February 11, 2015

To: Members of the Audit and Insurance Committee  
   John Hardin, Chair  
   Sonny Beck  
   Vanessa Castagna  

Fr: Peg Fish, Director of Audits  

Re: Audit Plan for Calendar Year 2015  

The projects planned for 2015 cover a wide array of risks and opportunities. The plan is intended to maximize internal audit resources and provide reasonable coverage that aids the Board of Trustees, leaders, and managers in discharging governance, executive, and management responsibilities.

The enclosed plan provides a summary of the anticipated use of internal audit resources during 2015. It is aligned with the University’s enterprise risk management initiatives.

Enclosure  

c: Chairman Tom Spurgeon  
   Vice Chairman Mike Berghoff  
   President Mitch Daniels  
   Treasurer William Sullivan  
   Provost Deba Dutta  
   Assistant Treasurer Jim Almond  
   Corporate Secretary Janice Indrutz  
   Legal Counsel Steve Schultz
The purpose of this report is to provide information about the 2015 planned audit activity. This report, in conjunction with the 2014 Calendar Year Annual Report, fulfills the annual reporting requirements of the Bylaws of the Trustees of Purdue University.

AUDIT PLAN DEVELOPMENT

The audit plan was developed with consideration of Purdue’s enterprise risk management initiatives. Risk categories mirror those nine (9), which are academic and student, athletics, engagement, financial, human resources, information technology, regulatory, research, and safety and facilities. In this model, impacts are measured as follows:

Risk Assessment Impact Measures

- Reputation
- Strategic (not aligned with the strategic plan)
- Safety (loss of life or injury)
- Interruption (in mission critical activities)
- Fiscal (incurred cost and lost opportunity)

Risk drivers considered in the development of the audit plan included:

- reputational risks
- strategic changes
- data integrity and security
- ineffective and inefficient data management
- research and intellectual property
- major changes in operations or systems
- new technologies
- unauthorized access to data

- human resources
- potential risk of financial and/or data loss
- size and complexity of operations
- major changes in programs, controls, or staff
- increased regulatory scrutiny and accountability
- operations subject to a high level of public scrutiny
- unexpected operating results
- information understanding and communication

The focus of the plan is on risk management and governance, with the internal controls providing a means to mitigate risks. The scope of the audits may be adjusted to address significant changes that occur throughout the year. The plan is designed with flexibility to facilitate unanticipated strategic or operational initiatives.

AUDIT RESOURCE PLANNED ALLOCATION

<table>
<thead>
<tr>
<th>Planned Allocation of Audit Resources, Chart 1</th>
<th>Estimated Project Hours</th>
<th>Percent of Total</th>
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</thead>
<tbody>
<tr>
<td>Audits (Planned)</td>
<td>9,560</td>
<td>76%</td>
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<tr>
<td>Audits (Unplanned)</td>
<td>1,750</td>
<td>14%</td>
</tr>
<tr>
<td>Client Research</td>
<td>315</td>
<td>3%</td>
</tr>
<tr>
<td>Non-Client Contact</td>
<td>915</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>12,540</td>
<td>100%</td>
</tr>
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</table>

Total audit coverage (planned and unplanned) is estimated at 90%. Fourteen percent (14%) of total projected audit resources have been reserved for unplanned audits. This will allow for flexibility in addressing emerging risks, anonymous allegations, and requests by governance bodies, management, and others.

Approximately three percent (3%) of staff total resources are budgeted for client research. This category includes providing risk or control input to various University areas, determining the impact of regulations or standards, researching specific information at management’s request, and overseeing the anonymous reporting program.

Non-client contact, seven percent (7%), consists of office support, compliance with the Institute of Internal Auditor’s International Standards for the Professional Practice of Internal Auditing (Standards), business continuity planning, and meeting professional development requirements.

Strategic, regulatory, technological, and emerging trends in higher education dramatically affect what is audited. Emerging expectations for alignment of internal audit and risk oversight exist. Trends in the
profession of internal auditing include globalization, talent and organizational issues, and technological advancement. Information provided by the Institute of Internal Auditors (IIA), the Association of College and University Auditors (ACUA), the American Institute of Certified Public Accountants (AICPA), the Association of Certified Fraud Examiners (ACFE), and the Information Systems Audit and Control Association (ISACA) also aid staff in gaining knowledge of current trends and issues impacting higher education.

**Planned Percentage, Direct Audit Hours, and Number of Audits by Campus/Area**

<table>
<thead>
<tr>
<th>Campus/Area</th>
<th>Planned Percentage</th>
<th>Planned Audit Hours</th>
<th>Planned Number</th>
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<tbody>
<tr>
<td>Calumet (5%)</td>
<td>450</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Calumet Follow-up</td>
<td>80</td>
<td>3</td>
<td></td>
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<tr>
<td>Fort Wayne (6%)</td>
<td>455</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Fort Wayne Follow-up</td>
<td>90</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>North Central (1%)</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>North Central Follow-up</td>
<td>70</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>West Lafayette (84%)</td>
<td>7,795</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>West Lafayette Follow-up</td>
<td>280</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>External Coordination (4%)</td>
<td>340</td>
<td>7</td>
<td></td>
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</tbody>
</table>

Sixty-five (65) audits are included in the plan, 58 new and 7 in-process. Budgeted hours for follow-up activity that occurs during the same year of the audit, are included in the planned budget. Follow-up that crosses years is budgeted separately as shown above. A decrease in activity for regional campuses is planned, primarily due to three major application audits of SAP. These are budgeted under West Lafayette since these systems are administered by this campus. However, each campus location benefits accordingly.

