



May 25, 2016

TO: The Board of Trustees of the University of Oregon

FR: Angela Wilhelms, Secretary

RE: Notice of Executive and Audit Committee Meeting

The Executive and Audit Committee of the Board of Trustees of the University of Oregon will hold a public meeting on the date and at the location set forth below. Subjects of the meeting will include: quarterly audit report, FY17 audit plan, and information technology strategic plan updates.

The meeting will occur as follows:

Thursday, June 2, 2016 at 8:00 am
Ford Alumni Center, Giustina Ballroom

The meeting will be webcast, with a link available at www.trustees.uoregon.edu/meetings.

The Ford Alumni Center is located at 1720 East 13th Avenue, Eugene, Oregon. If special accommodations are required, please contact Amanda Hatch at (541) 346-3013 at least 72 hours in advance.

BOARD OF TRUSTEES

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**Board of Trustees of the University of Oregon
Executive and Audit Committee
Public Meeting
8:00 am – June 2, 2016
Ford Alumni Center, Giustina Ballroom**

Convene

- Call to order and roll call
- Approval of December 2015 EAC minutes (Action)

- 1. Quarterly Audit Report and FY2016-17 Audit Plan**, *Chief Auditor Trisha Burnett*
- 2. University IT and Computing Priorities Update**, *Interim CIO Chris Krabiel; Professor of Computer and Information Science and IT Leadership Team Member Joe Sventek*

Meeting Adjourns



Agenda Item #1

Quarterly Audit Report & FY17 Audit Plan

Note: The quarterly audit report will be provided at the meeting.

As one fiscal year winds down, the Board of Trustees approves an internal audit plan for the next. The Office of Internal Audit (Internal Audit) has developed a proposed risk assessment audit plan for Fiscal Year 2017 (FY2017). The plan is attached to the enclosed resolution (Exhibit A).

The plan was informed by risk assessments and interviews, prior audit work, external consulting analyses, and information gathered from individuals on campus about audit priorities.

While the plan serves as a guide for Internal Audit as it charts its work throughout the coming fiscal year, additional audit needs may come to the attention of the Board, the President, and/or the Chief Auditor throughout the fiscal year. Passage of this plan does not prohibit the Chief Auditor from engaging in audits of such items or her ability to reprioritize as deemed necessary and appropriate.

Full compliance by university employees is expected with regard to all audits.

The Executive and Audit Committee may take action on this matter on behalf of the full Board.

**Executive and Audit Committee
Board of Trustees of the University of Oregon**

Resolution: Adoption of FY17 Risk Assessment and Audit Plan

Whereas, the University of Oregon (University) is governed by and the business and affairs of the University are ultimately managed by the Board of Trustees;

Whereas, the University takes seriously the responsibility to manage, invest and spend resources;

Whereas, the University's Office of Internal Audit provides independent, objective evaluations and advisory services that add to the accountability of the University;

Whereas, the Office of Internal Audit will work closely with the Board of Trustees, university leadership, faculty and staff to conduct and coordinate a broad range of audit functions for the University; and

Whereas, the Office of Internal Audit has developed an audit plan for Fiscal Year 2017 ("Audit Plan") attached hereto as Exhibit A; and,

Whereas, the Policy on Committees authorizes the Executive and Audit Committee to act on behalf of the full Board of Trustees when appropriate;

Now, THEREFORE, the Executive and Audit Committee of the Board of Trustees of the University of Oregon hereby approves the proposed FY17 audit plan and directs the officers, or their designee(s), of the University to take all actions and steps deemed necessary and proper to implement the approved plan.

