Audit Committee January 2014

2. Internal Audit Shared Services StudyLynne Sanders
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Situation: The completion of the internal audit shared services study is the result of a

directive provided by the UNC Strategic Plan approved by the Board of

Governors.

Background: The UNC Strategic Plan for 2013 through 2018 was approved by the Board of

Governors in February 2013. Goal 4 of the Strategic Plan focused on Maximizing Efficiencies in several operational areas of the University. The

Internal Audit function was one area identified for review and study.

Assessment: The Internal Audit Shared Services Study is complete. Recommendations of

the Internal Audit Advisory Team are being presented.

Action: This item is for information only

University of North Carolina System "Our Time Our Future" Strategic Plan - Internal Audit Shared Services Study Executive Summary

Introduction

In February of 2013, the University of North Carolina System released its strategic plan for 2013 through 2018, "Our Time Our Future: The UNC Compact with North Carolina." The plan focuses on five major goals with strategies and action steps to obtain those goals. One of those goals and action steps is to maximize efficiencies among the internal audit functions within the UNC System.

In April of 2013, an Internal Audit Advisory Team (IAAT) was formed and tasked with studying and recommending a model to maximize efficiencies among the internal audit functions within the UNC System. The IAAT is comprised of personnel from UNC General Administration and the Chief Audit Officers from five universities within the UNC System. The key goals established by the IAAT were: (1) establish best practices guidance that conforms to industry standards; (2) determine the most cost efficient and effective delivery of internal audit services across the UNC System; (3) increase access to specialized audit skill sets such as information technology and investigations; and (4) ensure adequate attention to unique risks at each University. Fulfilling these goals challenged the IAAT to understand the resource needs to provide quality and excellent internal audit services as well as to further determine how those resources should be deployed within the UNC system.

Current Staffing Size and Model

Currently, there are 53.25 staffed internal audit positions across the UNC system. Expenses related to internal audit for the 2013 fiscal year totaled \$5.1 million, which constitutes .067% of the total UNC system expenses. The current model of delivering internal audit services includes sixteen stand-alone internal audit departments, two co-sourced arrangements, and a peer-to-peer collaboration between two campuses. The two co-sourced arrangements are between UNC General Administration and the North Carolina School of Science and Mathematics; and Winston-Salem State University and the UNC School of the Arts. The peer-to-peer collaboration is between Western Carolina University and UNC Asheville.

Analysis and Results

To adequately conduct the shared services study for internal audit, extensive research and analysis was conducted by the IAAT. This included reviewing numerous articles, books, and staffing methodologies; interviewing subject matter experts; reviewing other university system models of internal audit service delivery; gathering benchmarks from the Institute of Internal Auditors; and reviewing studies conducted by other agencies and companies. Based on the research conducted, it was found that there is no optimal methodology to determine adequate staff size of an internal audit department or optimal model to deliver internal audit services. The best and most objectively applied methodology and model will require an element of professional judgment.

The IAAT compiled and distributed a survey to each Chief Audit Officer in the UNC system to capture information related to staffing, training, audit plan hours and completion rates, memberships, financial information, computer assisted audit tools, and risk assessment results. One of the IAAT members also obtained the services of their campus' Institutional Planning, Assessment, and Research section to conduct a literary review of internal audit staffing models and methodologies.

The IAAT reviewed twelve university system models across the United States. Research of these models included interviews with system personnel and a review of their organizational structures. It was determined that our system most closely aligns with the University System of Georgia (USG). USG has approximately 75.5 internal audit positions with internal audit functions located on each campus. Each campus internal audit department has a reporting relationship to the campus Chief Executive Officer but

also a reporting relationship to the Chief Audit Officer at the System level. It is important to note that although we most closely align with USG, it is difficult to compare university systems since no two systems are alike.

In addition to researching other higher education models, the IAAT studied the three most routinely applied staffing methodologies for internal audit which included the: (1) static approach, (2) risk analysis approach, and (3) benchmarking approach. The IAAT also studied a tool, *Effective Sizing of Internal Audit Activities for Colleges and Universities*. This tool was developed through a research project conducted by accounting professors and sponsored by the Institute of Internal Auditor's (IIA) Research Foundation, the Association of College and University Auditors, a chapter of the IIA in Norway and a leading Chief Audit Executive. Due to limitations within the first three approaches identified, the *Effective Sizing tool* was deemed the best measure of assessing staffing needs for the UNC system because of its ability to take into account unique variables that are specific to colleges and universities. The *Effective Sizing* tool revealed that 138 internal audit positions were needed in the UNC System.

Another study reviewed by the IAAT was an internal audit staffing analysis conducted by the North Carolina Office of State Budget and Management (OSBM) in 2008. This study was conducted when the Internal Audit Act of 2007 was first enacted by the North Carolina legislature. This study considered the size of the institution, risk factors, and professional judgment. The conclusion for the university system was that 75 internal audit positions would be needed.

