REGENTS COMMUNICATION

Item for Information

Subject: Report of University Internal Audits
            October – November 2012

Attached is the report of activities completed by the Office of University Audits for the period **October through November 2012**.

Included in the report are a:

- Summary of each audit report issued during the period, including Management's Corrective Plans. These audits were presented at the Regents' Finance, Audit, and Investment committee meeting in December.
- Summary of each follow-up review report issued during the period, including the actions completed by management. Follow-up reviews are designed to provide assurance that Management's Corrective Plans have been implemented, are working as intended, and are sustainable.
- Table of open audit issues as of **November 30, 2012**, including estimated completion dates.

If you have any questions or would like additional information, please contact me at 647-7500 or by e-mail at jmoelich@umich.edu.

Respectfully submitted,

Jeffrey M. Moelich, Executive Director
University Audits

Original Reports

Campus

Cooperative Institute for Limnology and Ecosystems Research 2012-221
Report issued October 23, 2012

The Cooperative Institute for Limnology and Ecosystems Research (CILER or the Institute) is an affiliated institute in the School of Natural Resources and Environment (SNRE) at the University of Michigan. The Institute is part of the National Oceanic and Atmospheric Administration's (NOAA) Cooperative Institutes program. NOAA provides support for Cooperative Institutes in exchange for collaboration on research projects relevant to NOAA's mission. NOAA selects Cooperative Institutes because they operate outstanding research programs in areas where NOAA would like assistance or needs additional expertise. Federal grants provide approximately 99% of CILER's budget, and NOAA funding is the most significant single source.

CILER provides expertise in the areas of forecasting systems, invasive species research, and the understanding of ecological processes in the Great Lakes region. The Institute has five research scientists and a staff made up of postdoctoral fellows, analysts, specialists, and graduate students to manage the research. CILER's business office, assisted by SNRE's business office, provides the research team with support ranging from human resources services to grant management.

In addition to conducting NOAA research, CILER acts as a conduit for distributing NOAA funding to other research programs that provide expertise necessary to complete the research. Through CILER researchers' connections with other universities and private companies, CILER is able to recruit the necessary talent crucial for individual project needs. Partner universities include Michigan State, Michigan Tech, University of Wisconsin, University of Minnesota, The Ohio State University, Wayne State University, Grand Valley State University, University of Toledo, the State University of New York (SUNY), and Stony Brook University. Local partners include Sea Grant and the Great Lakes Environmental Research Laboratory (GLERL).

PURPOSE AND SCOPE

The purpose of the audit was to assess operational controls to ensure CILER has adequate controls over the following administrative functions:
- Management oversight
- Grant management
- Subrecipient monitoring
- Financial management
- Procurement
- Payroll
- Asset management and laboratory oversight

RISK AND CONTROL DISCUSSION
Management Oversight

Discussion: As part of the process for assessing management oversight, University Audits interviewed CILER's Director, business office staff, and Principal Investigators (PIs), as well as personnel in SNRE's business office and the Office of Research and Sponsored Projects (ORSP). These discussions identified and testing confirmed a number of situations where processes have broken down due to inadequate communication and collaboration between these parties. SNRE is accountable for ensuring their affiliated

institutes have a clear understanding of their responsibilities. Lack of effective communication led to confusion as to which unit had responsibility for areas involving HR and grant management. Based on testing results:

- Two CILER employees remained on temporary appointments for more than eighteen months, the maximum period permissible under SPG Section 201.57, *Temporary Employment*. Neither CILER nor SNRE had assumed responsibility for monitoring the length of temporary employment.
- While SNRE's HR group owns the on- and off-boarding processes, CILER could manage some pieces of these processes more effectively. For example, CILER PIs will be the first to know when incoming employees require a J1 visa. By passing that information along to SNRE, the visa process can proceed to ensure no employee is ready to start without the proper paperwork.
- Two CILER employees did not certify their effort for fiscal year 2011. Effort reporting is the method of certifying to the federal granting agencies that the effort required as a condition of the award has actually been completed. CILER's Business Administrator had responsibility for completing the reporting by contacting the employee(s) for resolution or researching the employees' effort in cases where an employee no longer works at the University.
- CILER included a line item labeled as a tax in their proposal to renew the five-year cooperative agreement with NOAA through 2017. CILER submitted the proposal to NOAA despite ORSP concerns about the tax. NOAA rejected the proposal, directing CILER to resubmit the proposal with several line item changes, including removal of the tax. Closer consideration of ORSP's concerns prior to submitting the proposal could have avoided delays in processing.

