UNIVERSITY OF OREGON

November 26, 2018

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: the quarterly audit report and recommended changes to the internal audit charter; the semi-annual enterprise risk management report, and an update on Transform IT and Information Systems' security efforts.

The meeting will occur as follows:

Monday, December 3, 2018 at 2:00 p.m.
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 Jennifer LaBelle at (541) 346-3166 at least 72 hours in advance.

Board of Trustees | Executive and Audit Committee
Public Meeting | December 3, 2018 @ 2:00 p.m.
Ford Alumni Center | Giustina Ballroom

Convene
- Call to order, roll call
- Approval of September 2018 EAC minutes (Action)

1. **Enterprise Risk Management – Semi-Annual Report:** Andre Le Duc, Associate VP and Chief Resilience Officer

2. **Transform IT Update:** Jessie Minton, Vice Provost and Chief Information Officer

3. **Quarterly Audit Report and Suggested Amendment to Audit Charter (Action):** Trisha Burnett, Chief Auditor

Meeting Adjourns

Agenda Item #1

Enterprise Risk Management

Strategic Enterprise Risk Management and Compliance Committee Report

University of Oregon Board of Trustees

December 2018

Developed by:
Safety and Risk Services

Overview

The Strategic Enterprise Risk Management and Compliance (SERMC) committee is charged by the President of the University. The committee charge is to:

1. Develop tools and processes to actively identify, evaluate, and manage university risks

2. Ensure that systems and processes are in place to provide accountability for compliance with the University's legal and policy obligations

3. Encourage communications, problem-solving, and collaboration across divisions, units, and departments

The committee is chaired by:
- Chief Resilience Officer and Associate Vice President for Safety and Risk Services

Committee membership includes:
- Vice President for Finance and Administration and Chief Financial Officer
- Vice President for Research and Innovation
- Vice President and General Counsel to the University
- Vice President for Equity and Inclusion
- Vice President for Student Life
- Vice President for Student Services and Enrollment Management
- Vice President for University Communications
- Vice President for University Advancement
- Executive Vice Provost for Operations
- Vice Provost for Information Services and Chief Information Officer
- Chief Resilience Officer and Associate Vice President for Safety and Risk Services
- Chief Human Resources Officer and Associate Vice President for Human Resources
- Chief Auditor
- Associate Vice President for Business Affairs and University Controller
- Senior Associate Vice President for Research and Innovation
- Director of Intercollegiate Athletics

Committee members serve as risk area leads or "risk owners" over the potential risk exposure areas, conditions or events that exist in their portfolios.

In 2017-2018 the committee asked risk owners and subject matter experts within their portfolios to review and provide feedback on their risk exposure areas and to identify existing controls and mitigation strategies.

In order to increase situational awareness among leadership and management, risk owners also gave presentations on their risk areas at one of the monthly SERMC meetings. The committee also established a work group structure to address emerging risks.

2018 University Institutional Risk Profile
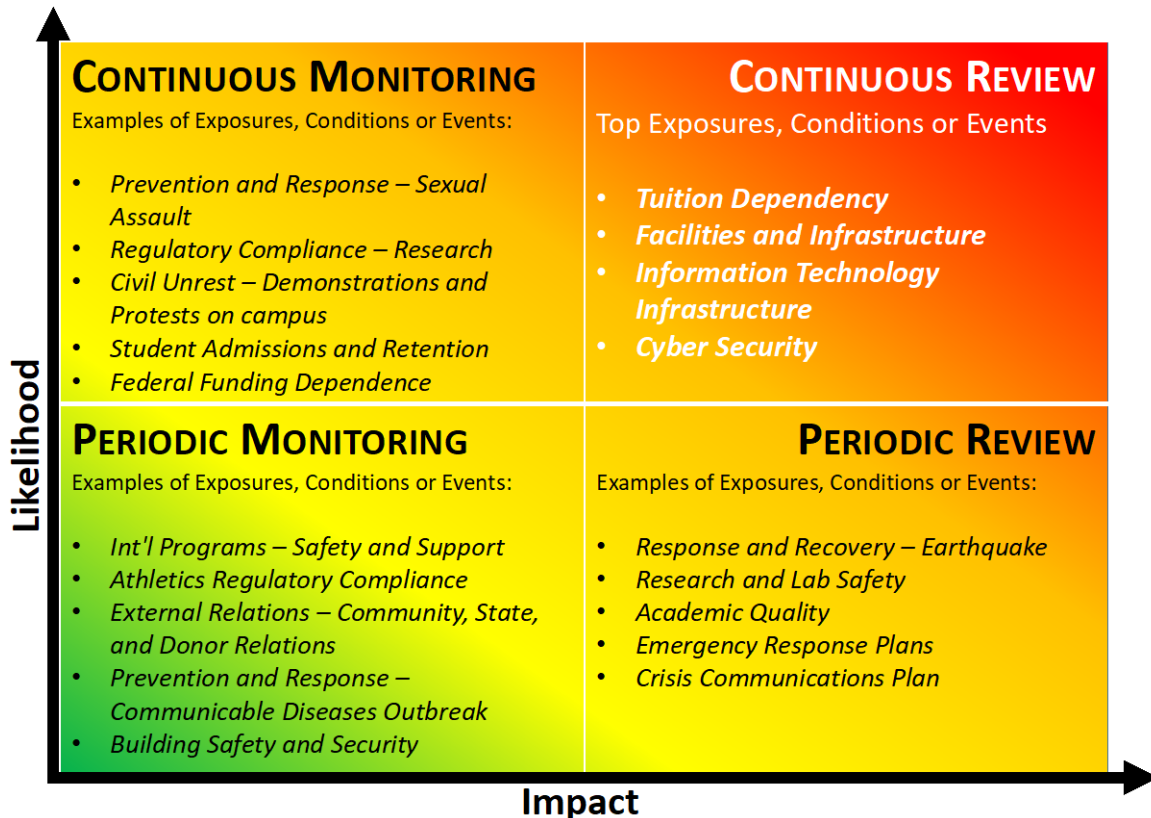
Continuous Review
Risks that have the potential for a HIGH or VERY HIGH impact and have a HIGH or VERY HIGH likelihood of occurring

Continuous Monitoring
Risks that have the potential for a LOW or MODERATE impact and a HIGH or VERY HIGH likelihood of occurring

Periodic Review
Risks that have the potential for a HIGH or VERY HIGH impact and a LOW or MODERATE likelihood of occurring

Periodic Monitoring
Risks that have the potential for a LOW or MODERATE impact and a LOW or MODERATE likelihood of occurring

SERMC Work Groups

When SERMC identifies potential gaps or risk exposures that do not have a risk owner or that require additional in-depth analysis the committee establishes inter-departmental and cross-disciplinary work groups to explore the concern. The groups focus primarily on topics that require special attention for purposes of compliance, planning response, or risk management. SERMC provides the work group with a clearly defined charge, a set of expected outcomes, and a timeline for the work group to return to the committee with recommendations.

_Work Group Process__: from risk identification to action_

The work group approach allows SERMC to bring campus partners to the table to better understand specific risk exposures, and to develop actionable recommendations to mitigate those risks. The work group structure also encourages information sharing, problem-solving, and collaboration across divisions, units and departments.

Information Communications Technology Accessibility Work Group

SERMC charged this work group to:
- Bring together stakeholders to develop strategies for removing barriers and improving accessibility of information and communication technologies (ICT) across campus (including UO websites, web pages, and web applications among others).
- Identify and review current policies/procedures/practices regarding accessible technologies at UO.
- Finalize an ICT Accessibility Policy and Procedures (including implementation guidelines) for submission to the Policy Advisory Council.
- Research methods to ensure information provided by or gathered from third-party vendors is accessible, including standards and language related to ICT procurement.

Membership:
- *Human Resources*
- *General Counsel*
- *Information Services*
- *Student Services and Enrollment Management*
- *University Communications*
- *Accessible Education Center*
- *Purchasing and Contracting Services*
- *UO Libraries*
- *Office of the Registrar*
- *Athletics*
- *Student Life*
- *Business Affairs*

Findings:
- *The work group recommended that the University dedicate more resources to ensure that all UO web pages and other active ICT be made accessible to the widest range of users, including those with disabilities.*

Actions:
- The work group created an accessibility link on the uoregon.edu home pages that directs individuals to a website where inquiries, requests, and complaints can be submitted. The website is https://www.uoregon.edu/accessibility.
- The work group drafted a policy and procedures to address ICT compliance at the University. There is one provision in the procedures that speaks to a proposed implementation schedule that is contingent on an external audit of all outward facing University websites. The Office of Internal Audit is currently exploring potential external auditors for this purpose. The group anticipates another recommendation to SERMC to approve the phases and costs of an audit.
- The work group recommended development of a proposal for the Budget Advisory Group to fund a new position (ICT Accessibility Program Manager) who would specialize in ICT compliance. SERMC agreed to the proposal. The work group is developing a budget proposal for FY20.