Moved: _____ Seconded: _____

Trustee	Yes	No
Bragdon		
Ford		
Kari		
Lillis		
Ralph		
Wilcox		

Dated: _____ Recorded: _____

Office of Internal Audit
Annual Risk Assessment and Internal
Audit Plan

FY2017

Risk Assessment

*Conducted for the purpose of developing the
Annual Risk Based Audit Plan*

EXHIBIT A

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EXECUTIVE SUMMARY

During FY16, the Office of Internal Audit (Internal Audit) met with the Director of Enterprise Risk Services (ERS) and discussed the risk assessment process. It was determined that Internal Audit would collaborate with ERS for the enterprise risk assessment during early 2016. However, this collaborative process was subsequently rescheduled for fall 2016. Internal Audit has experienced nearly complete turnover in staffing during FY16. As a result, risks identified during the prior year risk assessment process have not been fully evaluated. For the FY17 audit plan, Internal Audit will revisit information gathered during the prior year as a basis for the audit plan. This includes review of the prior year audit plan, the results of the Strategic Enterprise Risk Management & Compliance (SERMC) committee risk assessment process, and prior year interviews conducted by Internal Audit. Feedback from senior leadership will be obtained to identify necessary adjustments.

Many processes and systems are currently being evaluated by management for potential changes. Time will be allocated on the audit plan to allow for advisory services in these areas. Internal Audit will advise on internal controls, safety, security, compliance, efficiency, and effectiveness. The progress and action plans will be included in Board communications.

METHODOLOGY

During the preparation of the FY17 audit plan, Internal Audit reviewed prior audit work, risk assessments, interviews, external consulting analyses, and input from senior leadership about audit priorities.

As the internal audit function is still new to the University, one focus is validating fundamental control systems, including evaluation of administrative oversight functions (Risk Source 1). Audit objectives will focus on evaluating the internal control structure of oversight functions based on the Committee of Sponsoring Organizations of the Treadway Commission (COSO) model and the efficiency of processes.

The results of the 2014 SERMC Risk Assessment Report identify downside risks – those risks that could negatively affect the university's ability to achieve its core mission of instruction, research, and public service. Follow-up was performed in 2015 to identify changes in perceived risks. Both of these documents are valuable inputs into the current (Risk Source 2).

The prior year risk assessment was designed as a formal mechanism to gather information about factors that could prevent the University from meeting its objectives. The results collectively reflected more than 90 interviews with senior leaders, deans, directors, and department heads. (Risk Source 3).

RESULTS

Mission Statement

The mission of the Internal Audit is to assist leadership in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, internal controls, and governance processes.

Introduction

The Institute of Internal Auditors' (IIA) International Professional Practices Framework (IPPF) requires the chief audit executive to establish a risk-based plan to determine the priorities of the internal audit function. Due to employee turnover, there was no internal audit staff for the majority of the year. Several audits were started but not completed.

Audit Resources

The Internal Audit is currently comprised of a chief auditor and one executive assistant. However, the hiring process has been initiated to fill two internal audit staff positions. Reasonable assumptions were made as to the hiring process and starting dates included below. However, variations will have a direct impact on the hours available for audit services. Audit staff resources are expected to be allocated as follows:

Position	Gross Available Hours	Leave & Holidays	Training & Related Travel	Net Available Hours
Chief Auditor	2,080	350	60	1,670
Internal Auditor	1,733 *	350	140 #	1,243
Internal Auditor	1,733 *	350	140 #	1,243
Total	5,547	1,050	340	4,157

* Expected start dates of September 1, 2016

Note that in addition to annual continuing education requirements, new employees are required to attend University orientation and other introductory trainings.

2017 Audit Plan

Internal Audit will focus on validating fundamental control systems and high risk areas as identified in the SERMC Risk Assessment Report and the prior year interviews conducted by Internal Audit. Other administrative goals for FY17 are:

- Implement audit management software
- Refine internal policies and procedures to ensure compliance with the IIA’s International Professional Practices Framework (IPPF)
- Market Internal Audit to all levels of the University
- Develop self-assessment tools for the campus community
- Develop and implement a student worker program

Internal Audit engages in three primary activities – assurance, advisory, and investigative services. Additionally, Internal Audit performs follow-up engagements and coordinates external audit efforts. The focus of Internal Audit is to actively work with the University to assist management in addressing strategic, financial, operational, compliance, and reputational risk and exposures on both university-wide and departmental level processes and control systems. Internal Audit brings a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. As a result of turnover in the office, the prior year risk assessment and prior year approved audit plan will serve as the basis for the proposed FY17 risk based plan in order to appropriately focus audit resources.

