Internal Audit Overview

Audit’s Role in Governance, Risk Management and Internal Control
Mission

- Provide independent, objective assurance and advisory services designed to add value and improve the university's operations
- Help university departments accomplish their objectives by bringing a systematic, disciplined approach to identify opportunities for improvement
Reporting Structure

- Internal Audit maintains its objectivity through its unique reporting structure, which is outlined in Policy 3350:
  - Direct, Unrestricted Access to the President and the Finance and Audit Committee of the Board of Visitors
  - Reports Functionally to the Chair of the Finance and Audit Committee of the Board of Visitors
  - Reports Administratively to the University President
Internal Auditing Definition

- Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.
Scope of Audit Activities – Governance

• Governance is the combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

• Internal Audit assesses and makes appropriate recommendations for improving the governance process in its accomplishment of the following objectives:
  • Promoting appropriate ethics and values within the University.
  • Ensuring effective organizational performance management and accountability.
  • Effectively communicating risk and control information.
  • Effectively coordinating the activities of and communicating information among the board, external and internal auditors and management.
Scope of Audit Activities - Risk Management

• Risk is the possibility of an event occurring that will have an impact on the achievement of objectives. Risk is measured in terms of impact and likelihood.

• Internal Audit assists the University by identifying and evaluating significant exposures to risk, assessing the effectiveness of the University's risk management system, and contributing to continuous improvement.

• Particularly, evaluate risk exposures relating to the University's governance, operations, and information systems regarding the
  • Reliability and integrity of financial and operational information.
  • Effectiveness and efficiency of operations.
  • Safeguarding of assets.
  • Compliance with laws, regulations, and contracts.
Scope of Audit Activities – Internal Controls

- Assist the University in maintaining effective controls (encompassing governance, operations, and information systems) by evaluating their effectiveness and efficiency and by promoting continuous improvement.

- Evaluating the adequacy and effectiveness of the system of internal control is based on the same risk exposures listed in the risk management area.

- Ascertain the extent to which operating and program goals and objectives have been established and conform to those of the University, results are consistent with established goals and objectives, and management has established adequate criteria to determine whether objectives and goals have been accomplished.
Risk & Control Process

- Perform Risk Assessment
- Monitor Performance
- Implement Control Activities
- Promote Culture of Accountability, Responsibility and Ethics
- Information
- Training
- Communication
Risk & Control Process

Monitoring:
- Monthly reviews of performance reports
- Internal audit function

Control Activities:
- Purchasing limits
- Approvals
- Security
- Reconciliation
- Specific policies

Risk Assessment:
- Internal and external events
- Internal audit risk assessment
- A strategy to manage risks

Information & Communication:
- Reporting
- University communications

Control Environment:
- Tone from the top
- Corporate Policies
- Organizational authority
Your Role in Risk and Control

• Our EMPLOYEES perform many controls that will reduce many of the University’s risks.
  • Purchasing
  • Reconciliation
• Implementing a system of internal controls that identifies and manages risks.
• Ensuring evidence of review is documented at the department level
• Taking corrective action when control deficiency or weakness is identified and documenting such action.
Risk Assessment

- Internal Audit annually performs a risk analysis to identify those entities that should receive the most audit attention.
- Relative business risk is assessed based on a combination of qualitative and quantitative factors.
- Discussions are held with a number of key administrators around campus to help us refine the qualitative ratings and identify turnover, new systems or procedures, etc. that might impact our analysis.
Risk-based Audit Priorities

- Campus and Board of Visitor’s Input via Interviews or Surveys ("Risks that keep one up at night")
- Emerging Issues in Higher Education
- Observations from External Audit or Reviews
- Reliance on Information Systems
- Public and Political Sensitivity
- Significance of Organizational Changes
- Financial Exposure
- Quality of the Control Environment
- Control Deficiencies Identified in Investigations
Audit Types

- Audits & Reviews
  - Risk Based Operational Audits
  - Compliance Reviews
  - Advisory Services
  - Fraud, Waste, and Abuse Reviews
# Audit Plan FY 2012