Special Events on Campus Work Group

SERMC charged a Special Events on Campus work group to research and recommend institutional policies and procedures for safeguarding special events hosted on campus by the university and/or unaffiliated groups.

Membership:
- *Safety and Risk Services*
- *Risk Management*
- *Emergency Management*
- *Athletics*
- *UO Scheduling and Event Services*
- *UO Fire Marshal's Office*
- *UO Police Department*
- *University Communications*
- *Student Life*
- *Campus Planning and Facilities Management*
- *Business Affairs*
- *Purchasing and Contracting*

Findings:
- *Events that are scheduled through UO Scheduling are well monitored and vetted.*
- *Event booking procedures managed by UO Scheduling are not formalized.*
- *Many groups independently oversee their own buildings. The decentralized nature of how space is managed increases the likelihood that an event will not be vetted, associated risks will not be mitigated, and that the campus will not receive campus-wide communications about the event.*
- *The university does not use a centralized scheduling software to manage space reservations across campus. A request for proposals (RFP) for software packages is needed.*
- *Resources for planning events live in a number of locations depending on the types of event needs (e.g., space reservations, alcohol permits, fire safety, security, etc.)*
- *Fees for third party space rentals are not assessed consistently.*
- *Certain very large scale events require the coordination of many departments across campus and are a drain on resources.*

Actions
- UO Scheduling worked with General Counsel to improve and finalize event scheduling procedures.
- The university acquired centralized scheduling software that will allow for enterprise wide visibility into all events on campus.
- General Counsel developed event procedure templates and shared them with Schools and Colleges who manage their own spaces.
- Student Life is beginning to develop a one-stop website that will contain all of the information needed for developing, scheduling, and hosting special events.

Nighttime Safety Training, Outreach and Engagement Work Group

SERMC charged this work group to:

1. Catalog existing personal safety and assault prevention awareness and training resources provided by campus partners.
2. Explore ways to link, align and leverage modes of outreach, engagement, and trainings related to nighttime safety and violence prevention.
   Develop a short-term action plan to enhance safety messaging and trainings for fall of 2018 in order to reach a broader audience using multiple tools.

Membership:

- *Safety and Risk Services*
- *Student Life*
- *Student Services and Enrollment Management*
- *UO Police Department*
- *Human Resources*
- *University Communications*
- *Dean of Students*

Findings:

- *Current personal safety and assault prevention awareness resources are dated.*
- *There is no centralized location for the various resources (websites, videos, etc.).*
- *Outreach and training efforts around safety and violence prevention awareness on campus are decentralized by department.*

Actions:

- The work group recommended that new safety and violence prevention awareness training videos need to be launched. Safety and Risk Services oversaw the launch of a safety campaign about the UO app and University Communications produced safety and violence prevention awareness training videos.
- The work group recommended that the UO mobile app should be used to aggregate the various safety and violence prevention awareness trainings websites already in place. The group also created a new button on the UO mobile app for emergency contacts.
- The work group recommended, and SERMC agreed, that the Chief Resilience Officer should be the steward of the safety portion of the UO mobile app.

Nighttime Safety Transportation Program Work Group

SERMC charged this work group to:
1. Catalog existing nighttime campus transportation programs and near campus transportation (e.g., Lane Transportation District, etc.).
2. Explore opportunities to improve services and/or develop new or alternative ways to address campus nighttime transportation needs.
3. Develop recommendations and a short-term action plan in fall of 2018.

Membership:
- *Office of the Vice President for Finance and Administration*
- *Safety and Risk Services*
- *Parking and Transportation*
- *UO Police Department*
- *Student Life*
- *Community Relations*
- *Campus GIS and Mapping*

Findings:
- *There are numerous nighttime transportation options currently available including Designated Driver Shuttle, Saferide, Bike Share, Spring Break airport pickup, UOPD escort, LTD, and taxis.*
- *The fixed route shuttle does not have long term funding. The service was discontinued at the end of spring term 2018.*
- *Ride share options such as Uber and Lyft are coming to Eugene soon. It is unclear what impact this will have on nighttime transportation options.*
- *LTD does not have capacity to take on a fixed route shuttle system similar to the system that what was put in place following the string of robberies in spring 2018.*
- *LTD may further reduce services used by the campus community.*
- *The Campus Transportation Plan is more than 30 years old and does not address the issue of nighttime transportation.*

Actions:
- SERMC was presented with different options and recommended that a temporary shuttle service will run in the 2018-2019 academic year. The president provided one-time funds for the temporary shuttle service.
- The work group recommended that a timeline and strategy be developed to identify current transportation needs and that the Campus Transportation Plan be updated accordingly.
- In September 2018, the UO Department of Parking and Transportation began working on a Strategic Plan to mature and improve programs and customer service. Parking and Transportation will soon begin work on a long-range campus master plan that will assess infrastructure needs, operations, capital projects, and funding options.
- Safety and Risk Services and Campus GIS Mapping created an app on the UO mobile app called "UO Rides" that allows users to view maps and see on and off campus transportation options.

In Progress and Upcoming SERMC Work Groups

Nighttime Safety Campus and Near Campus Lighting Work Group: This work group builds on the annual campus safety walk and explores opportunities to expand the current campus safety route map to include near off-campus buildings, Greek Life housing, near campus housing, etc. This group is also working with the City of Eugene, near campus neighborhood associations, and businesses to explore collaborative efforts/projects to increase the amount of nighttime lighting. Recommendations and a short-term action plan should be complete in December of 2018.

Enterprise Training Coordination and Systems Work Group: This work group will help SERMC better understand the breadth of current training tools at UO and on which platforms the tools are maintained. The work group will look at streamlining how trainings are offered, managed, and tracked. The work group will also explore strategic operational and direct cost saving strategies.

University Reporting Channels: The University has multiple channels for reporting concerns (e.g., fraud, safety concerns, persons in imminent risk of suicide, technology accessibility, academic misconduct, etc.). This work group will identify the reporting channels currently in place and explore options for centralizing enterprise-wide reporting channels. In addition, the group will catalog potential high-risk activities in which physical contact is within the scope of professional duties. The group will assess the required certifications for performing high risk activities of this type.

Agenda Item #2

Transform IT and
Information Services Update

Information Technology Update

Date: December 3, 2018

Board of Trustees of the University of Oregon

Presented by:

Jessie Minton, Vice Provost for Information Services
and Chief Information Officer

UNIVERSITY OF OREGON

Enabling Education & Student Success

- Online/hybrid education environment
- Emphasize student success in technology choices
- Use tech to meet students where they are

Foundational IT Maturity

- Transform IT
- IT Strategic Plan "*Excellence* through Technology"
- Cybersecurity Strategic Plan "SecureU"
- Network redesign
- Project management maturity

Enabling Research

- High speed research connectivity
- Oregon Fiber Partnership – regional high speed connectivity
- Research services
  - Scalable and secure cloud services
  - On-premise services

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2019   2020   2021   2022

Agenda

- Transform IT
- SecureU

Transform IT

Foundational IT Maturity Improvements

Transform IT: program that will rationalize the use of information technology resources on campus to better support the University of Oregon's strategic academic and research missions.

