



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](http://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

6227 University of Oregon, Eugene OR 97403-1266 T (541) 346-3166 [trustees.uoregon.edu](http://trustees.uoregon.edu)

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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: \_\_\_\_\_

| <b>Trustee</b> | <b>Yes</b> | <b>No</b> |
|----------------|------------|-----------|
| Bragdon        |            |           |
| Ford           |            |           |
| Kari           |            |           |
| Lillis         |            |           |
| Ralph          |            |           |
| Wilcox         |            |           |

Dated: \_\_\_\_\_ Recorded: \_\_\_\_\_

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Office of Internal Audit  
Annual Risk Assessment and Internal  
Audit Plan

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**FY2017**

*Risk Assessment*

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

**EXHIBIT A**

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**EXECUTIVE SUMMARY**

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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**

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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**

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**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               |
| <b>Total</b>     | <b>5,547</b>          | <b>1,050</b>     | <b>340</b>                | <b>4,157</b>        |

\* 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 |
|---------------------------|---|---|-------------|-----------------|
| <b>Assurance Services</b> |   |   |             |                 |
| 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  |
| <b>Advisory Services</b>      |                             |  |     |     |
| 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 |
| <b>Investigative Services</b> |                             |  |     |     |

|   |  |   |                    |      |
|---|--|---|--------------------|------|
| Campus Wide                                 | Investigative Audits                             | Based upon the number of reports received from EthicsPoint hotline and management. Also includes carryforward from FY16.  |                    | 600  |
| <b>Follow-Up</b>                            |  |   |                    |      |
| Campus Wide                                 | Follow up procedures                             | Follow up on corrective actions from previous engagements.  |                    | 200  |
| <b>External Audit Coordination</b>          |  |   |                    |      |
| 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   |
| <b>Risk Assessment &amp; Audit Planning</b> |  |   |                    |      |
| 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  |
| <b>Administrative Initiatives</b>           |  |   |                    |      |
| Campus Wide                                 | Process Improvement                              | Previously defined administrative goals for FY17  |                    | 417  |
|   |  |   | <b>Total Hours</b> | 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

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- 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

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- 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*

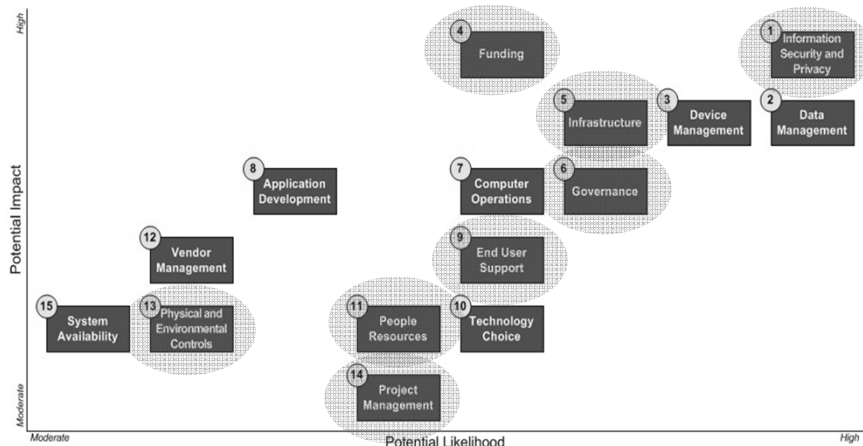
## Information Technology Vision

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- 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

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- 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

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- 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

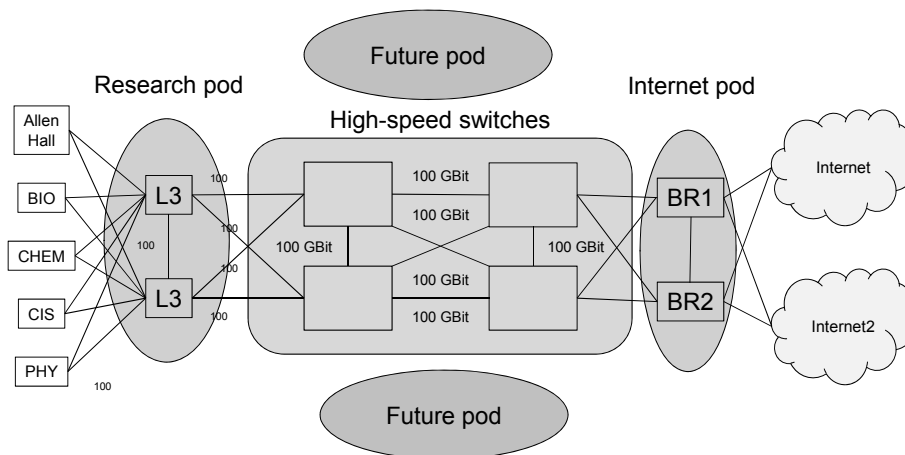
## IT Risks: Action Taken

- 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*

See March Presentation Page 13

## IT Risks: Infrastructure

(extensible high-speed networking architecture)



See March Presentation Page 26



## IT Risks: Infrastructure

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### 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\*

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- 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

See March Presentation Page 20

## Leveraging Resources: Short-term Assessment

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- 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*

See March Presentation Page 21

## Campus Engagement

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- 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)*

See March Presentation Page 28

## 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   |

See March Presentation Page 28

## High Performance Computing (HPC) – Governance & Personnel

| Date         | Action   |
|--------------|--|
| 12 May 2016  | Director position posted ( <a href="http://jobs.uoregon.edu/unclassified.php?id=5527">http://jobs.uoregon.edu/unclassified.php?id=5527</a> ) |
| 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   |

See March Presentation Page 28

## 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   |            |

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## 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     |

*Continued on next slide*