MINNESOTA STATE COLLEGES AND UNIVERSITIES
BOARD OF TRUSTEES

Agenda Item Summary Sheet

Committee: Audit Committee   **Date of Meeting:** May 17, 2011

Agenda Item: Audit Planning Related to Systemwide Risk Assessment

☐ Proposed Policy Change	☐ Approvals Required by Policy	☐ Other Approvals	☒ Monitoring

☐ Information

Cite policy requirement, or explain why item is on the Board agenda:

In June 2011, the Board of Trustees will be asked to approve the fiscal year 2012 audit plan. In preparation of that action, Audit Committee input is needed to determine priorities, given available resources and risk assessment results.

Scheduled Presenter(s):

Beth Buse, Executive Director, Office of Internal Auditing
Eric Wion, Deputy Director, Office of Internal Auditing

Background:

In August 2010, the Audit Committee approved the following committee goal for the year:

Complete a thorough evaluation of the audit approach for the Minnesota State Colleges and Universities. The evaluation should:

- *Be based on a risk assessment and include a plan for obtaining internal control and compliance audit coverage given that the contractual relationship with the Office of the Legislative Auditor has ended.*

- *Consider the value and role of obtaining annual financial statement audits for individual colleges and universities.*

- *Determine a strategy for an information technology audit approach.*

BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES

BOARD INFORMATION

AUDIT PLANNING RELATED TO SYSTEMWIDE RISK ASSESSMENT

Executive Summary

A three-staged risk assessment identified enterprise strategic, fiscal, and information technology risk factors. Given these factors and available audit resources, we recommend the following audit priorities for fiscal year 2012:

- Continue core assurance services. These core services include meeting contractual obligations to external audit firms, follow-up on outstanding audit findings and conducting fraud investigations.
- Reserve resources to allow selection of a focused systemwide project, based on priorities of the Board of Trustees and Chancellor.
- Complete a comprehensive information technology audit risk assessment.
- Conduct audits in the following areas:
    - Internal control and compliance audit of Southwest Minnesota State University;
    - Business cycle focused audits of state university payroll and ISRS security; and
    - Information technology audit of vulnerability management practices.

Audit Committee input is needed on the above recommendation in order to complete the fiscal year 2012 audit plan by its deadline.

Audit Risk Assessment Methodology and Results

Professional internal auditing standards require that the audit plan be based on a risk assessment to ensure that resources are focused on the most critical projects.

When developing the audit risk assessment process, our office conducted research on internal audit risk assessment best practices and methodologies. We reviewed materials and held conversations with internal audit employees from many higher education systems and institutions to determine the processes used for their annual audit risk assessment.   The following table illustrates several of the processes that we took into consideration:

Higher Education System	Audit Risk Assessment Methodology
Austin Community College District	Enterprise risk management process
Arkansas State University System	Self-assessment of risk of auditable units and survey of leadership
Oregon University System	On-line survey of leadership, fiscal analysis, risk decision model and discussions with leadership
University of Minnesota	Risk decision support model, fiscal analysis, and discussions with leadership

We discovered that methods used to conduct risk assessments and build annual audit plans are very diverse. However, common underpinning factors include the maturity of an enterprise risk management program, available audit resources, complexity of the organization, and auditor professional judgment. Based on the results of our research, we developed an audit risk assessment approach that took into consideration enterprise strategic risks, financial risks, and information technology risks.

Enterprise Strategic Risks

Representatives of the Finance Division, Office of Internal Audit, and Office of General Counsel held meetings with various groups of system, college, and university leaders to discuss risk factors affecting the system. Specifically, the team met with:

- 25 colleges that do not have an annual financial statement audit. These meetings were with college leadership and were held in conjunction with Vice Chancellor King's regional Trends and Highlights meetings.
- Three institutions that have an annual financial statement audit.   Meetings were held with leadership from Bemidji State University, Minnesota State University, Mankato, and Rochester Community and Technical College.
- Focused groups from various institutions representing college and university registrars and finance officers.

In addition, the Office of Internal Auditing had focused discussions with the Compliance Oversight Committee, Leadership Council, Interim Vice Chancellor for Academic and Student Affairs, Vice Chancellor of Finance, Vice Chancellor of Human Resources, Chancellor, the three external audit firms and the Legislative Auditor.

Common themes that came to light in nearly all of the conversations included:

- Difficult economic times the State of Minnesota and the nation are facing and the resulting decline in state support of higher education.
- Loss of knowledge due to turnover of key staff.
- Insufficient personnel in fundamental areas.

Potential risk areas identified during discussions with leadership where internal audit could provide audit coverage include:

- Financial aid administration;
- Student and employee safety;
- Online education;
- Employee professional development; and
- Tuition and fee costs.

Historically, internal audit has scheduled a study of a topic like those identified above to provide insight to system leaders. Recent studies have focused on undergraduate student credit transfer, auxiliary and supplemental revenues, affiliated foundations and implementation of student success systems.