Summer 2017:
- Determined and defined service based approach for program
- Defined project management methodology and governance

Fall/Winter 2017:
- Created documentation, reports by unit of previous IT consulting engagements
- Hired project management and business analysis staff

Spring/Summer 2018:
- Launched campus engagement phase
  - Service inventory, cost, staffing, gap analysis

Fall/Winter 2018 - 2020:
- Service migrations based upon IT charter and advancement of UO mission

Campus Engagement Report

52 unique IT units were identified

Academic and Adminstrative:

28 academic and administrative IT units identified and asked to provide estimates of their annual IT budgets which included:

> Staff (+ OPE) Budget
>
> Student Employee Budget
>
> Operational Budget (Hardware and Software)

Research:

24 research IT units identified and asked to share how they received IT services and the greatest areas of need for their work

Campus Engagement Report

Academic and administrative:

Total Annual IT Budgets Across 28 IT Units

UO Unit (Dept)		
UNIT TOTAL	Total Budget	$47,812,267
	Budget (Staff+OPE)	$28,020,155
	Budget $ Operational (Ha..	$18,447,393
	Budget $ (Student)	$1,344,719

($ Millions)
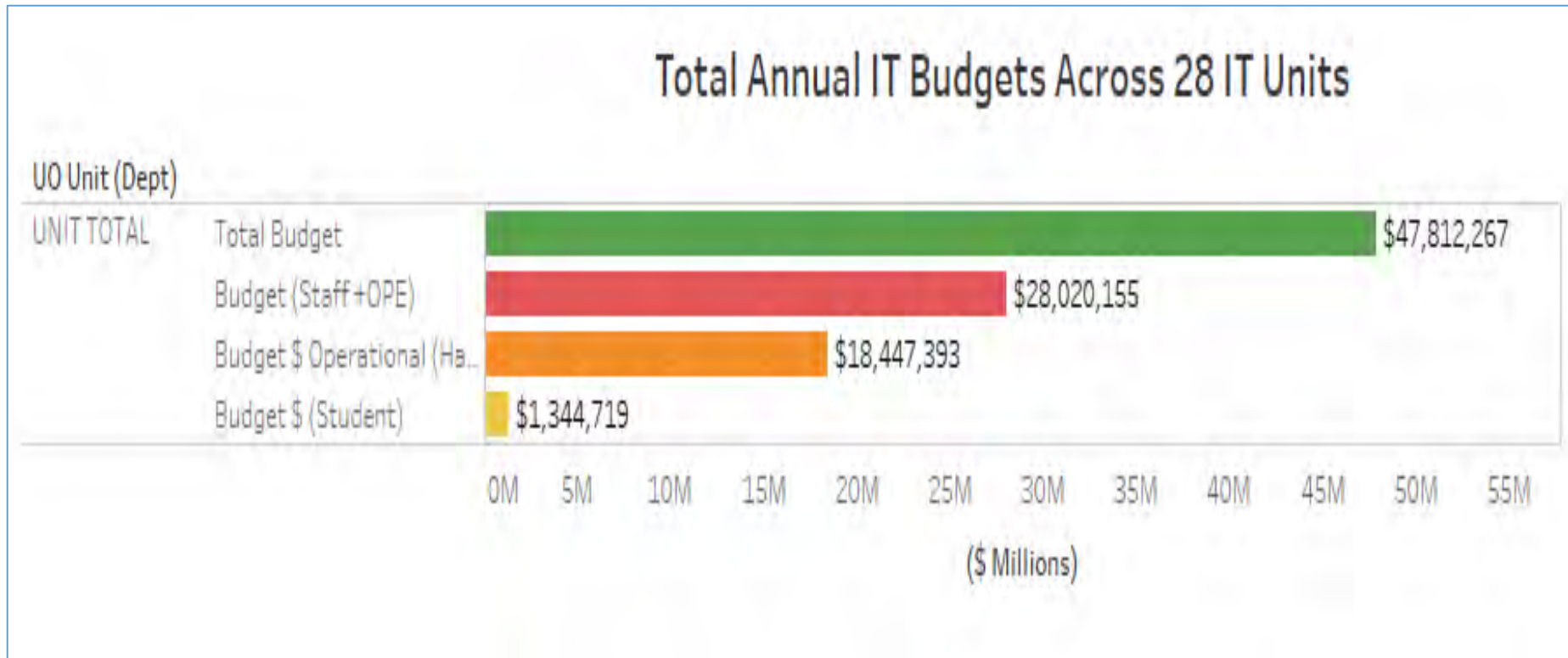
$14m of current general fund budget resides centrally in Information Services, roughly 29%

Total staff support hours per week by service
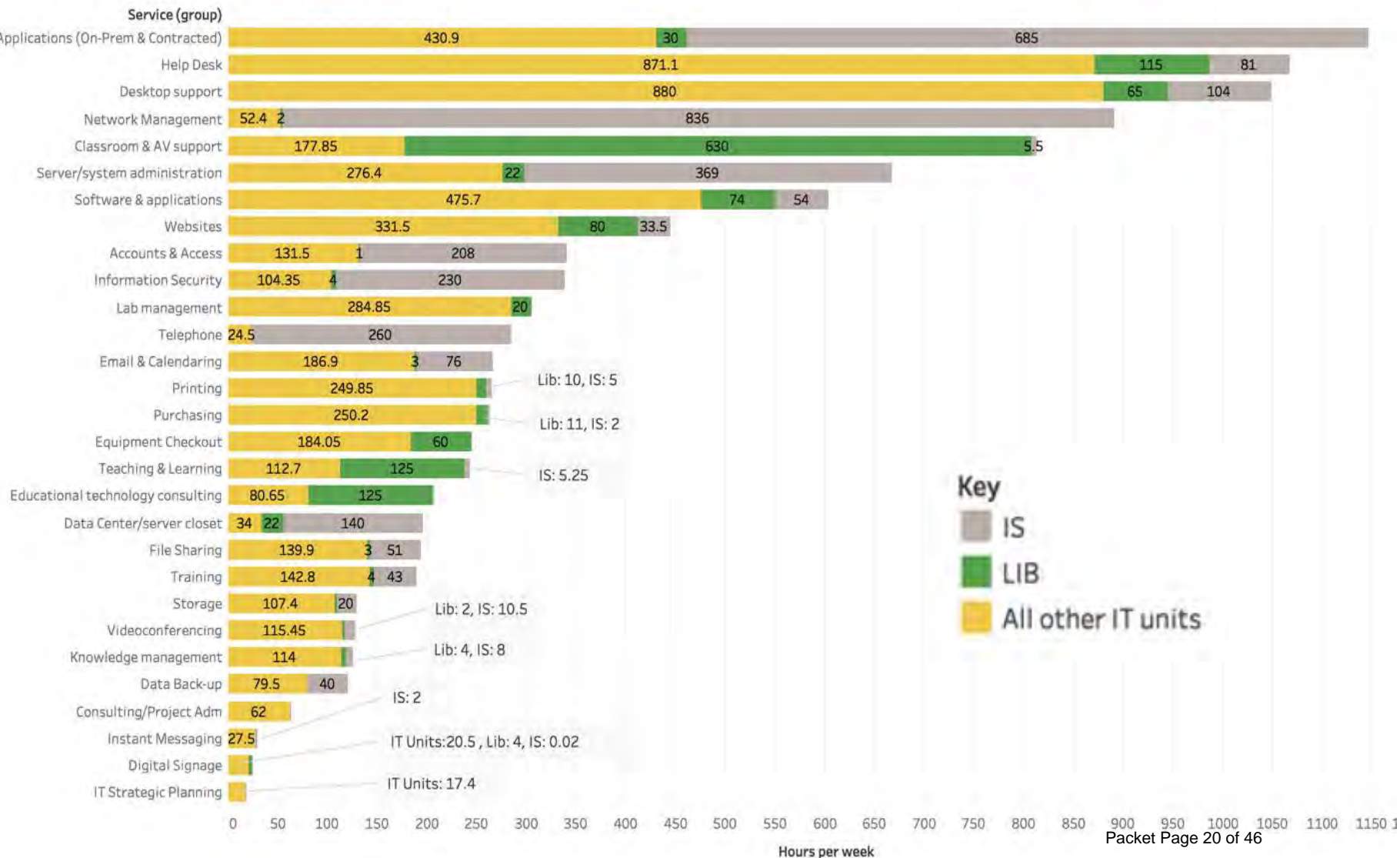
Campus Engagement Report – Research

Overview of services provided by research units & services provided by someone else

Service

Service	Self-Service	Others provide
Desktop Support	15	15
Websites & App Development	20	9
Printing Support	9	15
Purchasing	19	5
File Sharing	18	5
Help Desk/Desktop Support	8	15
Data Storage	17	5
Data Backup Services	15	6
Video Conferencing	18	3
Data Servers - Virtual	9	8
Systems Support	9	8
Data Analytics	15	1
Data Center/Server Closet - Physi...	11	5
Software & Application Develop...	13	3
HPC (High Performance Computi...	5	10
Firewall Services	4	7
Instant Messaging (Jabber)	9	1
Lab Management	9	1
Contracted Vendor Services	5	4
Data Security	6	3
Data Visualization	8	
Programmatic Support	8	
Cyber-Security Monitoring	1	4
Vulnerability Scanning Services	1	4
Digital Signage (Four Winds)	2	1

