
		Research the feasibility of providing electronic delivery of STRS Ohio member-related documents	Agree	Yes	01/09/2013
Proxy Voting*	Proxy Voting for Passive/Active Investments	Audit did not result in recommendations	N/A	N/A	N/A
	Compliance with Proxy Voting Policy				
Purchasing Service by Payroll Deduction*	Member Applications	Audit did not result in recommendations	N/A	N/A	N/A
	Processing of Receipts				
	Segregation of Duties				
	Payroll Deduction Refund				
Reemployed Retirees*	Compliance with Ohio Revised Code	Audit did not result in recommendations	N/A	N/A	N/A
	Violations/Collections				
	Lump-Sum Calculation Input Controls				

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
STRS Ohio Self Insurance	Identification/Mitigation of Key Risks	STRS Ohio work with ORSC to find alternative coverage or take measures to mitigate the risk of ORSC employee healthcare costs	Agree	Yes	8/31/2013
	Annual Reporting				
	Allocation of Self Insurance Costs	Address the risks associated with the lack of stop-loss coverage in the self-insurance program	Agree	Yes	8/31/2013
		Establish policies and procedures that control the recording of expenses and reporting annual expenses to the STRS Ohio Board of Directors	Agree	Yes	6/30/2013
		Finance and HRS Departments determine specific goals, objectives and amounts needed for the associate health insurance fund	Agree	Yes	6/30/2013
		In the annual report to the State Teachers Retirement Board, include a footnote that reported expenses include estimates for expenses incurred but not yet paid	Agree	Yes	6/30/2013
		Develop procedures to insure all misc. healthcare income amounts are properly posted to the healthcare account and with sources identified	Agree	Yes	9/30/2013
		Develop HIPAA policies and procedures to insure compliance of STRS Ohio's self-funded insurance plan	Agree	Yes	09/30/2013

**Active Audits**

Alternative Investments	Opportunistic/Diversified: Due Diligence  Monitoring  Valuations	Audit In Progress	N/A	N/A	N/A
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	Draft Report Under Mgmt. Review	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	Final Rpt. Under Mgmt. Review	N/A	N/A
Derivatives	Derivative Exposure Report  Currency Forward Settlements  SWAP Settlements  Equity SWAP Collateral  Segregation of Duties	Audit in Progress	N/A	N/A	N/A

Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Domestic Equities	Compliance with Investment Policy  Monitoring of External Portfolio Managers  Investment Management Fees  Reporting/Accounting  Research Costs  Approved Brokers  Custodian	Audit in Progress	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	Yes	No	12/31/2013
Fixed Income	Compliance  Approved Brokers/Commissions  Accuracy of Pricing  Due Diligence  Monitoring of External Managers	Audit In Progress	Draft Rpt. Under Mgmt. Review	N/A	N/A
International Investing	External Manager Fees  Monitoring of External Managers  Foreign Tax Reclamations  Sub-Custodian Controls	Audit Initiates 12/16/2013	N/A	N/A	N/A
IT Change Control**	Proper Authorizations  Proper Testing  Proper Approvals  Proper Monitoring  Proper Segregation of Duties	Draft Report Under Mgmt. Review	N/A	N/A	N/A
IT Operations**	Data Backup and Recovery  Scheduling  Incident Tracking and Resolution	Audit in Progress	N/A	N/A	N/A
IT Security/ Access**	Password Settings  User Access  Physical Access  Logical Access  Privileged Access	Uniformly apply password security standards across all IT systems (Logical Access - Password Configuration)  Annually complete STaRS access reviews (Logical Access- Periodic Access Reviews)  Develop policy/procedures to manage the monitoring and review of access to ITS critical areas (Physical Access - ITS Critical Areas and User Access)  Log Maximis and STaRS MSS & ESS unsuccessful login attempts and monitor regularly to identify potential suspicious activity  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 <sup>1</sup>  Agreed  Agreed  Agreed  Agreed	No  Yes  Yes  Yes  Yes	6/30/2014  6/04/2013  10/31/2013  10/31/2013  6/04/2013
Member Data Management	Third-Party Access to Member Data  Transmission of Member Data/Security  Third-Party Operations/Control  Contractual Agreements	Audit Initiates 12/15/2013	N/A	N/A	N/A