<table>
<thead>
<tr>
<th>Risk Based Audits</th>
<th>Risk Ranking</th>
<th>Projected BOV Mtg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics NCAA Compliance *</td>
<td>High</td>
<td>June 2012</td>
</tr>
<tr>
<td>Construction Contracts</td>
<td>High</td>
<td>June 2012</td>
</tr>
<tr>
<td>Human Nutrition, Foods and Exercise</td>
<td>High</td>
<td>March 2012</td>
</tr>
<tr>
<td>Institutional Review Board for Human Subjects</td>
<td>High</td>
<td>June 2012</td>
</tr>
<tr>
<td>IT: Printer Security</td>
<td>High</td>
<td>March 2012</td>
</tr>
<tr>
<td>IT: UNIX Servers</td>
<td>High</td>
<td>March 2012</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>High</td>
<td>June 2012</td>
</tr>
<tr>
<td>Office of Sponsored Programs*</td>
<td>High</td>
<td>March 2012</td>
</tr>
<tr>
<td>Office of the University Bursar *</td>
<td>High</td>
<td>August 2012</td>
</tr>
<tr>
<td>Payroll Transactions</td>
<td>High</td>
<td>August 2012</td>
</tr>
<tr>
<td>Registrar</td>
<td>High</td>
<td>June 2012</td>
</tr>
<tr>
<td>University Scholarships and Financial Aid *</td>
<td>High</td>
<td>March 2012</td>
</tr>
<tr>
<td>English</td>
<td>Medium</td>
<td>March 2012</td>
</tr>
<tr>
<td>Equine Medical Center</td>
<td>Medium</td>
<td>August 2012</td>
</tr>
<tr>
<td>Hokie Passport Services</td>
<td>Medium</td>
<td>March 2012</td>
</tr>
<tr>
<td>IT: Identity Assurance Using eToken Certificates</td>
<td>Medium</td>
<td>June 2012</td>
</tr>
<tr>
<td>IT: Surplus Property</td>
<td>Medium</td>
<td>March 2012</td>
</tr>
<tr>
<td>Non-General Fund Revenue</td>
<td>Medium</td>
<td>March 2012</td>
</tr>
<tr>
<td>Northern Virginia 4-H Educational Center</td>
<td>Medium</td>
<td>June 2012</td>
</tr>
<tr>
<td>Records Management</td>
<td>Medium</td>
<td>June 2012</td>
</tr>
<tr>
<td>Fralin Life Science Institute</td>
<td>Low</td>
<td>August 2012</td>
</tr>
<tr>
<td>Richmond and Hampton Roads Centers</td>
<td>Low</td>
<td>August 2012</td>
</tr>
<tr>
<td>Student Affairs Auxiliaries</td>
<td>Low</td>
<td>March 2012</td>
</tr>
</tbody>
</table>
## Audit Plan FY 2012

### Compliance Reviews

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Projected BOV Mtg</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Architecture and Urban Studies</td>
<td>March 2012</td>
</tr>
<tr>
<td>Office of the Provost</td>
<td>March 2012</td>
</tr>
<tr>
<td>Vice President for Finance</td>
<td>March 2012</td>
</tr>
<tr>
<td>Vice President for Research</td>
<td>March 2012</td>
</tr>
</tbody>
</table>

### Advisory Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia Tech Carilion Research Institute</td>
<td>August 2012</td>
</tr>
<tr>
<td>International Centers and Programs</td>
<td>August 2012</td>
</tr>
<tr>
<td>Building Official</td>
<td>March 2012</td>
</tr>
<tr>
<td>Federal Higher Ed Opportunity Act Compliance</td>
<td>August 2012</td>
</tr>
<tr>
<td>Unallocated</td>
<td></td>
</tr>
</tbody>
</table>

- The annual audit plan is published on the Internal Audit website after approval by the Board of Visitors.

[http://www.ia.vt.edu/]
Audit Process

- Audit Assignment
- Engagement Letter
- Entrance Conference
- System Understanding and Documentation
- Fieldwork
- Draft Report
- Exit Conference
- Final Report
- Follow Up and Close Out
Common Audit Findings

- **CASH HANDLING**
  - Inadequate segregation of duties
  - Receipts not deposited at least weekly or when receipts total $250
  - Access to cash registers are not properly safeguarded
  - Cash receipts and void receipts not being utilized when necessary

- **FISCAL RESPONSIBILITY**
  - Banner Snapshot by Org certification indicating reconciliation and approval, not being signed or dated by preparer and Department Head
  - Reconciliation not performed timely

- **PAYROLL AND PERSONNEL**
  - P117 Wage Appointment form not on file
  - Exempt overtime not approved in advance and in writing
  - Overtime calculation incorrectly
  - Background checks not obtained on sensitive positions
  - Wage verification entries not being reviewed
Common Audit Findings

- **LEAVE**
  - Leave and Hour Work reports don’t agree with the University Electronic Leave Report submitted
  - Electronic Leave Reports not submitted timely (before the 16th)

- **PROCUREMENT CARD**
  - Original receipts not retained by department
  - Cardholders sharing card

- **INVENTORY (FIXED ASSETS AND OTHER)**
  - Incomplete fixed asset information (Location and Custodian)
  - Inadequate inventory procedures
  - Lack of documentation of Inventory counts

- **HEALTH AND SAFETY**
  - Emergency Action Plans updated and communicated to employees

- **INFORMATION SYSTEMS**
  - Security of sensitive data
  - Data security
Fraud, Waste, and Abuse

• “The university will not tolerate theft, waste, or abuse of state, university, or university-related funds, property, or other resources through fraudulent means.”