Legend: Others provide (blue) / Self-Service (orange)

Total # of responses from research units

Desired services by research units

Service

Service	Number of units with a desire for service
Programmatic Support	11
Data Backup Services	10
Websites & App Development	10
Data Storage	9
Data Visualization	8
Desktop Support	8
Video Conferencing	8
File Sharing	6
Help Desk/Desktop Support	6
Software & Application Develo..	6
HPC (High Performance Compu..	5
Systems Support	5
Data Analytics	4
Data Security	4
Cyber-Security Monitoring	3
Data Center/Server Closet - Ph..	3
Firewall Services	3
Lab Management	3
Printing Support	3
Vulnerability Scanning Services	3
Contracted Vendor Services	2
Data Servers - Virtual	2
Instant Messaging (Jabber)	2
Purchasing	1
Digital Signage (Four Winds)	

Number of units with a desire for service

The greatest area of desired interest for the research community:

Programmatic support or consultation

The next most needed services were:
- Data backup
- Storage solutions
- Website development
- Application development
- Desktop support

NEXT STEPS

Service List

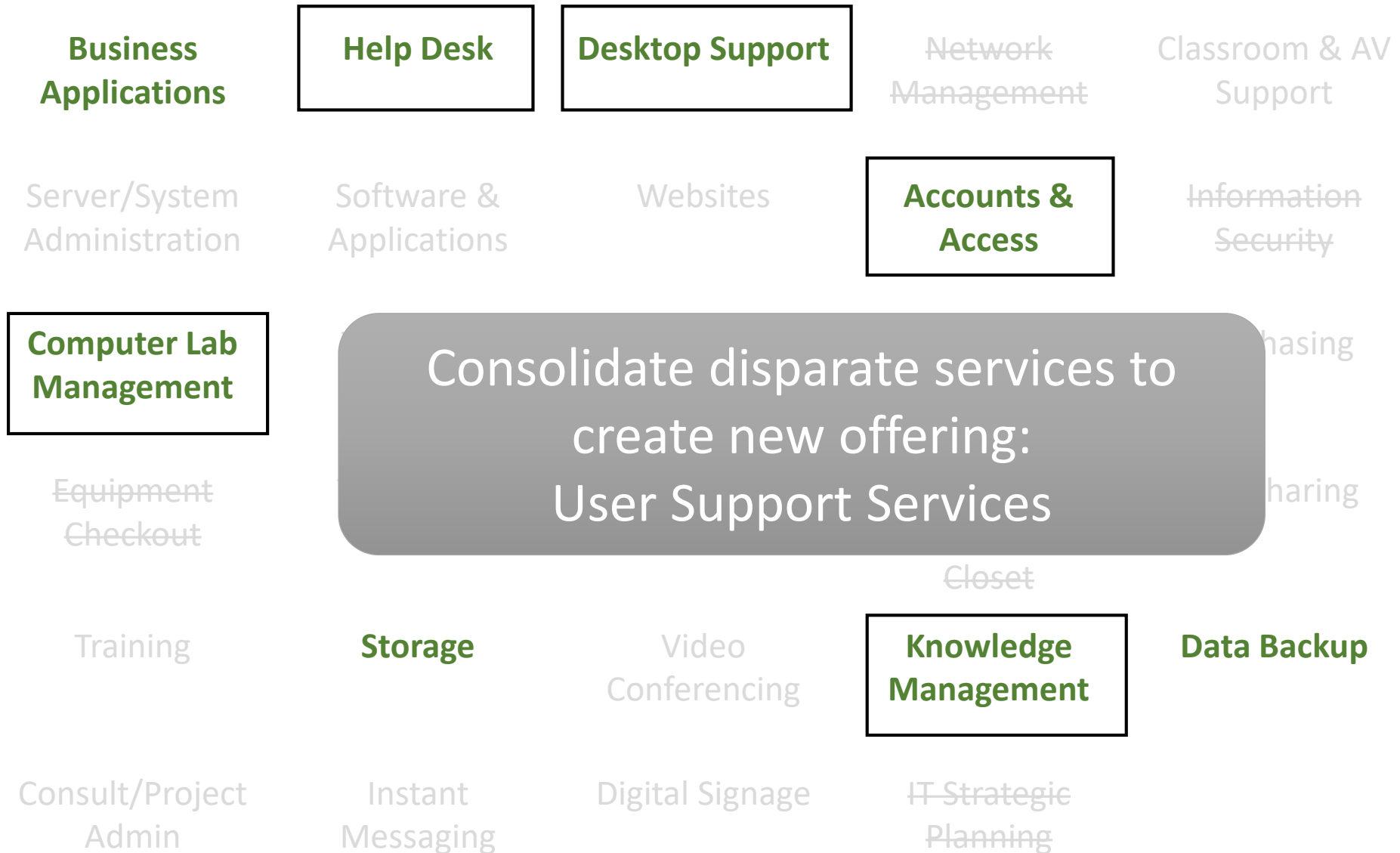|				
Business Applications	Help Desk	Desktop Support	Network Management	Classroom & AV Support
Server/System Administration	Software & Applications	Websites	Accounts & Access	Information Security
Computer Lab Management	Telephone	Email & Calendaring	Printing	Purchasing
Equipment Checkout	Teaching & Learning	Ed Tech Consulting	Data Center/Server Closet	File Sharing
Training	Storage	Video Conferencing	Knowledge Management	Data Backup
Consult/Project Admin	Instant Messaging	Digital Signage	IT Strategic Planning	

Services recommended out of scope

Business Applications	Help Desk	Desktop Support	~~Network Management~~	Classroom & AV Support
Server/System Administration	Software & Applications	Websites	Accounts & Access	~~Information Security~~
Computer Lab Management	~~Telephone~~	~~Email & Calendaring~~	~~Printing~~	Purchasing
~~Equipment Checkout~~	Teaching & Learning	Ed Tech Consulting	~~Data Center/Server Closet~~	File Sharing
Training	Storage	Video Conferencing	Knowledge Management	Data Backup
Consult/Project Admin	Instant Messaging	Digital Signage	~~IT Strategic Planning~~	