Internal Audit’s planned audit projects for FY17 are:

Audit Unit	Audit Title	Audit Focus	Risk Source	Estimated Hours
Assurance Services				
Business Affairs	Accounts Payable Practices and Controls	To evaluate the internal control structure of the central function.	1	400
Business Affairs	Payroll Practices and Controls	To evaluate the internal control structure of the central function.	1	400


Business Affairs	Cash Handling	To evaluate the internal control structure of the central function and the processes used by the campus.	1	400
Athletics	Unit Level Risk Assessment	To gain an understanding of the athletics program in order to identify inherent risks; to identify systems and processes along with related controls that are intended to mitigate these risks. The results of this work will be used to develop a multiple year, risk based audit plan.	1,3	300
Athletics	NCAA Compliance Program	To evaluate the effectiveness of the program using a compliance framework	2,3	300
Research & Innovation	Export Controls	To evaluate the processes used to ensure compliance with federal export control regulations.	2,3	300
Central IS	IT Security	Evaluate the IS Information Security Office's various efforts to protect University information and systems to comply with applicable laws and regulations	2,3	40
Advisory Services				
Campus Wide	Trainings and Presentations	Internal Audit will continue offering training on internal controls, risk, and fraud awareness as requested and plans to establish ongoing professional development opportunities.		100
Campus Wide	Advisory Services	Management may ask Internal Audit for advisory services to be performed in accordance with the mission and authority of Internal Audit.		200
Investigative Services				

Campus Wide	Investigative Audits	Based upon the number of reports received from EthicsPoint hotline and management. Also includes carryforward from FY16.		600
Follow-Up				
Campus Wide	Follow up procedures	Follow up on corrective actions from previous engagements.		200
External Audit Coordination				
Business Affairs & Athletics	Financial Statements, Single Audit, and NCAA AUP	Coordinate with and provide oversight of external audit in accordance with the Internal Audit Charter.		80
Risk Assessment & Audit Planning				
Campus Wide	Facilitated Internal Control Self Assessments	Solicit areas of the campus to participate in facilitated internal control self-assessments.		100
Campus Wide	Student Mentoring	As the student intern project is developed, this will include mentoring students as they gain an understanding of specific unit processes, identify weaknesses, and work with unit management to improve processes.		120
Campus Wide	Annual Risk Assessment	The annual risk assessment will form the basis of the audit planning for future years. Estimated budget includes participation in Enterprise Risk Services enterprise wide risk assessment.		200
Administrative Initiatives				
Campus Wide	Process Improvement	Previously defined administrative goals for FY17		417
			Total Hours	4157



Agenda Item #2


University IT and Computing Priorities Update



IT Strategic Planning Update


June 2, 2016

Chris Krabiel, Interim CIO
Joe Sventek, Professor of Computer and Information Science



Quarterly IT Strategic Updates

- Based on the March 4, 2016 presentation to the Board
- Updates will cross-reference topics to that March presentation (“See March Presentation Page X”)



IT Overview and Planning

- Engagement with IS Team and UO Campus
 - *Introductory meetings around campus*
- Daily IS Operational Objectives
 - *Daily campus support and ongoing projects (See Appendix A)*
- Established Initial Strategic Objectives
 - *Developed project initiation plans for each strategic objective, which includes defining a scope of work, identifying critical project resources and determining high-level timelines*
 - *Balanced workload, staffing and priorities*
- Engagement, Planning and Scheduling with Harvey Blustain (consultant)