Policy 1040: Reporting Suspected Fraudulent Activities
http://www.policies.vt.edu/1040.pdf
FWA Awareness

**Fraud** - Any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain.

**Waste** - Any thoughtless or careless expenditure, consumption, mismanagement, use, or squandering of resources. Waste also includes incurring unnecessary costs as a result of inefficient or ineffective practices, systems, or controls.
FWA Awareness

Abuse - The excessive or improper use of a thing, or to employ something in a manner contrary to the natural or legal rules for its use.

Abuse also includes intentional destruction, diversion, manipulation, misapplication, maltreatment, misuse of resources, or excessive use as to abuse one’s position or authority.
Distribution of Fraud Schemes

In 2010, 15% of all reported fraud cases occurred in the government and higher education sectors with a median loss per case of $76,000.

<table>
<thead>
<tr>
<th>Industry</th>
<th># of Cases</th>
<th>% of Cases</th>
<th>Median Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking/Financial Services</td>
<td>238</td>
<td>16.6%</td>
<td>$175,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>193</td>
<td>10.7%</td>
<td>$300,000</td>
</tr>
<tr>
<td>Government and Public Administration</td>
<td>178</td>
<td>9.9%</td>
<td>$81,000</td>
</tr>
<tr>
<td>Retail</td>
<td>119</td>
<td>6.8%</td>
<td>$85,000</td>
</tr>
<tr>
<td>Healthcare</td>
<td>107</td>
<td>5.9%</td>
<td>$160,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>91</td>
<td>5.1%</td>
<td>$197,000</td>
</tr>
<tr>
<td>Education</td>
<td>90</td>
<td>5.0%</td>
<td>$71,000</td>
</tr>
<tr>
<td>Services (other)</td>
<td>88</td>
<td>4.9%</td>
<td>$109,000</td>
</tr>
<tr>
<td>Construction</td>
<td>77</td>
<td>4.3%</td>
<td>$200,000</td>
</tr>
<tr>
<td>Technology</td>
<td>65</td>
<td>3.8%</td>
<td>$250,000</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>62</td>
<td>3.4%</td>
<td>$300,000</td>
</tr>
<tr>
<td>Oil and Gas</td>
<td>57</td>
<td>3.2%</td>
<td>$478,000</td>
</tr>
<tr>
<td>Real Estate</td>
<td>57</td>
<td>3.2%</td>
<td>$475,000</td>
</tr>
<tr>
<td>Services (professional)</td>
<td>51</td>
<td>2.9%</td>
<td>$110,000</td>
</tr>
<tr>
<td>Arts, Entertainment and Recreation</td>
<td>49</td>
<td>2.7%</td>
<td>$180,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>45</td>
<td>2.5%</td>
<td>$120,000</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>42</td>
<td>2.3%</td>
<td>$513,000</td>
</tr>
<tr>
<td>Religious, Charitable or Social Services</td>
<td>41</td>
<td>2.3%</td>
<td>$75,000</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>37</td>
<td>2.1%</td>
<td>$131,000</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing and Hunting</td>
<td>27</td>
<td>1.5%</td>
<td>$320,000</td>
</tr>
<tr>
<td>Communications/Publishing</td>
<td>16</td>
<td>0.9%</td>
<td>$110,000</td>
</tr>
<tr>
<td>Mining</td>
<td>12</td>
<td>0.7%</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>

Source: Association of Certified Fraud Examiners 2010 Report to the Nations on Occupational Fraud and Abuse
Initial Detection of Fraud

Source: Association of Certified Fraud Examiners 2010 Report to the Nations on Occupational Fraud and Abuse
Fraud Facts

It is estimated that the cost of fraud in the typical organization translates to 5% of revenues. This translates to $2.9 trillion in annual fraud losses when applied to the 2009 Gross World Product.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Median Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset misappropriation</td>
<td>86.30%</td>
<td>$135,000</td>
</tr>
<tr>
<td>Corruption</td>
<td>32.80%</td>
<td>$250,000</td>
</tr>
<tr>
<td>Fraudulent Statements</td>
<td>4.80%</td>
<td>$4,100,000</td>
</tr>
</tbody>
</table>

The sum of percentages exceeds 100% because several of the cases involved schemes.