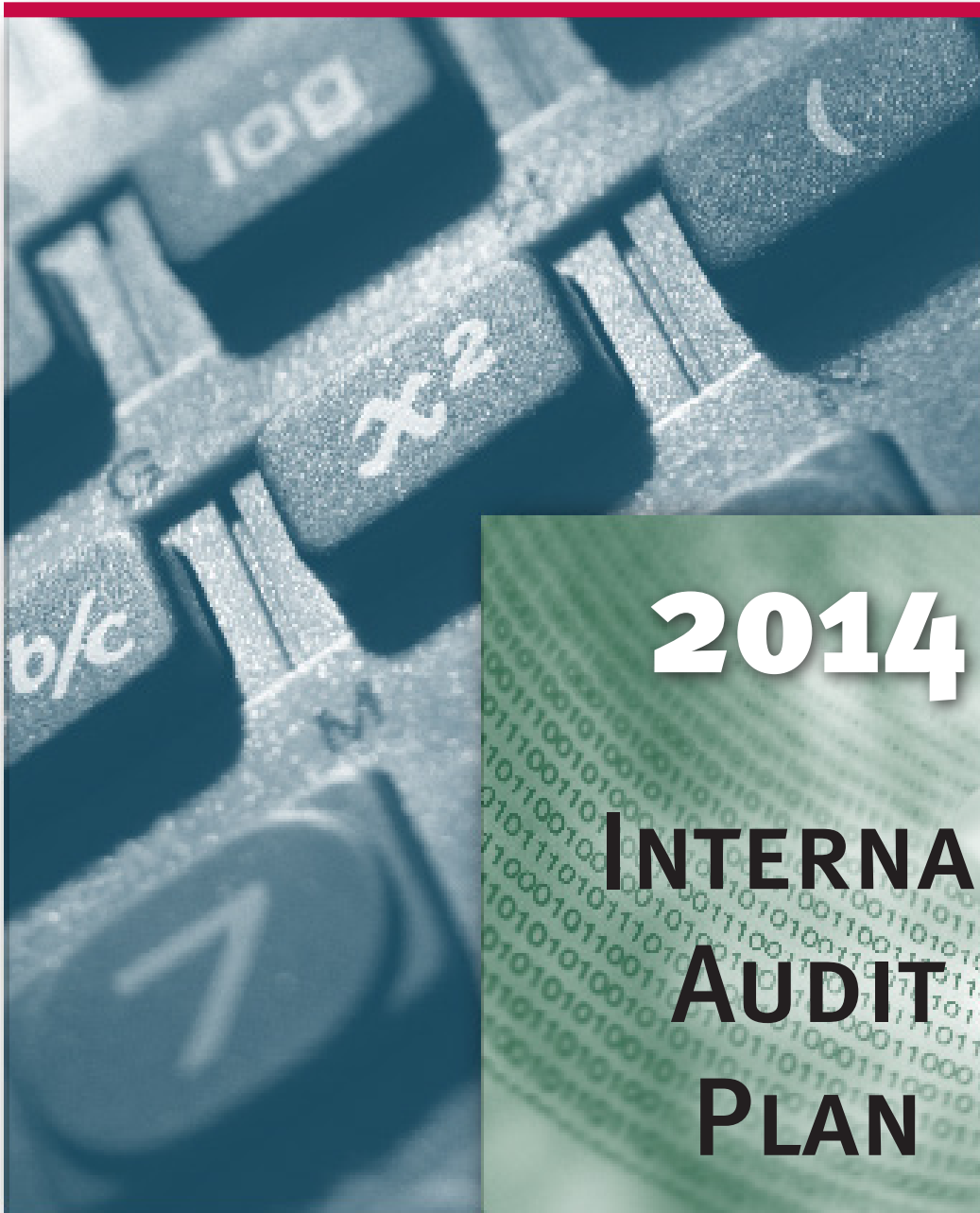


Audit Area	Scope	Recommendations	Management's Response	Implemented	Implementation Date or Targeted Implementation Date
Purchasing Practices	Compliance with Policies Due Diligence/Efficient Use of Resource Receipt/Tracking of Goods and Services Segregations	Update the Policy for Approval of Administrative Expenses  Document the various levels of purchasing authority to the lowest signee  Consider the potential benefits of partnering with other organizations for purchasing purposes	Final Rpt. Under Mgmt. Review	N/A	N/A
Real Estate 2013	Property Management Fees Site Inspections External Compliance Reviews Tenant Surveys Compliance with Investment Policy	Audit Initiated	N/A	N/A	N/A
Securities Lending	Compliance Accuracy of Income Approved Borrowers Quality of Collateral Counterparty Risk	Audit In Progress	N/A	N/A	N/A
Service Retirement Benefits	Departmental Process Documentation Benefit Calculations Management of Overpayments Segregation of Duties	Audit Initiated	N/A	N/A	N/A
Unused Sick/Vacation Leave	Compliance Accuracy of Payments Disposition	Audit In Progress	N/A	N/A	N/A

\*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

"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.



**2014**

**INTERNAL  
AUDIT  
PLAN**



**STATE TEACHERS RETIREMENT SYSTEM OF OHIO**  
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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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# 2014 INTERNAL AUDIT SCHEDULE

Audit Area	Description of Audit Area	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Investment Compliance	Identification of Key Policies Review of Controls Applicable Laws/Regulations Controls for Laws/Regulations												
Other Staff Expenses	Compliance with Policies Accuracy of Board Reporting												
Benefit Payment Process	Accuracy of Monthly Forecast General Reconciliations G/L Postings Segregation of Duties												
Health Care	Records Retention/Management Issues Monitoring and Resolution Disbursement Reconciliations Segregation of Duties												