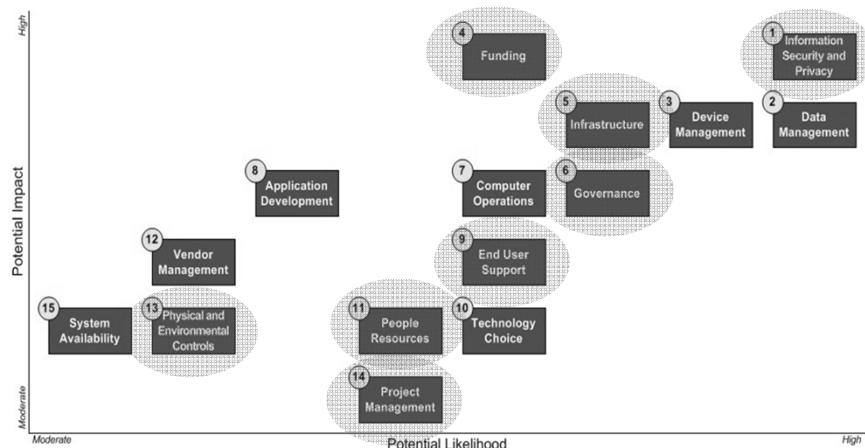
See March Presentation Page 12

Information Technology Vision

- Collaborative Across Campus Constituencies
 - *People and resources: portfolio of projects*
 - *Portland*
 - *Residence Halls*
 - *Student Life*
 - *Registrar*
- Consistent & Strong Executive Support
 - *Helps ensure IT strategic plan is supported*
 - *Weekly executive IT meetings and strategic discussions*
 - *IS staffing*
 - *Funding*
 - *Security*
 - *Governance*
 - *Project status*

See March Presentation Page 9

Recall: Baker Tilly Assessment Map



See March Presentation Page 5

Five Areas of Focus: Key Points

- **Security** (Baker Tilly Report #1)
 - *Some policies adopted, more in the pipeline*
 - *Strategic investments purchased*
- **Infrastructure** (Baker Tilly Report #5)
 - *UO network structure and core development*
- **Governance** (Baker Tilly Report #6)
 - *Two key committees formed and launched*
- **Physical and Environmental Controls** (Baker Tilly Report #13)
 - *Allen Hall – opened in April*
 - *HPC – vendor selection*
- **Project Management** (Baker Tilly Report #14)
 - *Certified Project Manager Information Systems (work flow project)*

See March Presentation Page 5

IT Risks: Action Taken

- Information Security and Privacy
 - *Three policies approved*
 - *Data Security Response*
 - *Information Security Program*
 - *Data Classification*
 - *Two policies drafted / in process*
 - *Acceptable Use*
 - *Security Awareness*

See March Presentation Page 5

IT Risks: Action Taken

- Funding
 - *Funded two additional Central IS application development positions and a security analyst*
 - *Funded Allen Hall and a work flow investment project*

Investment	Cost	Update
Network core switches	\$2,000,000	Joe Sventek initial evaluation completed
Infrastructure – Email, Data Center consolidation, other needs	\$587,000	Pending network evaluation, Data Center/Allen Hall in process
2-factor authentication	\$80,000	Alternate procurement in process
Training Program - Security	\$17,000	June procurement, Implement October
SIEM (\$250,000)	\$50,000	Install May, completion June
Work Flow	\$548,000	Contract modification and project team in process
IT Service Management (ISTM)	\$75,000	Product evaluation on-going
Content Delivery Network	\$10,000	TBD
Web Service and Data Integration	\$15,000	TBD
Banner Assessment	\$75,000	TBD