Control Recommendation: CILER should develop formal policies and processes that include:
- Establishing a management agreement with SNRE to formally address each unit's specific responsibilities concerning administrative services
- Scheduling regular meetings between SNRE and CILER business managers to facilitate collaboration between the units, and forwarding meeting minutes to the CILER Director and SNRE Administrative Director to keep them informed
- Leveraging the experience of central offices like ORSP, who are willing to provide training, answer questions, and offer guidance

Management Plan:
- SNRE and CILER have drafted a Service Level Agreement clarifying how SNRE and CILER share administrative responsibilities and HR roles for each unit.
- CILER has prepared a department manual to supplement the University Standard Practice Guide, and SNRE's Human Resources Manager has reviewed it. The manual will be updated to detail the roles and responsibilities of the administrative office and PIs regarding financial analysis and reporting and research monitoring activities.
- CILER's Administrator will schedule regular meetings with SNRE's Business Manager. Notes of the meeting will be distributed to the department directors.

Auditor Comment: University Audits will review the SLA, department manual and meeting notes during the follow up review. Testing will involve reviewing supporting documentation for HR responsibilities assigned to CILER and financial reporting responsibilities as identified in the department manual.

Grant Management Reporting
Discussion: CILER's business office reconciles approximately 150 grants per month. The process is to download information in the form of several reports from BusinessObjects and then manually enter the breakdown into a CILER prepared worksheet. Half of the assistant administrator's time is devoted to producing this manual report. The PIs we interviewed stressed the importance of these reports in managing their projects.

Control Recommendation: Developing a system-generated report should be a high priority. CILER should work with ITS to build the most effective system report possible and instruct their PIs in its use. Eliminating this manual data entry will eliminate potential input errors and permit the CILER business office to spend more time monitoring grants and analyzing expenditures.

Management Plan: ITS revised some of the queries used to supply monthly project status reports to CILER PIs. The new report streamlines the manual process formerly used by the department. The department administrator, in conjunction with SNRE's business office, will work with ITS on future improvements. SNRE's business office will work with CILER's Assistant Administrator to begin implementing use of the reports immediately, rather than waiting for the new Administrator to be hired.

Laboratory Training, Documentation, and Certification

Discussion: The majority of CILER staff conducts research at the Great Lakes Environmental Research Laboratory located south of Ann Arbor. Since GLERL provides an onsite laboratory safety training and certification program for GLERL employees, CILER instructs its own employees to complete that program instead of standard U-M lab safety training offered by Occupational Safety and Environmental Health (OSEH). According to OSEH, all U-M employees who work in a laboratory are required to take either comprehensive lab safety training at OSEH's office or online courses in chemical laboratory safety and bloodborne pathogens.

Control Recommendation: It is reasonable for CILER staff to participate in the established GLERL lab safety training and certification program. Under current University policy, however, CILER is still obligated to ensure its employees take the appropriate U-M training course(s) prior to working in a laboratory. CILER should implement a tracking document listing all GLERL-provided and U-M-provided lab safety training and certification by employee. This will provide a quick reference to ensure all CILER employees are up to date on safety training and certification.

Management Plan: Completion of the University's laboratory safety programs will be part of CILER's new employee orientation process. The new manual will address the training requirement. CILER will also implement a process to document and track its employees' participation in GLERL training programs. Existing employees who have not yet taken U-M's training courses will take them as soon as possible.