The rollout of data warehouses related to human resources and financial data, as well as the integration of data mining tools into the auditing and operational processes, will facilitate analyses of large risk populations with greater efficiency.

Internal Audit coordinates and provides a single point of contact for external audits. We also assist management in coordinating responses pertaining to these audits.

Audits generally cover multiple risk categories; however, the sixty-five (65) audits have been classified based on the primary risk category. The general audit description and associated numbers of planned audits are shown with brackets [ ].

- Academic and Student, 14.5% [Clinics 1, Distance Education 4, Scholarships 3, Study Abroad 1]
- Athletics, 3.5% [Ticket Sales 2, Financial Reports 2, Operations 1]
- Engagement, 2.8% [Cooperative Extension 1, International 1]
- Financial, 32.7% [Accounts Receivable 1, Construction 1, Contracts/Procurement 4, Debt/Investments 2, General Ledger Data 8, Operations 2, Related Organizations 3]
- Human Resources, .8% [Background Checks 1]
- Information Technology, 35.6% [Career Account Server Migration 1, Data Management Banner 1, Emerging Technologies 1, External Penetration Testing 1, Infrastructure 2, Production Readiness 1, SAP Finance and Human Resources 3, Vulnerability Assessment 1, Security 2, Space Management 1, System Upgrades or Replacements 6]
- Regulatory, 1.7% [Title IX Compliance, 1]
- Research, 6.7% [Federal Awards 2, Effort Reporting 1, Export Controls 1, Uniform Guidance 1]
- Safety and Facilities, 1.7% [Clery Act 1]

The Internal Audit Office communicates its audit plan with external auditors to ensure that broader coverage is achieved through the internal and external audit plans.
AUDIT STAFFING
The Director of Audits, Peg Fish, MS in Management and Certified Internal Auditor, is responsible for the overall audit plan and for ensuring that audits are performed in accordance with the *Standards*.

The audit plan budgets are based on the following staffing:

- **Information Systems Audit Manager** Robert Oxender, MS in Computer and Information Science, CISA, CISSP, CPA
- **Information Systems Auditor** position currently posted
- **Audit Manager** Jeff Tatum, CIA
- **Auditor** Susan Cearing, CSSA
- **Associate Auditor** Alex Quinn, CPA (pending experience)
- **Principal Auditor, Special Projects** Wendi Johnston, CRISC
- **Senior Auditor** Deb Martin, CPA, CFE, CGMA

In December 2014, efforts began to engage an external firm to provide a network security assessment for each of the four campuses. This engagement is being conducted in collaboration with Information Technology Security and Policy.

INITIATIVES, GOALS, AND PRIORITIES
Initiatives for 2015 include continued alignment with risk oversight, dynamic change in the risk-centric audit approach, and facilitating the University’s enterprise risk management program. Monitoring of the anonymous reporting program and coordination of the University’s external audits are also part of audit’s function.

<table>
<thead>
<tr>
<th>Goals</th>
<th>2015 Priorities</th>
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<tbody>
<tr>
<td>1. Create and promote a university-wide risk infrastructure consciousness which ensures integrity in the University’s operating environment.</td>
<td>a) identify waste, fraud, and abuse via various mechanisms including the anonymous reporting program&lt;br&gt;b) facilitate the University’s enterprise risk management program&lt;br&gt;c) communicate, train, and educate</td>
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<td>2. Initiate activities which result in added value for the University.</td>
<td>a) maintain a state of the art audit framework which assures audit effectiveness&lt;br&gt;b) continue with a risk-centric audit approach&lt;br&gt;c) identify opportunities to improve effectiveness and efficiencies</td>
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<td>3. Deliver customer/stakeholder value and satisfaction.</td>
<td>a) maintain a flexible audit approach&lt;br&gt;b) ensure that the audit plan is aligned with strategic initiatives&lt;br&gt;c) communicate promptly with customers and/or stakeholders</td>
</tr>
<tr>
<td>4. Employ technological tools and techniques.</td>
<td>a) utilize data mining techniques&lt;br&gt;b) track audit status and progress&lt;br&gt;c) recognize organizational trends</td>
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<td>5. Identify alternative workforce strategies appropriate for the complexities of higher education</td>
<td>a) benchmark internal audit workforce strategies in higher education and other business sectors, where possible&lt;br&gt;b) ensure that continuing professional education opportunities meet career objectives and the needs of internal audit&lt;br&gt;c) benchmark salaries&lt;br&gt;d) implement rapid development strategies</td>
</tr>
<tr>
<td>Challenges in Meeting Goals</td>
<td>Strategies to Meet or Mitigate</td>
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<tr>
<td>------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
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</tbody>
</table>
| 1. Maintaining staffing expertise given rapidly changing higher education landscape including regulations, technologies, and strategic direction | a) continuing professional education  
               b) co-sourcing/partnering strategies  
               c) alternative workforce strategies  
               d) compliance with auditing standards |
| 2. Technology                                                                            | a) data mining tools  
               b) audit software                                                  |
| 3. Space                                                                                 | a) space utilization  
               b) remote connectivity                                              |