See March Presentation Pages 5, 26

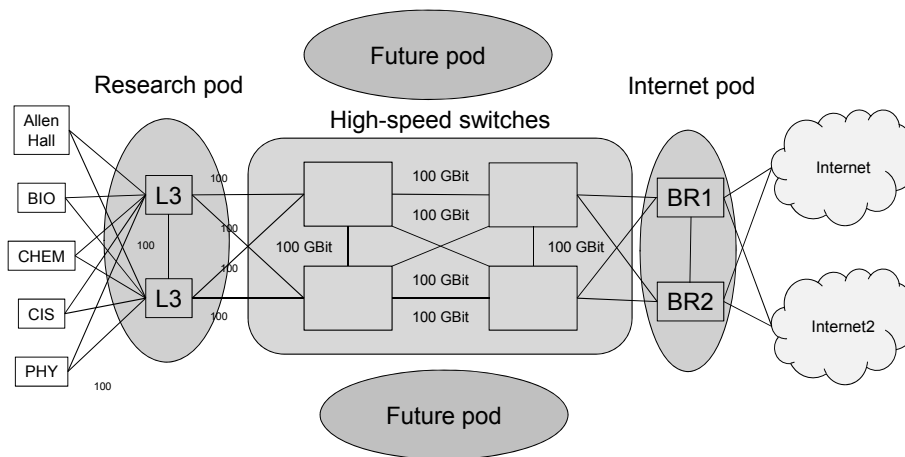
IT Risks: Action Taken

- Governance
 - IT Governance Committee
 - *Membership identified*
 - *Developing the committee charter*
 - IT Directors Committee
 - *Current action items: charter, survey, software*
 - *Includes an executive committee of 5 unit reps for efficiency*

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IT Risks: Infrastructure

(extensible high-speed networking architecture)



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IT Risks: Infrastructure

Estimated Timeline

Task	Start date	End date
Design completion	In progress	15 June 2016
Vendor meetings	16 June 2016	17 June 2016
Faculty meetings	In progress	TBD
Equipment ordering and delivery	1 July 2016	30 September 2016
Define core equipment location	1 June 2016	15 June 2016
Fiber installation	1 July 2016	24 February 2017
Core & research switch installation	1 October 2016	3 April 2017

Leveraging Resources: Long-term Assessment*

- Campus Interviews
 - 63 individuals plus 17 focus groups (113 total people)
 - Academic Leadership Team (ALT), including deans
- IT Activity Survey
 - Assessing unit functions and work
 - Developed with IT directors and customized for the environment
 - Executed a survey across campus in May, under analysis

*Harvey Blustain - Lead

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Leveraging Resources: Short-term Assessment

- Data Center Consolidation
 - *Two pilot servers moved into Allen Hall in April*
 - *Focusing on research areas and security*
 - *Adhering to data security compliance (NIST 800-171)*
 - *Facility opened June (Baker Tilly #13)*
- Enterprise Software
 - *Compiled academic and administrative software*
 - *Evaluating opportunities to streamline purchasing*
 - *Contracting, standardization and best practices*
- Email/ Calendar *pending infrastructure review*
- Help Desk Support
 - *Ticketing system, conducting product/vendor research*

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Campus Engagement

- Transparency
 - *Website updated to show the strategic plan / processes*
 - *Lots of face-to-face conversations and outreach*
- New Management & Central IS Team
 - *Participation on leadership groups, committees*
 - *Collaborative external participation (e.g. NWACC, NERO/OGIG)*

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High Performance Computing (HPC) – Vendor Selection

Date	Commentary
11 March 2016	Received bids from six vendors: Cray, Dell, HP, IBM, Lenovo, SGI
1 May 2016	Eliminate IBM (needed software not available on POWER processor) and SGI (uncompetitive bid)
12 May 2016	Removed Lenovo from consideration (uncertain partnership opportunities)
12 May 2016	Solicit additional information from HP and Cray
26 May 2016	Make final decision among Cray, Dell, HP
1 June 2016	Place order for additional support for ACISS
10 June 2016	Complete statement of work and finalize contract obligations.
10 Sept 2016	Equipment delivered
10 Oct 2016	System configured, tested, and ready for use

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High Performance Computing (HPC) – Governance & Personnel

Date	Action
12 May 2016	Director position posted (http://jobs.uoregon.edu/unclassified.php?id=5527)
26 May 2016	Draft governance and business-model document available for task force comment
9 June 2016	Final governance and business-model document delivered to VPRI
18 July 2016	Estimated start date for Director
29 Aug 2016	Faculty Advisory Committee populated
10 Oct 2016	HPCF open for business