Financial Risks

Organizations are held to a higher standard of care and due diligence when public funds are at risk. Internal control and compliance audits provide independent assurance to leaders that internal controls are properly designed and operating as intended. These audits often focus on risky financial activities, which are not necessarily the most material financial activities.

Internal audit recently assessed fiscal risk factors at each college and university, using several risk metrics outlined below:

Metric Category	Factors Measured
Audit	- Time since last internal control and compliance audit and the volume of findings - Whether the institution has an annual financial statement audit and the volume of findings from the last audit - Number of outstanding unsatisfactory audit findings
Financial Condition	- Operating gains or the size of losses - Composite Financial Index (CFI) - Overall materiality of financial transactions
Business Operations	- Change or loss in key personnel, knowledge, or skills - Diversity or complexity of operations - Number of incompatible security access rights

All of the above metrics were assigned a point value to determine an overall ranking for each college and university. In addition, we used professional judgment to make adjustments to certain institution's rankings for significant financial risk factors that were not part of the standard risk model. This work helped us identify ten potential audit targets with the greatest financial risk, as discussed below:

- 5 universities were included in the top 10. Their scores generally ranked high as a result of material financial activity, large numbers of people with incompatible access, and the length of time since the last internal control and compliance audit. These universities have not had an internal control and compliance audit since 1999 or 2000.
- 5 colleges were included in the top 10. Their scores were generally ranked high due to the volume of past internal control and compliance findings and the number of outstanding audit findings. Four of these colleges had operating losses in 2010 and one has not had an internal control and compliance audit since 2001.

When developing the audit plan, it is important to keep in mind that internal control and compliance audits can be structured in different ways. The following table describes the differences between institutional and business cycle audits:

Audit Scope	Pros	Cons
Individual College or University	- Scope can be customized to focus on the riskiest activities and several different business/control cycles can be reviewed - Recommendations may be tailored to the institutions' particular circumstances - Provides independent assurance on how well the institution is protecting resources - Leadership is comforted by a known audit presence	- Costly due to the number of entities - Institutions may go a long period without an audit
A Single Functional Area (payroll for example)	- Provides independent assurance across the system for one functional area - May be more likely to identify systemic problems and recommendations to benefit more institutions	- Scope is very limited - Business/control cycles may go a long period without an audit - Limited audit presence at individual institutions - Costly due to differing business practices across the system

Information Technology Risks

Some information technology controls are subject to basic audit coverage as part of the annual audit of the system-wide financial statements. However, the primary purpose of a financial statement audit is to opine on whether the financial reports are free of material misstatements. Information technology audits fill the gap by providing management with independent assurance that critical information technology operations are efficient, effective, and secure.

In prior years, the Legislative Auditor conducted nine information technology audits under a contract with the Minnesota State Colleges and Universities. However, work has not been done since this contractual relationship ended in 2005. Recognizing that information technology now transcends all aspects of the system and institutions could not function without technology, we believe that it is important to once again provide leaders with independent assurance in this mission critical area.

Certain information technology risks were identified during the work done assessing enterprise strategic and financial risks. We supplemented this lists with other information technology risks to identify key areas where audit coverage could provide system leaders with independent assurance:

- Loss, theft or unauthorized changes to student data. The specific focus of our work would assess how effectively colleges and universities protect data when it is removed from enterprise systems and managed on local computers.
- Vulnerability management. The system made a substantial investment in a state of the art enterprise vulnerability and threat management system. This audit would assess how effectively information technology professionals are using the system to find and fix security vulnerabilities before they are exploited.
- Continuity of operations planning. This audit would determine if the system could adequately respond, recover, resume, and restore people, business processes, and technology, should a disruption occur.
- Application controls. Application controls drive the integrity of information gathered, stored, and processed by critical computer systems. Possible candidates for audit would be the ISRS financial aid and security modules.
- Banking and vendor controls. As a combined financial and information technology audit, we could potentially assess the adequacy of controls that prevent unauthorized payments or transfers from local bank accounts.
- Payment Card Industry Data Security Standard compliance. Organizations that accept credit cards could face steep fines for failing to comply with PCI standards. Recognizing this, the system spent a significant amount of money to move the organization towards PCI compliance. This audit would provide an independent assessment to leaders on the current state of PCI compliance.

The Office of Internal Auditing is planning to develop a more comprehensive information technology risk assessment in fiscal year 2012, with the addition of dedicated information technology audit resources.

Audit Budget and Resource Planning

Board Policy 1A.2, Part 5, Subpart E, states that the Office of Internal Auditing reports directly to the Audit Committee and it is charged with oversight of internal and external audits. However, the Office of Internal Auditing is included in the same budget process as other divisions in the Office of the Chancellor. The budget process is now underway, with a budget expected to come before the Board in June. Appendix A provides information on actual and proposed audit expenditures and a summary of technical hour usage for the Office of Internal Auditing.