AIX/Windows Security	Verify FTP Login is Restricted Disabled Default Accounts Registry Access Permissions Review Domain/AD Model Review Account Lockout Settings Review Update Access Review Groups												
Member Income Taxes	Withholding Change Reconciliations Tax Interface Reconciliations Segregation of Duties												
Associate Travel	Prior Authorization to Travel Compliance with Travel Policy Approval/Payment of Travel Expenses												
Liquidity Reserves	Compliance Income Purchases/Sales												
Survivor Benefits	Benefit Calculations Student Benefits Segregation of Duties												
Board Expenses	Preapproval of Travel Accuracy of Reimbursements Compliance With Rules/Policies												

# 2014 INTERNAL AUDIT SCHEDULE

Audit Area	Description of Audit Area	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Investment Performance	Review of PBI Memos Accuracy of PBI Awards Investment Policy Compliance												
Financial Reporting (STRS Ohio)	Role-Based Security/Segregation Adjusting Journal Entries Disaster Recovery Audit Trail Integrity												
Database Security	Operating System Permissions Review Database Listener Files Review Database Tables Review Creation of User Accounts Review Authentication Review Logical Access Review Privileged Accounts												
Personal Investment Disclosure	Compliance with Policies Accuracy/Completeness Monitoring												
Member Withdrawals	Compliance Refund Estimates/Payments Non-Zero Accounts Segregation of Duties												
Disability Benefits	Reexamination Schedules Medical Invoice Payments Statement of Employment/Earnings Terminated Benefits – Notification Benefit Calculations												
Alternative Investments	Due Diligence Proper Notification and Approval Monitoring Valuations												
Business Continuity Plan	Compliance Monitoring and Testing												
Post-Retirement Benefits	Death Match Annuity Certain Expirations Overpayment/Collections Disbursement Compliance												
Domestic Equities	Compliance with Policies Research Costs External Management Fees Monitoring of External Managers Approved Brokers												

# RISK FACTORS

<b>Risk Factor</b>	<b>Risk Factor Description</b>	<b>Weighting</b>
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:

<b>Risk Factor Description</b>	<b>Score</b>
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	
<b>ADMINISTRATION</b>							
Associate Payroll	2	2	2	2	2	3	13
Associate Travel Expenses	2	2	3	2	2	2	13
Attendance Reporting	3	2	3	2	2	3	15
Benefit Payment Process	3	4	3	3	3	3	19
Board Expenses	2	2	2	2	2	2	12
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 Programs	2	2	3	2	2	2	13
Insurance/Risk Management	2	2	1	2	2	2	11
Internet/Intranet	2	3	3	2	3	3	16
Ohio Ethics Commission Reporting	1	2	1	2	2	1	9
Other Staff Expenses	2	2	3	2	1	1	11
Personal Investment Disclosure	3	2	2	2	2	2	13
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	
<b>FINANCE</b>							
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
Early Retirement Incentive Credit	2	2	2	2	3	2	13
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	2	13
Petty Cash/Café Operations	2	2	2	3	1	1	11
Purchasing Service Credit by Payroll Deduction	2	4	2	2	3	2	15
<b>INFORMATION TECHNOLOGY SERVICES</b>							
AIX/Windows Security	5	3	5	1	5	5	24
Database Security	5	3	5	1	5	5	24
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
<b>INVESTMENTS</b>							
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	4	5	2	4	4	5	24
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	2	3	3	18
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	
<b>MEMBER BENEFITS</b>							
Annual Statements	3	4	2	2	2	2	15
Benefit Services (Post Retirement)	3	4	2	2	2	2	15
Defined Contribution Plan	2	2	2	2	2	2	12
Disability Benefits	2	3	2	2	2	2	13
Health Care	3	3	2	2	3	4	17
Member Data Management	3	4	4	2	2	2	17
Member Records Management	2	2	2	2	2	2	12
Member Services Center	2	2	2	1	2	2	11
Purchasing Service Credit	2	3	2	2	3	2	14
Reemployed Retirees	3	4	3	3	2	2	17
Service Retirement Benefits	2	4	2	3	3	4	18
Survivor Benefits	2	3	2	3	2	2	14

\*See Page 3 for description of risk factors.

# RISK FACTORS WEIGHTED

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
<b>ADMINISTRATION</b>							
Associate Payroll	18	16	14	12	10	12	82
Associate Travel Expenses	18	16	21	12	10	8	85
Attendance Reporting	27	16	21	12	10	12	98
Benefit Payment Process	27	32	21	18	15	12	125
Board Expenses	18	16	14	12	10	8	78
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
Ohio Ethics Commission Reporting	9	16	7	12	10	4	58
Other Staff Expenses	18	16	21	12	5	4	76
Personal Investment Disclosure	27	16	14	12	10	8	87
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	6	10	4	60

\*See Page 4 for description of risk assessment scale.

# RISK FACTORS WEIGHTED

Audit Area	Risk Factors*						Total
	A	B	C	D	E	F	
<b>FINANCE</b>							
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
Early Retirement Incentive Credit	18	16	14	12	15	8	83
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	8	86
Petty Cash/Café Operations	18	16	14	18	5	4	75
Purchasing Service Credit by Payroll Deduction	18	32	14	12	15	8	99

<b>INFORMATION TECHNOLOGY SERVICES</b>							
AIX/Windows Security	45	24	35	6	25	20	155
Database Security	45	24	35	6	25	20	155
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

<b>INVESTMENTS</b>							
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	36	40	14	24	20	20	154
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	12	15	12	119
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	
<b>MEMBER BENEFITS</b>							
Annual Statements	27	32	14	12	10	8	103
Benefit Services (Post Retirement)	27	32	14	12	10	8	103
Defined Contribution Plan	18	16	14	12	10	8	78
Disability Benefits	18	24	14	12	10	8	86
Health Care	27	24	14	12	15	16	108
Member Data Management	27	32	28	12	10	8	117
Member Records Management	18	16	14	12	10	8	78
Member Services Center	18	16	14	6	10	8	72
Purchasing Service Credit	18	24	14	12	15	8	91
Reemployed Retirees	27	32	21	18	10	8	116
Service Retirement Benefits	18	32	14	18	15	16	113
Survivor Benefits	18	24	14	18	10	8	92

\*See Page 4 for description of risk assessment scale.