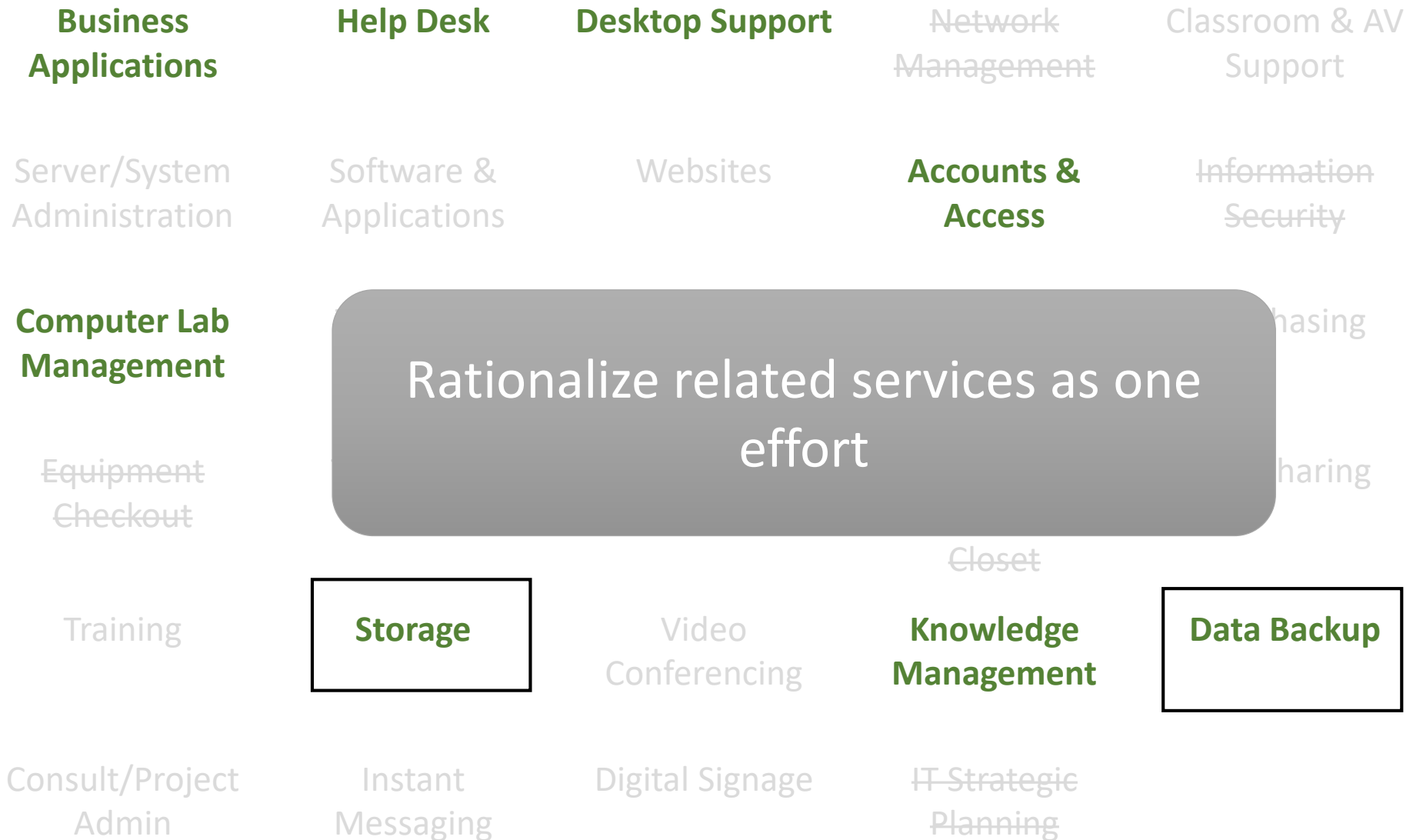| ~~Rationalization not recommended~~	~~In scope for related project~~

Phase 1 recommendation – in scope

Business Applications	**Help Desk**	**Desktop Support**	~~Network Management~~	Classroom & AV Support
Server/System Administration	Software & Applications	Websites	**Accounts & Access**	~~Information Security~~
Computer Lab Management	~~Telephone~~	~~Email & Calendaring~~	~~Printing~~	Purchasing
~~Equipment Checkout~~	Teaching & Learning	Ed Tech Consulting	~~Data Center/Server Closet~~	File Sharing
Training	**Storage**	Video Conferencing	**Knowledge Management**	**Data Backup**
Consult/Project Admin	Instant Messaging	Digital Signage	~~IT Strategic Planning~~	

Business Applications

Help Desk

Desktop Support

~~Network Management~~

Classroom & AV Support

Server/System Administration

Software & Applications

Websites

Accounts & Access

~~Information Security~~

Computer Lab Management

Consolidate disparate services to create new offering:
User Support Services

~~Purchasing~~

~~Equipment Checkout~~

~~Sharing Closet~~

Training

Storage

Video Conferencing

Knowledge Management

Data Backup

Consult/Project Admin

Instant Messaging

Digital Signage
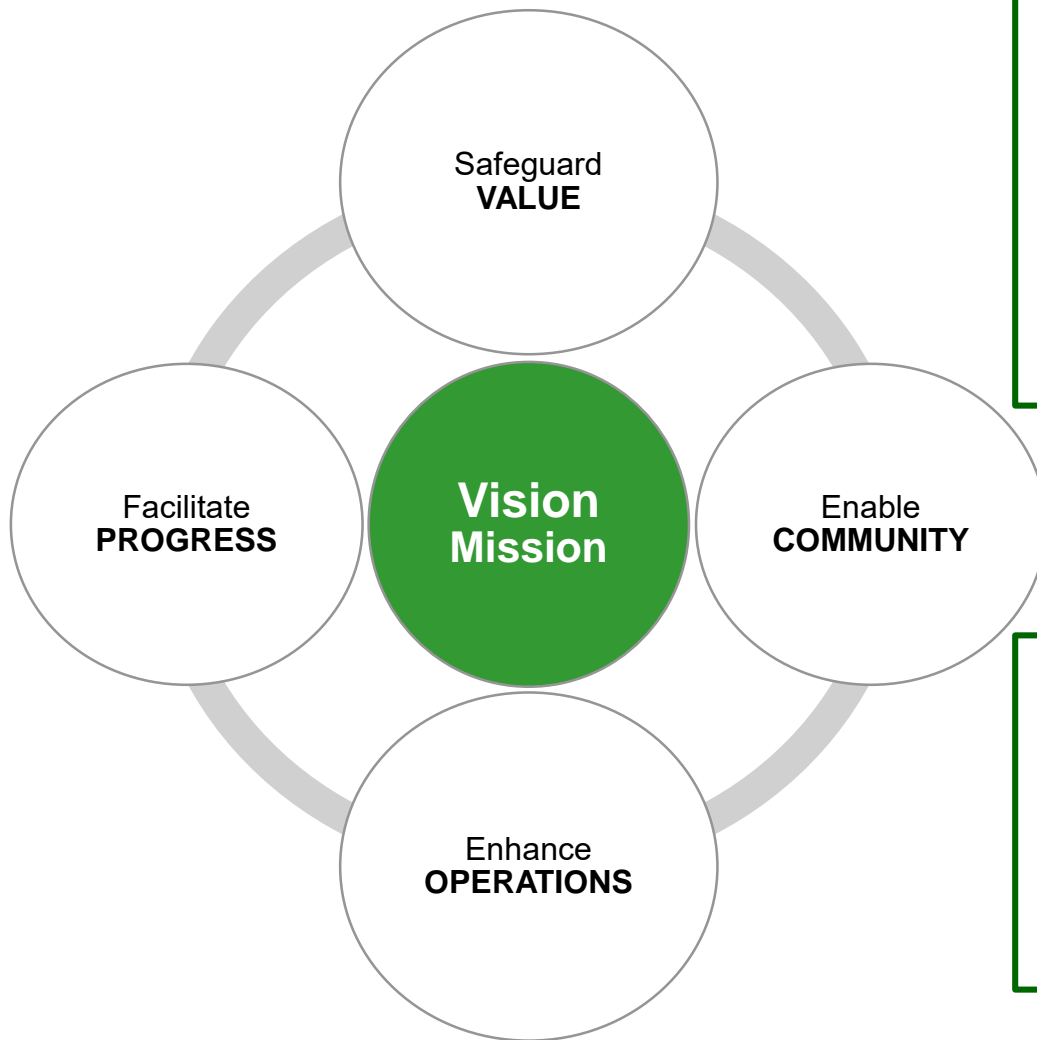
~~IT Strategic Planning~~

Phase 1 recommendation – in scope

Business Applications

Help Desk

Desktop Support

Network Management

Classroom & AV Support

Server/System Administration

Software & Applications

Websites

Accounts & Access

Information Security

Computer Lab Management

Rationalize related services as one effort

hasing

Equipment Checkout

haring

Closet

Training

Storage

Video Conferencing

Knowledge Management

Data Backup

Consult/Project Admin

Instant Messaging

Digital Signage

IT Strategic Planning

Business Applications

Help Desk

Desktop Support

Network Management

Classroom & AV Support

Server/System Administration

Information Security

Computer Management

Purchasing

Each business application will require individual assessment

Equipment Checkout

Teaching & Learning

Ed Tech Consulting

Data Center/Server Closet

File Sharing

Training

Storage

Video Conferencing

Knowledge Management

Data Backup

Consult/Project Admin

Instant Messaging

Digital Signage

IT Strategic Planning

Timing for Phase 1

Nov 2018 → Steering committee support → ITSC Support

Dec 2018 → Planning → Stakeholder engagement

Jan-April 2019 → User support services (USS) project kickoff → Business process documentation → Storage and backup planning/kickoff

April 2019 → Present new USS service delivery model → Begin USS implementation → Business applications kickoff

2019 – early 2020 → USS Implementation → Establish new org structures → Subsequent services kickoff

SecureU

Cybersecurity Strategic Plan Components

Vision

A knowledgeable and capable UO community working together to safeguard our digital assets and capabilities to empower excellence in research and instruction in a resilient cyber environment

Mission

To empower the UO community to leverage digital assets and capabilities, and defend our cyber environment through proactive measures