Retroactive Salary Distribution Changes

Discussion: The distribution of salary expenses may be changed retroactively to accommodate the establishment of a new shortcode, late processing of an award notice, protracted contract negotiations, or other circumstances. The University generally limits retroactive pay adjustments involving sponsored funds to a period of 120 days unless the adjustments are between sub-grants from the same parent grant. Review of grant expenses found several adjustments exceeding the 120-day period, one of which did not occur within the same parent grant.

Control Recommendation: The University supports establishing a hardship account to pay employees when sponsored funds are anticipated but not yet available. Requesting the establishment of a hardship account for sponsored projects not yet funded permits the units to pay employees without the need to retroactively move employees when funds become available. CILER should work with SNRE or ORSP to understand the process for establishing hardship accounts, and pay employees from these accounts when it is appropriate.

Management Plan: CILER has adopted the use of hardship accounts for projects not funded under the cooperative agreement.

Auditor Comment: Follow-up will include reviewing University reports to determine if employees are paid on non-cooperative agreement projects while working on another project.

SUMMARY

The Cooperative Institute for Limnology and Ecosystems Research is conducting crucial research on the Great Lakes. Our audit findings conclude that CILER needs to continue developing their relationships with SNRE and other University partners. An independent review panel in the fall of 2010 also noted a need to strengthen the collaboration between the University and CILER while acknowledging the significant contributions CILER research scientists, investigators, research fellows, and graduate students have made conducting world-class environmental research.

The quantity and significance of the grants managed by CILER increases the need for them to continually improve their ability to monitor projects efficiently. Additionally, CILER is in the process of hiring a new administrator. The new administrator will be responsible for closing the existing cooperative agreement with NOAA while implementing the new agreement. University Audits strongly recommends immersing the new administrator into SNRE's support structure to help them integrate quickly and have a source of contacts to assist their development. ORSP has also indicated a willingness to help with the new administrator's development. Having this sense of community and support will be critical for the new administrator to manage CILER projects effectively.

University Audits will conduct a formal follow-up to the outstanding issues during the fourth quarter of fiscal 2013.

UM- Flint Housing	2012-213

Report issued November 1, 2012

The First Street Residence Hall (FSRH) represents UM-Flint's transition from a strictly commuter college to a live-in campus. Approved by the Board of Regents in 2006 and first opened in 2008, FSRH is now entering its fifth year of operations. It has been called a transformative step for the campus, enabling UM-Flint to successfully recruit students who could not previously be recruited. This includes international students and out-of-state residents. Incoming freshmen are the primary target group, but some senior students, including graduate students, utilize the property.

The FSRH encompasses approximately 100,000 square feet with 300 beds situated in two- or four-bedroom suites. Accommodations are designed to surpass the traditional freshman residence hall experience with kitchens and living rooms in every suite. Supervision is provided by a combination of resident advisors

(RAs; student staff who receive room and board in exchange for overseeing a block of suites) and professional staff. The Hall Director and the Assistant Hall Director both live in the residence hall to provide supervision for the residents and RAs.

Although the FSRH's primary objective is to serve UM-Flint students, short-term contracts are available for groups with an educational connection, typically during the summer. In the past, this has included a ballet camp sponsored by the Magnus Ballet, as well as programs for high school students offered by UM-Flint's Office of Educational Opportunity Initiatives.

Housing relies on close relationships between UM-Flint and the community. Internally, key partners include the Department of Public Security (DPS) and Facilities and Operations. The FSRH both competes and partners with some of the downtown area housing developments. Most notably, the Riverfront Housing structure is used by UM-Flint, Mott Community College, Baker College, and Kettering University students.

PURPOSE AND SCOPE

This audit evaluated the effectiveness of Housing management's controls over safety and security, financial oversight, strategic planning, receivables, procurement, payroll, employee management, building structure, and information technology. We met with units that partner extensively with Housing, including Facilities and Operations, DPS, Information and Technology Services, the Environment, Health and Safety Department, and Financial Services and Budget. We interviewed Housing staff including some RAs. In addition to reviewing selected transactions for compliance with procurement and payroll policies, we reviewed a sample of student accounts to verify that housing costs were accurately assessed and billed. A walk-through of the residence hall was provided by Housing leadership, including a model suite, common areas, and maintenance zones.