# 2014 INTERNAL AUDIT WORK PLAN

Audit Area	Priority	Dept.	Risk Score	Last Audit	Estimated Audit Date	Risk Codes
International Investing	HIGH	I	154	2013		F, I, C, O
Alternative Investments	HIGH	I	137	2012	Sep-14	F, I, C, O
Domestic Equities	HIGH	I	125	2012	Oct-14	F, I, C, O
Derivatives	HIGH	I	123	2013		F, I, C, O
Real Estate	HIGH	I	119	2013		F, I, C, O
Fixed Income	HIGH	I	103	2013		F, I, C, O
Liquidity Reserves	HIGH	I	86	2011	May-14	F, I, C, O
AIX/Windows Security	MED.	ITS	155	N/A	Mar-14	F, I, C, O, PS
Database Security	MED.	ITS	155	N/A	Aug-14	F, I, C, O, PS
I.T. Operations	MED.	ITS	155	2013		F, I, C, O, PS
I.T. Security: Change Control	MED.	ITS	153	2013		F, I, C, O, PS
I.T. Security: Logical/Physical Access	MED.	ITS	141	2013		F, I, C, O, PS
Business Continuity Plan	MED.	A	122	2011	Oct-14	F, I, C, O
Member Data Management	MED.	MB	117	2013		PS, C
Financial Reporting (STRS Ohio)	MED.	F	113	2011	Jul-14	I, C, O
Service Retirement Benefits	MED.	MB	113	2013		I, C, O
Health Care	MED.	MB	108	2011	Feb-14	I, C, O
Annual Statements	MED.	MB	103	2012		I, C, O
Contribution Reporting	MED.	F	90	2012		I, C, O
Annual Reporting	MED.	F	86	2013		I, C, O
Accounts Payable	MED.	F	78	2012		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	Feb-14	I, C, O
Member Income Taxes	LOW	F	125	2011	Apr-14	I, C, O

## Risk Codes:

F: Financial = Risk related to financial impact

I: Integrity = Risk related to accuracy of data or asset managed/presented

C: Compliance = Risk related to non-compliance with laws/regulations/internal policies

O: Operational = Risk related to operational efficiencies/inefficiencies

PS: Public Sensitivity = No material financial impact but high public sensitivity

# 2014 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		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		I, C, O
Benefit Services (Post Retirement)	LOW	MB	103	2011	Oct-14	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		I, C, O
Survivor Benefits	LOW	MB	92	2011	Jun-14	I, C, O
Postage	LOW	A	91	2012		I, C, O
Purchasing Service Credit	LOW	MB	91	2012		I, C, O
Building Maintenance	LOW	A	90	2012		I, C, O
Personal Investment Disclosure	LOW	A	87	2011	Aug-14	I, C
Member Withdrawals	LOW	F	86	2011	Aug-14	I, C, O
Disability Benefits	LOW	MB	86	2011	Sep-14	I, C, O
Flexible Spending Programs	LOW	A	85	2013		I, C, O
Associate Travel Expenses	LOW	A	85	2011	May-14	I, C, O, PS
Early Retirement Incentive Credit	LOW	F	83	2012		I, C, O
Investment Performance	LOW	I	83	2013	Jul-14	I, C, O
Associate Payroll	LOW	A	82	2013		I, C, O
Board Expenses	LOW	A	78	2013	Jul-14	I, C, O, PS
Educational Assistance Program	LOW	A	78	2013		I, C, O
Child Care Center	LOW	A	78	2011		I, C, O

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# 2014 INTERNAL AUDIT WORK PLAN

Audit Area	Priority	Dept.	Risk Score	Last Audit	Estimated Audit Date	Risk Codes
Member Records Management	LOW	MB	78	2012		C, O
Member Services Center	LOW	MB	78	2013		C, O
Other Staff Expenses	LOW	A	76	2009	Jan-14	I, C, O, PS
Petty Cash/Café Operations	LOW	F	75	2012		I, C, O, PS
Proxy Voting	LOW	I	74	2012		I, C
Unused Sick and Vacation Leave	LOW	A	60	2013		I, C, O
OEC Reporting	LOW	A	58	2008		I, C, O, PS

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