Diagram circles: Safeguard VALUE, Vision Mission, Enable COMMUNITY, Facilitate PROGRESS, Enhance OPERATIONS

Cybersecurity

Current Risks

	Rare	Unlikely	Possible	Probably	Almost Certain
Severe					R1
Large				R2	
Moderate			R3		
Small					
Insignificant					

(U O I M P A C T)

		Sample attacks against UO:
R1	Data Breach	o 2018: **15,000+** students, faculty, staff Passwords potentially stolen (**653** confirmed); **Tracking Cost (1,300 Hours, $80K); sensitive data came within grasp** of attacker(s)
R2	Loss of Research or Academic Opportunities for Non-compliance	
R3	University Disruption	o 2016-2017: Theft of **60+** faculty DuckIDs /Passwords

High-Risk Weaknesses

Access Control

DuckID / Password is inadequate

95 / PAC is woefully inadequate

Awareness

15,000+ phished users (Aug '18)

60+ phished faculty (Oct '16)

Data Security Compliance

Unmanaged system security vulnerabilities

High-Risk Data proliferation

Insufficient guidance

Solution to High-Risk Weaknesses

Access Control

2-Factor Authentication:

Student Health, Student Conduct, DuckWeb, Banner, Privileged Access, …

Awareness Training Email Security

Online Training for All

Self-Phish for faculty/staff

In-person Training

Email Security (implementing)

Data Protection Security Framework

Vulnerability Scanning & remediation

Data Loss Prevention

Data Security Framework

Round 1 – Minimum Investment to Reduce High-Risk Weaknesses

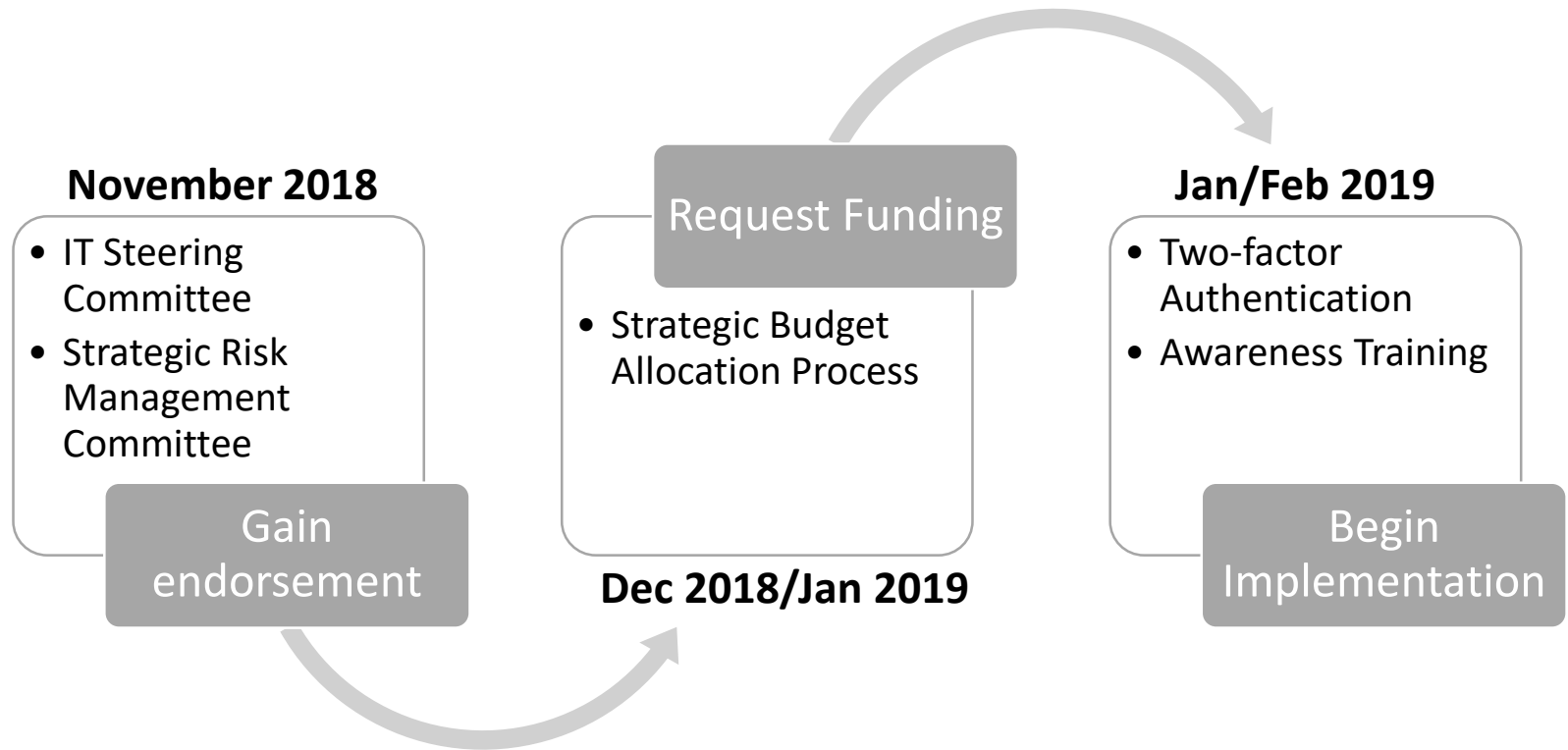| Function	Benefit	Description	Investments	
			One-time	Recurring
2-Factor Authentication (P1)	• 98% end-user breach reduction • Reduce impact of incidents	**19,000 users** (non-student affiliations) • Hardware Tokens (non-cell phone users) • Telephony Credits • IT Support (1 FTE) • IT Service Management (1 FTE) • Professional service • Project Mgmt. & Business Analyst FTE	 $16K $32K	$34K $32K $95K $127K
Awareness Training (P2)	• Reduce susceptibility to and impact of phishing • Targeted training	• Online Training Modules (all users) • Self-Phishing tool (faculty and staff)		$55K $14K
Vulnerability Scanning (P3)	• Find vulnerabilities before the adversary	• Vulnerability Scanning Tool • Cybersecurity Analysts (1 FTE) • Professional Services • Project Mgmt. & Business Analyst FTE	$6K -- $8K $14K	$75K $152K
Data Loss Protection (P4)	• Curtail insecure data storage • Increase guidance via Data Security Framework	• Data Loss Prevention Tool (DLP) • Cybersecurity Analysts (0.5 FTE) • Professional Services • Project Mgmt. & Business Analyst FTE	--- --- $16K $23K	$58K $76K
Incident Monitoring & Response (P5)	• Increase incident visibility & response	• Cybersecurity Operating Center (CSOC) Equipment (student-run)	$25K	
Total Investment			**$140K**	**$718k**

Round 2 – Minimum Investment to Reduce Compliance Risks

Function	Benefit	Description	Investments	
			One-time	Recurring
Endpoint Protection (P1)	• Reduce breach/disruption like ransomware • Protect data and increase compliance	• Software • IT Support (1 FTE) • Professional Services • Project Mgmt. & Business Analyst FTE	$20K $32K	$139K $117K
Risk & Compliance Management (P2)	• Increase proactivity and compliance with HIPAA, GLBA, GDPR, FERPA, NIST 800-171, …	• Cybersecurity Analysts (1 FTE) • Cybersecurity Interns & GE's (3)		$150K $59K
Training - Security, IT (P3)	• Increase defense capability of cybersecurity staff • Support guided DIY cybersecurity to broaden scope and capability university-wide	• Ongoing training for cybersecurity staff • Ongoing cybersecurity training for IT staff and Cybersecurity Liaisons		$35K
Miscellaneous Analysis Tools (P4)	• Reduce impact of malware • Enhance email security	• Malware analysis • Email security addition	$5K	$3K
Total Investment			**$57K**	**$503K**