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Looking Ahead: Next Quarter's Focus and Updates

- Report and recommendations from Harvey Consulting
- Progress update on Work Flow project
- Update on Allen Hall Data Center
- Timeline and update for general infrastructure plan
- CIO search update

Appendix A: Project Portfolio (Summary View)

Project Title	Project Lead	Business Sponsor	Project Size	Status	Close Date
Cacti to Zabbix Migration	James Lewis	ACIO Infrastructure	Medium	Started	2/29/2016
Library Digital Archive	Alex Harris	CIO/CAS	Large	Started	6/17/2016
Education Advisory Board - Student Success Collaborative	Noreen Hogan	Provost	Medium	Started	
Campus Workflow Implementation	Tony/Corrie	VPFA-VPRI-CIO	Huge	Started	
Central Kitchen and Woodshop	Andy Vaughan	Campus Ops	Large	Completed	4/1/2016
1600 Milrace CASLS Move	Andy Vaughan	Campus Ops	Small	Completed	12/22/2015
Jane Sanders Softball Stadium	Andy Vaughan	Campus Ops	Medium	Completed	4/1/2016
Proofpoint Enhanced Security Demo	James Lewis	ACIO Infrastructure	Medium	Completed	4/6/2016
Active Directory Certification Authority	Leo Clark	ACIO Infrastructure	Small	Completed	12/11/2015
Wiki-Confluence Merger	Robert Bennett	CIO	Large	Completed	5/4/2016
Project Management Implementation	Tony Saxman	CIO	Large	Completed	4/4/2016
IDR Data Rollout	Tony Saxman	VPRI-VPFA-CIO	Huge	Completed	11/6/2015
Incident Management	Kelsey Lundsman	ACIO CE	Huge	Completed	3/14/2016
EMU Addition	Andy Vaughan	VPFA	Huge	Started	5/2/2016
Science Library Network	Andy Vaughan	VPRI	Large	Started	7/1/2016
Datacenter Onboarding Process Design	Bill Wiener	CIO	Small	Started	6/1/2016
Exchange 2013	Jeff Jones	CIO	Huge	Started	

Continued on next slide

Appendix A: Project Portfolio (Summary View, Cont.)

Project Title	Project Lead	Business Sponsor	Project Size	Status	Close Date
HR Talent Management System	Noreen Hogan	HR Dir	Large	Started	
IAM Duo Two Factor Authentication	Rob Chevalier	ACIO IDMS/EAA	Large	Started	
Duck ID Self Service Replacement	Rob Chevalier	CIO	Medium	Started	
Allen Hall Data Center Co-Location	Tony Saxman	VPFA	Large	Started	6/10/2016
Cisco ISE	Tony Saxman	ACIO Infrastructure	Large	Started	10/30/2016
SIEM Implementation	Will Laney	CISO	Large	Started	
ITSM Program Management	Kelsey Lundsman	CIO	Medium	Started	
Comcast Service Entrance	Eric Fullar	ACIO Infrastructure	Medium	Waiting Approval	
Phone Replace	Eric Fullar	CIO	Large	Waiting Approval	
Conference Room Technology Upgrade	Kristin Smith	CIO	Small	Started	
CC CRAC Unit Upgrades	Micah Sardell	ACIO Infrastructure	Medium	Started	
Network Closet Survey	Ron Mirable	ACIO Infrastructure	Large	Started	
IT Infrastructure	Steve Menken	CIO	Huge	Started	
Campus Guest Wireless	Steve Menken	CIO	Medium	Started	
SCCM	Will Laney	CISO	Huge	Started	
Off Campus Disaster Recovery		CIO	Medium	Started	
Degree Audit	Noreen Hogan	ACIO IDMS/EAA	Large	Tabled	
Red Hat 7, & Puppet Systems Development	Tony Saxman	ACIO Infrastructure	Medium	Tabled	Tabled

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