Source: Association of Certified Fraud Examiners 2010 Report to the Nations on Occupational Fraud and Abuse
Fraud Schemes

- Vendor Fraud
- Theft/Embezzlement
- Personal Business on State Time
- Abuse of Authority
- State Vehicle Abuse
- Conflict of Interest
- Missing Asset
- Falsification of Univ. Records
- Misfeasance and Waste
- Misuse of Property
- Improper Use of Univ. Resources
- Leave or Time Abuse

FRAUD
Fraud, Waste, and Abuse

Average 43% substantiation since 2000

Note:
In 2011, 19 cases were closed, but 16 were still active as of June 30.
Fraud, Waste, and Abuse

• Since FY 1999-00, over 70% of allegations fall within five general categories:
  • Leave or time abuse
  • Improper use of university resources
  • Abuse of authority
  • Theft or embezzlement
  • Conflict of Interest

• Gradual increase in allegations regarding leave or time abuse.
Personal Red Flags

- Living beyond means
- Financial difficulties
- Control issues, unwillingness to share duties
- Unusually close association with vendor/customer
- Wheeler-dealer attitude
- Divorce/family problems
- Irritability, suspiciousness or defensiveness
- Addiction problems – drugs/alcohol/gambling
- Refusal to take vacations
Organizational Red Flags

- Placing too much trust in key employees
- No communication of expectations
- Lack of proper authorization of transactions
- Inadequate attention to details
- No separation of duties between accounting functions
- Lack of clear lines of authority and responsibility
- Tendency toward crisis management
- Relaxed management style
- Poor system design
- Inadequate training
Actions to Minimize Fraud

• Tone at the Top
• Education & Training
• Integrity Risk & Controls
• Reporting & Monitoring
• Proactive Detection
• Investigation & Follow-up
Preventive and Detective Controls

5 Control Tools to consider:

• Establish a Control Conscious Environment
• Ensure Segregation of Duties
• Watch Authorizations, Approvals, and Verifications
• Maintain Control over Assets
• Take time for Monitoring
Fraud Prevention: Minimize Exposure

1. Develop internal controls to protect the organization and the employee
2. Don’t let an individual have complete control of a financial process
3. Restrict access to computer facilities and data
4. Rotate job duties and cross-train
5. Review monthly statements; know where the money is going
Fraud Prevention: Minimize Exposure

6. Notice and pay attention to the red flags
7. Communicate with your staff about fraud awareness; advertise that fraud detection is a priority; Distribute whistleblower policies
8. Know your employees
9. Include background and reference checking in the hiring process
10. Increase the perception of detection (Active monitoring)
Reporting Suspected Fraudulent Activities

• Upon the discovery of circumstances that suggest a fraudulent transaction or irregularity has occurred, University employees should immediately notify one of the following:
  • VT Internal Audit Department     (540) 231-4744
    (540) 231-9478
    (540) 231-7496
  • VT Police Department                (540) 231-6411
  • State Employee Hotline              (800) 723-1615

• Above list is in Internal Audit’s order of preference, so that we can ask follow-up questions and keep all parties informed. All reports are kept anonymous.
  • Will also accept e-mail or campus mail reports
Internal vs. External Audit

- External auditors provide an independent opinion on the organization's financial statements, annually.
- Internal auditors serve the organization by helping it accomplish its objectives, and improving operations, risk management, internal controls, and governance processes.
- Virginia Tech Internal Audit serves as a resource to university management, but maintains its objectivity by not engaging in activities that are generally the sole responsibility of management.
## Internal vs. External Audit

<table>
<thead>
<tr>
<th>External Auditor</th>
<th>Internal Auditor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not part of the organization</td>
<td>Part of the organization</td>
</tr>
<tr>
<td>Objectives are set primarily by statute</td>
<td>Objectives are determined by professional standards, the board, and management</td>
</tr>
<tr>
<td>Primary client is the board of directors</td>
<td>Primary clients are management and the board</td>
</tr>
<tr>
<td>Assess financial statement conformance with generally accepted accounting principles, fairly present the financial position, and whether operations are accurately represented and materially correct</td>
<td>Scope of work is comprehensive, concerned with all aspects of the organization – both financial and non-financial</td>
</tr>
<tr>
<td>Historical in nature</td>
<td>Focus on future events as a result of continuous review, evaluation of controls and processes, and preventing fraud</td>
</tr>
</tbody>
</table>
Internal and External Audit Coordination

For optimal economy, efficiency, and effectiveness, internal and external auditors should coordinate their efforts as follows:

- Benefit from their complementary skills, areas of expertise, and perspectives;
- Gain understanding of each other's scope of work and methods;
- Discuss audit coverage and scheduling to minimize redundancies;
- Provide access to reports, programs and working papers; and
- Jointly assess areas of risk.
Questions

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Director of Internal Audit

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kurek@vt.edu