Round 3 – Investment to Increase Compliance & Address Growth

Function	Benefit	Description	Investments	
			One-time	**Recurring**
GDPR Compliance Management (P1)	• Streamline responses to GDPR rights requests; reduce risk of hefty fines	• Coordinate GDPR compliance activities • Project Mgmt. & Business Analyst FTE	$14K	$12K
Risk & Compliance Management (P2)	• Increase proactivity and compliance with HIPAA, GLBA, GDPR, FERPA, NIST 800-171, …	• Cybersecurity Analyst (0.5 FTE) • Cybersecurity Interns & GE's (2)		$75K $40K
Data Loss Prevention Expansion	• Curtail insecure data storage	• Data Loss Prevention Tool Expansion • Project Mgmt. & Business Analyst FTE	$23K	$58K
SIEM Expansion (P3)	• Augment staffing levels by leveraging big data analytics; increased incident detection and response	• Expand to address increased campus coverage and growth of network traffic • Professional Services	$16K	$25K
NetFlow Analysis Expansion (P4)	• Quick detection and response to incidents	• Network analysis to detect and map paths of incidents; expansion to address traffic growth	$15K	$15K
Computer Forensics Tool (P5)	• Limit reporting/notification by uncovering actual incident impact	• Forensically-sound investigations to support UOPD, VPRI, Audit, OGC, plus security incidents		$2K
Total Investment			**$68K**	**$227K**

SecureU Next Steps

November 2018

- IT Steering Committee
- Strategic Risk Management Committee

Gain endorsement

Request Funding

- Strategic Budget Allocation Process

Dec 2018/Jan 2019

Jan/Feb 2019

- Two-factor Authentication
- Awareness Training

Begin Implementation

Requested Funding	One-Time	Recurring
Year 1	$140K	$718K
Year 2	$57K	$503K
Year 3	$68K	$227K
Totals	**$265K**	**$1,448K**

Questions?

Agenda Item #3

Quarterly Audit Report
&
Proposed Changes to the Internal Audit Charter

The quarterly audit report will be provided as a supplemental document as soon as it is finalized.

The Board of Trustees is asked to consider changes to the charter of the Office of Internal Audit (OIA).

In order to comply with the Quality Assurance and Improvement Program (QAIP) requirements, OIA conducted a review of the standing internal audit charter, last amended by the Board in June 2017. The existing charter was compared to the latest Quality Assessment Manual, which provides industry standards and best practices. After that review, OIA suggests certain changes to ensure required components are included and greater clarity around language.

Pursuant to the policy on board committees, the Executive and Audit Committee can act on this resolution on behalf of the full board; a seconded motion is not required.

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

Resolution: Amendments to the Internal Audit Charter

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

Whereas, the University of Oregon takes seriously the responsibility to manage, invest and spend resources and has an Office of Internal Audit (Internal Audit) to provide independent, objective evaluations and advisory services that add to the accountability of the University;

Whereas, Internal Audit has a departmental charter to articulate the purpose, authority, and responsibility of the office;

Whereas, Internal Audit proposes an update to the charter, attached hereto as Exhibit A, to (i) better align the document with current Quality Assurance Review requirements and (ii) ensure consistency with best practices in higher education audit environments; and,

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

NOW, THEREFORE, the Executive and Audit Committee of the Board of Trustees of the University of Oregon hereby adopts the updated Internal Audit Department Charter attached as Exhibit A.

Moved: _____   Seconded: _____

Trustee	Yes	No
Bragdon		
Ford		
Kari		
Lillis		
Ralph		
Wilcox		

Dated: _____   Recorded:_____

Office of Internal Audit

Department Charter

This charter defines the purpose, authority, and responsibility of the Office of Internal Audit at the University of Oregon

~~*June 2017*~~*December 2018*

Approved by the University of Oregon Board of Trustees Executive and Audit Committee
~~*June 1, 2017*~~*December 3, 2018*

<u>Purpose</u>

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve university operations. It helps the university accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. The Office of Internal Audit enhances and protects the University's value by providing risk-based and objective assurance, advice, and insight.

Mission Statement:

Driven by the highest professional and ethical standards, the Office of Internal Audit helps the University accomplish its objectives by evaluating and identifying opportunities to improve the effectiveness of governance processes, risk management, and internal controls.

Professional Standards:

The <u>responsibility of the </u>Office <s>of </s>Internal Audit <s>operates within the context of</s><u>is to serve the University in a manner that is consistent with the standards established by the internal audit community. At a minimum it shall comply with</u> the Institute of Internal <s>Audit's (IIA's) </s><u>Auditors' ("IIA") mandatory guidance including the *Definition of Internal Auditing*, the *Code of Ethics* and the </u>*International <u>Standards for the </u>Professional <s>Practices Framework (</s><u>Practice of Internal Auditing</u>* <u>("</u>IPPF<s>) and the Office of Internal Audit's procedure   manual. Audits will be conducted with integrity, objectivity, confidentiality, and competency as defined by the IIA's *Code of Ethics*</s><u>").</u> Additionally, the Office of Internal Audit references other appropriate audit frameworks, such as the Generally Accepted Government Auditing Standards.

The Office of Internal Audit will undergo external peer reviews pursuant to the IPPF. The Executive and Audit Committee shall have input into peer reviews and results of peer reviews will be available to the Committee upon completion.

<u>Authority</u>

To ensure the independence of the Office of Internal Audit, the Chief Auditor reports administratively to the Office of the President and functionally to the Executive and Audit Committee of the University of Oregon's Board of Trustees.<u>   The Chief Auditor will provide quarterly progress reports to the Executive and Audit Committee at each regular meeting, summarizing the results of engagement activities and reports. In addition, the Chief Auditor will keep the President, campus leadership, and the Executive and Audit Committee apprised of high-risk engagement issues.</u>

The Office of Internal Audit is granted full and unrestricted access to all functions, records, systems, property, and personnel. Any documents or information obtained by the Office of Internal Audit through the course of work will be handled with the confidentiality defined by the IIA's Code of Ethics. The Office of Internal Audit has authority to audit any function, program, account or system deemed necessary and appropriate in the judgment of the Chief Auditor, notwithstanding a flexible pre-approved audit plan.

University management is responsible for risk management, control, and governance of the areas audited. The Office of Internal Audit has no direct responsibility or authority over any of the areas audited. Staff shall not perform any operational duties for the University, initiate or approve accounting transactions of areas under review, or direct the activities of any University employee, except to the extent such employees have been appropriately assigned to an audit team or to otherwise assist the auditors.

All university employees are expected to comply fully and timely with requests made by the Office of Internal

Audit. This includes, but is not limited to, timely provision of information, access to information, or responses to draft reports. Recommendations made by the Office of Internal Audit shall be taken seriously and steps shall be taken to assess and determine a course of action in response to the recommendations. The Chief Auditor may report any non-compliance on the part of university programs or employees to the President and the Executive and Audit Committee.

Responsibility
The Office of Internal Audit is responsible for developing and implementing a flexible annual audit plan using an appropriate risk-based methodology. The annual audit plan should include consideration of any   risks or control concerns identified by management, and should be reviewed and approved by the   President and Executive and Audit Committee.

The Office of Internal Audit shall perform engagements in the following areas:

- Assurance services: ~~These~~Performed within the context of the IPPF, these services are independent and objective evaluations designed to provide reasonable assurance regarding the achievement of objectives over the effectiveness and efficiency of operations, reliability of financial reporting, or compliance with applicable laws and regulations.

- Consulting services: ~~These~~Performed within the context of the IPPF, these services may be requested by managers and other department and unit leaders to help identify a variety of areas for improvement.   The scope and objectives are agreed upon by the Office of Internal Audit and management of the area.

- Investigative services: These services evaluate allegations of fraud, waste, abuse or unethical business practices. The Fraud and Ethics Hotline is free, confidential, and available to employees, students, and the community to report unlawful or unethical concerns. Operated by ~~Ethics Point~~EthicsPoint, reports are managed by the Office of Internal Audit. Reports can also be made directly to the Office of Internal Audit.

- Other services: These services include coordination and oversight for external auditing agencies, and follow-up work. External auditing agencies include agencies such as the Secretary of State and the NCAA. Follow-up work is performed within the context of the IPPF to ensure plans and actions are taken to correct report conditions. Additionally, the Office of Internal Audit provides awareness training covering topics such as fraud, risks, and internal controls.

UNIVERSITY OF OREGON

Office of Internal Audit
Quarterly Report

December 2018

Report to the Board of Trustees of the University of Oregon
Executive and Audit Committee

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SUMMARY

The Office of Internal Audit ("Internal Audit") provides a quarterly report to assist the President and the Executive and Audit Committee with their oversight responsibilities for Internal Audit.