Dining Services was not included in this review. Housing and Dining Services are not located in the same buildings and report through different branches of UM-Flint organizational structure.

RISK AND CONTROL DISCUSSION

Financial Oversight

Discussion: The Accountant in Student Affairs, working in conjunction with UM-Flint's Financial Services and Budget department, has begun taking over the reconciliation of the Statement of Activity and other activities previously performed by the Housing Administrative Assistant. This is part of a cluster accounting model where the Accountant provides services as needed for many areas of Student Affairs, not just Housing. The Accountant's duties are designed to be fluid and will gradually include more of the financial reporting responsibilities.

Currently, some portions of the reconciliation are being performed by both employees, which is inefficient. A clear document outlining which employee will be responsible for which specific duties has not been established. While there are opportunities to improve efficiency and coordination between the Student Affairs Accountant and Housing, we did not identify any issues with the reconciliations.

Control Recommendation: Although utilizing a shared accountant, Housing management remains accountable and must ensure monitoring procedures are still sufficient. Establish a service level agreement or create documented procedures for what services will be provided for Housing. This ensures that key financial activities are neither missed nor duplicated. Develop procedures to ensure documentation such as receipts, approvals, and deposit information are shared as necessary. Establish a regular communication process so Housing staff and the Accountant have the opportunity to discuss trends, upcoming programs with financial impacts, and other business matters.

To further enhance departmental efficiency, evaluate the duties of the other administrative staff to ensure all resources are used adequately and thoughtfully. As duties are re-aligned, consider the effect on segregation of duties and verify that tasks are assigned appropriately. Consider the use of eReconciliation for efficiency.

Management Plan: As a first step in addressing this observation, Housing leadership and the Student Affairs Accountant reviewed the Housing account as it is currently and identified what can be improved. What quickly surfaced was the need to establish a better naming convention for our transactions in the Statement of Activity. In the past month, the Accountant and Housing staff have been working on new procedures and naming conventions for the Housing account. We are currently mapping our spending categories and establishing a simple and easily understandable naming structure. This will allow Housing to more efficiently track and analyze our spending.

We are reviewing reconciliation practices to make sure we are maximizing our resources. A draft document is being reviewed that covers all major financial responsibilities and which individual is responsible for their completion. As the needs of the department change and the Accountant's duties are modified, the document will be reviewed with both Housing leadership and the Accountant to ensure all groups are in agreement with

any revisions. The use of e-Reconciliation will be evaluated as a possible reconciliation tool after the spending categories are established.

Finally, we are establishing communication avenues between the Accountant and Housing staff. In addition to as-needed communication for questions, bi-weekly meetings between Housing and the Accountant will provide the opportunity for communication regarding financial trends or transactions, upcoming significant expenditures, and other business matters. The Accountant is also collaborating with other accountants that support auxiliary services.

These new initiatives will help the Housing department better budget our account and analyze our spending.

SUMMARY

During the course of the audit, Housing staff were receptive to other suggestions for process improvements and implemented many changes immediately. For example, yearly background checks will now be performed on key employees that have access to the residence hall. Previously, this was completed only at the beginning of an individual's employment. The Hall Director will use weekly RA meetings to conduct tabletop exercises that reinforce the training the RAs received at the beginning of the academic year. In addition, RAs will be offered first aid and CPR training. UM-Flint RAs, like their UM-Ann Arbor counterparts, do not typically receive this training. However, recognizing the benefit of having additional trained staff on-site at all times, UM-F Housing leadership has decided to offer this training to interested RAs to complement the existing process where DPS as the first point of contact in a medical emergency.

Both students and staff interviewed were enthusiastic in describing the changes the residence hall has brought to campus. Housing leadership is held in high regard for their openness, transparency, and efforts to improve coordination and communication with other units on campus. The addition of housing services to UM-Flint was a significant change in strategic vision, but current processes are working well and Housing leadership has clearly demonstrated their commitment to the program's success. Employees are fiscally responsible, safety procedures are extensively documented, and processes are followed consistently. Ensuring that employees performing financial reconciliations have a clear understanding of their responsibilities, particularly as duties are re-assessed and reassigned, will strengthen Housing's financial oversight. University Audits will perform a follow-up during the third quarter of fiscal year 2013.