Recommendations

As evidenced above, there is a wide variance from 75 to 138 internal audit positions needed in the UNC system. In order to make a recommendation to address staffing needs for the UNC system, the IAAT utilized a combination of the OSBM 2008 study, the *Effective Sizing* tool and professional judgment. Employing this methodology took into consideration the unique missions and characteristics of the institutions within the UNC System and necessitating factors to ensure adequate audit coverage while promoting excellence and quality in the delivery of internal audit services. Using this methodology, the IAAT concluded that the UNC System needs an additional twenty-one (21) positions (for a total of 74.25 positions) to ensure adequate internal audit coverage. The cost of staffing these additional internal audit positions is approximately \$1.97M. Current expenses plus the additional investment in internal audit services would total .087% of UNC System expenses, which would bring the UNC System in line with industry benchmarks.

Given the results of the staffing analysis, the IAAT identified and evaluated potential models of internal audit service delivery. Consideration was given to consolidating internal audit resources through a regional or centralized model as well as expanding on the current model which has co-sourcing arrangements established between four institutions and a successful peer-to-peer collaboration between two western NC campuses. Several aspects of importance in making the determination include internal audit needs based on feedback from each Chief Audit Officer in the UNC system, potential costs or cost savings of each model, qualitative characteristics to support quality and integrity of the internal audit function, and organizational governance. Through a careful and lengthy evaluation of pros and cons for each model, the IAAT recommends the UNC System retain its current model of delivering internal audit services with a phased-in deployment of regionally placed specialized resources to provide needed expertise in the areas of information technology audits, investigations, and advanced data analytics. This recommendation does not preclude the identification and implementation of future cosourcing arrangements between universities for internal audit services.

In addition to evaluating the best way to allocate internal audit resources, the IAAT also identified further needs to promote continued excellence in the area of internal audit that includes: (1) establishing a data technology strategy to include the use of computer assisted auditing tools (CAATs); (2) implementing standardized key performance indicators (KPIs) across the UNC internal audit

functions; (3) developing and implementing an internal audit best practices manual; and (4) support of training and membership resources across the UNC internal audit functions because some internal auditors are currently personally paying for these expenses. A proposed implementation strategy for the recommendations is outlined below.

Implementation

The IAAT proposes that the above recommendations be implemented in three phases over an eighteen month period and then pause for a reassessment of resource needs.

Phase I: The first phase (within 6 months) includes securing five new internal audit positions at an investment of \$500,000. These five positions will be deployed at the one person internal audit departments. The literature researched by the IAAT supports avoiding one person internal audit departments due to the risk that it creates. This risk includes not having broad audit coverage since there needs to be a diverse skill set and includes not having continuity or sustainability of audit services should the employee in the one person internal audit department leave/retire or take a leave of absence due to illness. During Phase I, the best practices manual will also be implemented with a focus on internal quality assessments and risk assessment processes. The IAAT also recommends that a financial commitment to training and funding of professional certifications be considered during this phase.

Phase II: Phase II (within 12 months) includes securing five more internal audit positions at an additional investment of \$650,000. Two of the positions would be deployed at North Carolina State University based on the staffing analysis that was conducted by the IAAT. The other three internal audit positions, which will have specialized auditing expertise such as information technology, investigations, and advanced data analytics, will be regionally located at three of the larger universities. These resources would be used to service the specialized internal audit needs in a defined region. Also during Phase II, computer assisted audit tools will be defined for implementation across the universities, thereby further enhancing the quality of internal audit services. Further, key performance indicators will be defined and standardized among the internal audit departments. The KPIs are a best practice that will provide a measure of operational effectiveness and efficiency for internal audit services in the UNC System and will provide feedback to key stakeholders. During Phase II, it is also recommended that a dotted line reporting relationship be defined and established between the Chief Audit Officers at each university and the Chief Audit Officer at the UNC System level. The Chief Audit Officers at each university would still report administratively to the Chancellor and functionally to their Board of Trustees Audit Committee. This enhanced reporting structure, which has been established in other university systems, would facilitate communications and efficiency in the system-wide internal audit functions and add another level of independence for internal audit services.

Phase III: During Phase III (within 18 months), the CAATs and KPIs that have been defined will be implemented and reported to key stakeholders. Also, given that 10 positions will have been added during Phases I and II, Phase III will be an optimal timeframe for the IAAT to reassess the future resource needs of internal audit services across the UNC System.

Conclusion

In conclusion, the UNC System has always been a leader in the delivery of internal audit services. When determining the "right" size and delivery model for internal audit services to ensure excellence and quality, an organization has to determine what impact it wants to have and what investment it wants to make with regard to internal audit services. Internal audit is one of the four cornerstones of governance. The other three are board, senior management, and external audit. The IAAT is confident the above recommendations will enhance the delivery of internal audit services across the UNC System, ensure continued excellence and quality, and assist the University in meeting its strategic plan and commitment to the people of North Carolina.