Internal Audit works to complete projects from the approved audit plan while meeting administrative goals for the year. The office currently has one vacant auditor position and is in the process of starting a search. Due to the turnover, some projects that were in process during the prior quarter are still in process. Consulting projects are also accepted by management request in an effort to proactively address risks and increase efficiencies across campus.

During the previous quarter, Internal Audit presented to an audience of peers at both regional and national conferences. This not only aligned with Internal Audit's strategic plan, but also offered the unique opportunity to discuss audit strategies, specific to the University, with a large group of peers. Internal Audit also presented about internal controls and fraud at the University's Financial Stewardship Institute.

Finally, after a successful partnership with student members of Beta Alpha Psi during the previous Spring term, a new group of students has been selected for the coming Winter and Spring terms. Internal Audit has also hired a student intern.

If there are any questions regarding the content of this report, I am available for discussion. Thank you for your work and your continued support of Internal Audit.

COMPLETED PROJECTS

ASSURANCE
Athletics IT Assessment
Internal Audit, in collaboration with Baker Tilly, began this project in February 2018. This project was identified on the approved FY18 audit plan. The objective was to conduct an IT assessment for the Athletics department covering key people, processes, and technology used. Opportunities to strengthen information technology general controls within Athletics were identified.

CONSULTING
There were no consulting projects finalized during the quarter.

PROJECTS IN PROGRESS

ASSURANCE
Non-retaliation Policies
Internal Audit began this project in August 2017. This project was identified on the approved FY18 audit plan. The objective is to evaluate the compliance and effectiveness of current University policies governing retaliatory behavior. This project has been reassigned to the Chief Auditor for completion due to turnover. One challenge affecting completion has been the need to identify all reporting channels on campus. As of August 2018, a management workgroup has been established for this purpose. This project is currently in the reporting phase. *Estimated completion: December 2018*

Cash Handling
Internal Audit began this project in September 2017. This project was rolled over from the fiscal year 2017 approved audit plan to the approved FY18 audit plan. The objective is to evaluate the internal control structure of the processes governing cash handling across campus, as established by the Business Affairs Office ("BAO"). The project is in the reporting phase, pending an exit conference with management for final report issuance. *Estimated completion: December 2018*

I-9 Compliance
Internal Audit, in collaboration with students from Beta Alpha Psi, began this project in April 2018. This project was identified on the approved FY18 audit plan. The objective is to evaluate the University's compliance with I-9 requirements during the hiring process. The project is in the reporting phase, pending an exit conference with management for final report issuance. *Estimated completion: December 2018*

Human Resources (HR) Practices and Controls
Internal Audit, in collaboration with Baker Tilly, began this project in May 2018. This project was identified on the approved FY18 audit plan. The objective is to evaluate the effectiveness of processes within the central function. This project is currently in the fieldwork phase. *Estimated completion: February 2019*

Firearms Inventory
Internal Audit began this project in September 2018. This project was identified on the approved FY19 audit plan. The objective is to verify that all firearms purchased by the University of Oregon Police Department are tracked, accounted for, and properly registered as required. This project is currently in the final planning phase. *Estimated completion: March 2019*

University Health Center IT Assessment
Internal Audit, in collaboration with Baker Tilly, began this project in October 2018. This project was identified on the approved FY19 audit plan. The objective is to conduct an IT assessment for the University Health Center covering key people, processes, and technology used. This project is currently in the final planning phase. *Estimated completion: March 2019*

Payment Card Industry (PCI) Program Assessment
Internal Audit, in collaboration with Baker Tilly, began this project in October 2018. This project was identified on the approved FY19 audit plan. The objective is to review and assess the University's program for complying with PCI Data Security Standards (DSS) requirements. This project is currently in the planning phase. *Estimated completion: March 2019*

Inventory of Critical Business Functions
Internal Audit began this project in September 2018. This project was identified on the approved FY19 audit plan. The objective is to perform an assessment of where and how decentralized critical business processes occur at the University. This project is currently in the planning phase. *Estimated completion: June 2019*

CONSULTING
Internal Audit is currently working on three consulting projects for different units on campus that are at various stages of completion. While these projects take time away from planned assurance projects, they serve three very important purposes, 1) to improve efficiencies and effectiveness in a proactive manner, 2) to reinforce Internal Audit's purpose to be a valuable partner, and 3) to provide Internal Audit with more insight regarding campus risks. Areas addressed in the current year include internal controls, process improvement, and identification of efficiencies. Once finalized, reports are issued summarizing any recommendations.

ONGOING PROJECTS

Consulting: As mentioned previously, consulting projects are performed at management's request. The FY19 audit plan includes time for these activities. This is an area that Internal Audit has emphasized and pursued heavily. As opportunities arise, Internal Audit offers this service and it has been well received by the University community. Internal Audit continues to offer training on internal controls, risk, and fraud awareness and presents at the annual Financial Stewardship Institute. Additionally, Internal Audit has developed a training series on the COSO Internal Control Framework to be offered through the Professional Development initiatives in Human Resources. Internal Audit offers facilitated internal control self-assessments as a service for the campus, as well as continues campus outreach and presentations to reach new audiences and introduce new concepts.

External Audit Coordination: Internal Audit is charged with coordinating and providing oversight for other control and monitoring functions, including external audit. Moss Adams, LLP is the external firm responsible for the university's financial statement audit, single audit, and NCAA agreed upon procedures. During the past quarter, Internal Audit met with Moss Adams to continue collaboration and information sharing. Internal Audit also assisted Sponsored Project Services with the R&D Single Audit conducted by Moss Adams.

UPCOMING PROJECTS

ASSURANCE
Vendor Reviews
Internal Audit, in collaboration with students from Beta Alpha Psi, is scheduled to begin this project in December 2018. This project was identified on the approved FY19 audit plan. The objective is to verify appropriate contracts are in place, as required. *Estimated completion: April 2019*

NCAA Compliance

Internal Audit is scheduled to begin this project in December 2018. This project was identified on the approved FY19 audit plan. The objective is to evaluate the effectiveness of the program using a compliance framework. *Estimated completion: April 2019*

NCAA Ticket Count
Internal Audit is scheduled begin this project in December 2018. This project is a routine audit identified on the approved FY19 audit plan. The objective is to verify average minimum attendance per the NCAA Division I requirements. *Estimated completion: February 2019*

CONSULTING

Three consulting project requests have been received and are set to begin next quarter.

FOLLOW-UP PROJECTS

To comply with internal auditing standards that require monitoring of audit recommendations communicated to management, Internal Audit performs follow-up projects. The objective is to ensure corrective actions on the audit recommendations, including those that may have been considered non-reportable, have been effectively implemented by management, or that management has accepted the risk of not taking action.

COMPLETED

Follow Up of Lab Safety Practices
Internal Audit followed up on eight observations and 26 management corrective actions. Of the corrective actions, 24 have been completed, while the remaining two are in progress. The final report was issued the first week of September. Internal Audit will follow up on the two remaining corrective actions during the first quarter of FY20.

Follow Up of Printing and Mailing Services
Internal Audit followed up on 20 observations and 20 management corrective actions. Of the corrective actions, 13 have been completed, three are in process, three have not been started, and one has been accepted. The final report was issued the last week of November. Internal Audit will follow up on the two remaining corrective actions during the first quarter of FY20.

Consulting Follow Ups
Internal Audit conducts follow-ups for consulting projects to determine whether corrective actions on recommendations have been effectively implemented by management and whether Internal Audit can provide additional assistance. Internal Audit is currently working on three consulting projects follow-ups.

UPCOMING

There are two audit follow-up projects scheduled for the upcoming quarter.

HOTLINE SUMMARY

Internal Audit has received the following requests for investigative services during the current fiscal year. Of these, three are in progress, and four has been referred to other units. Note that those referred to other units are followed up on by Internal Audit to ensure appropriate disposition.

Reporting Sources for FY19 Investigative Services	
Campus Direct to Internal Audit	2
3rd Party Hotline	5

Grand Total	7

It is common for a university our size to have an active hotline. Peer institution benchmarking indicates the activity is low for our institution, but has improved from the prior fiscal year. Internal Audit is working with leadership on additional ways to market this tool. In addition, Internal Audit is working to inventory other reporting mechanisms that may exist on campus.

ADMINISTRATIVE

Internal Audit continues to work on the Strategic Plan implementation schedule. Outreach on campus and involvement in national organizations were conducted during the prior quarter. Implementation of internal control, risk, compliance and fraud trainings and resource templates for units are in progress.