Past critical events and planning assumptions for determining available audit resources can be seen in the following sections:

Prior to 2010

The Office of the Legislative Auditor had been a primary source of audit services for the system. Since shortly after the 1995 merger, the system had a contract with the Legislative Auditor to conduct financial audits of each college and university, following a three-year revolving schedule. Up until 2006, the contract also provided for information technology audit work. With the hiring of CPA firms to conduct financial statement audits, the role of the OLA changed to focus on colleges that did not have annual CPA audits.

Fiscal Year 2010

Internal auditing staff began assisting with the college audits due to resource constraints by the Legislative Auditor. However, the Legislative Auditor did conduct an internal control and compliance audit at St. Cloud State University, outside of the contract with the Minnesota State Colleges and Universities.

> **Office of Internal Auditing Employee FTE**
>
> Fiscal Year 2009 = 11
> Fiscal Year 2010 = 9.5
> Fiscal Year 2011 = 8
> Fiscal Year 2012 = 10

The Office of Internal Auditing absorbed a 15 percent budget reduction. This reduction resulted in the elimination of consulting services and a reduction in capacity for other services.

Fiscal Year 2011

By mutual agreement, the contractual arrangement with the Office of the Legislative Auditor ended.

Though internal audit has provided staff resources to external audits in support of financial statement audits over the past ten years, the office plans to eliminate this

support as contracts expire to focus on more value added priorities. New Executive and Deputy Directors were hired and the office was restructured to improve information technology audit capabilities.

The Office of Internal Auditing has seen a marked increase in fraud allegations, placing additional demands on resources.

Fiscal Year 2012 Assumptions

Hours to support follow-up on outstanding audit findings will be reduced due to the clean-up effort over the past two years. Also, with fewer audits, there has been a reduction in the number of audit findings.

An information technology audit strategy for the system will be developed. The Office of Internal Auditing will also use consultants to help develop and implement an information technology audit approach. This would be a onetime project, using approximately $100,000 in salary savings from fiscal year 2011.

Audit resources will be used to execute a systemwide project, designated by the Chancellor and Board of Trustees. The office will add one auditor to focus on financial internal control and compliance audits.

Next Steps

In June, a proposed audit plan for fiscal year 2012 will be presented to the Board of Trustees for approval. The proposed plan will include:

- A determination of audit priorities based on the input from trustees from the May Audit Committee meeting and available audit resources.
- Evaluation and recommendation for an external audit approach for obtaining audited financial statements.

Date Presented to the Board of Trustees: May 17, 2011

Appendix A

Actual and Proposed Audit Expenditures by Fiscal Year

	2008 Actual	2009 Actual	2010 Actual	2011 Projected	2012 Planning	2013 Planning
Salaries & Benefits	1,074,187	1,114,179	1,025,074	876,866	1,084,711	1,084,711
Other	49,375	36,601	51,677	44,000	64,423	64,423
Total	**1,123,562**	**1,150,780**	**1,076,751**	**920,866**	**1,149,134**	**1,149,134**
Contract - OLA	236,130	231,017	223,522	-	-	-
Contract – CPA (1)	594,351	611,004	615,671	606,546	569,821	560,000
Contract - Other	-	-	-	16,000	120,000	20,000
Total	**830,481**	**842,021**	**839,193**	**622,546**	**689,821**	**580,000**
Total Audit Costs	**$1,954,043**	**$1,992,801**	**$1,915,944**	**$1,543,412**	**$1,838,955**	**$1,729,134**

(1) Cost of external auditing services from CPA firms is covered by individual colleges and universities and the Finance Division.

Summary of Technical Hour Usage

	Actual 2008	Actual 2009	Actual 2010	Projected 2011	Estimate 2012	Estimate 2013	Estimate 2014
Internal Auditing							
Total Available Hours	**12,439**	**11,914**	**9,743**	**7,789**	**9,510**	**10,180**	**10,180**
External Auditor Support	2,492	1,760	1,972	1,720	1,480	1,200	-
Follow-up	1,905	2,293	2,385	2,500	700	800	1000
Fraud Investigations	1,518	1,288	895	1,400	1,300	1,300	1,300
Consulting Services	732	1,442	-	-	-	-	-
Professional Advice	853	750	638	500	500	500	500
Other	1,975	1,663	901	1,500	930	930	930
Total Committed	**9,475**	**9,196**	**6,791**	**7,620**	**4,910**	**4,730**	**3,730**
Information Technology	-	-	-	-	1,500	1,500	1,500
Financial I/C and Compliance	-	346	1,200	169	2,000	2,000	2,700
Systemwide Projects	2,964	2,372	1,752	-	1,100	1,950	2,250
Total Project	**2,964**	**2,718**	**2,952**	**169**	**4,600**	**5,450**	**6,450**
Legislative Auditor							
Contract – College Audits	7,822	7,428	3,602	-	-	-	-
University Audits	-	-	2,148	1,500			
Total	**7,822**	**7,428**	**5,750**	**1,500**	**2,000**	**2,000**	**2,000**

Note: Analysis of technical hours excludes Executive and Deputy Director time.