Residential Dining Services	2012-216
Report issued November 21, 2012	

University dining halls and cafes represent an integral part of campus life. Nearly 30% of the student population lives in University residential communities. Residential Dining Services (RDS) works to provide these students with a positive dining experience. Serving over 2.5 million meals annually, RDS offers a diverse set of meal plans and dining options to accommodate students' dietary and financial needs. Staff provide nutritional guidance and assistance with food allergies and special diets through individual consultations and healthy eating seminars. RDS does little catering but it does operate a bakery to supply its dining halls and snack bars with baked goods.

RDS, a department of University Housing (Housing) under the umbrella of the Division of Student Affairs (DSA), manages nine residential dining halls and seven retail operations located across central and north campuses. Each dining operation offers a unique dining experience and ambience. While all operations work from a standardized master menu, one dining hall may focus on providing more vegetarian options, while another will cater more to ethnic and international cuisine. In most cases, students from one residence hall are welcome to dine in other cafeterias or RDS-managed snack bars using campus cash (e.g., Dining Dollars, Blue Bucks) stored on their M-Card.

RDS employs a diverse workforce including over 1,800 students annually along with regular and temporary staff, AFSCME, and skilled trade employees in various roles ranging from secretary to head chef. Work

schedules vary significantly to accommodate hours of operations as some retail operations stay open as late as 1:00 a.m.

PURPOSE AND SCOPE
DSA and Housing requested an audit of RDS' internal control environment and key processes to support effective strategic and capital planning.

The primary objectives of this audit were to:
- Verify strategic and capital planning efforts are sufficiently informed, effectively implemented, and routinely evaluated against predefined measures for success.
- Confirm sufficient controls exist to support efficient operations, manage resources effectively, and safeguard the University community.
- Verify communication and collaboration throughout the department, upward through the division, and across campus adequately supports progress towards goals and objectives.

The review focused on controls and processes in RDS, and its residential dining halls and retail operations. Interviews were conducted with key administrative representatives from RDS, Housing, DSA, and central support service areas including the Department of Occupational Safety and Environmental Health (OSEH). Testing was performed on customer surveys, safety and health code reviews, and other evaluative information compiled by key subject matter experts to assess controls in the following areas:
- Financial oversight and reporting
- Purchasing and inventory management
- Payroll and time reporting management
- Expense reporting and management
- Information system, data, and access management
- Safety and security planning

RISK AND CONTROL DISCUSSION
RDS is in the midst of leadership transition. Housing has been engaged in a work force planning effort over the past few years to better align human resources with the organization's current and future strategic goals and objectives. At the same time, RDS employees have had to adapt to a constantly changing work environment due to the renovation of all dining halls as part of DSA's master planning initiative. With the end of dining capital planning projects in sight and work force planning well underway, Housing is starting to focus on the long-term vision for RDS. The audit observations and recommendations below are intended to support those efforts.

Strategic Planning, Implementation, and Evaluation
Discussion: In many ways, Housing employs some industry best practices in its strategic planning around food service operations:
- Use of benchmarking against peer institutions to assess financial performance and operational efficiency
- Consultation with a food services industry expert to identify opportunities for improvement in keeping with industry standards
- Use of student surveys to evaluate customer satisfaction and quality

Although RDS operations are considered in these efforts, RDS does not yet have a comprehensive strategic plan of its own, in part, due to the following contributing factors:
- Difficulty with communication within Housing and RDS
- Lack of clarity around RDS' operational needs
- Unbalanced workloads and differing skillsets among RDS leadership

In the past, RDS involvement in key decisions was insufficient to ensure planning benefited from the knowledge and expertise of implementation-level staff. Interviews with numerous employees at different levels indicate differing skillsets and priorities between key leaders, which has presented barriers to effective collaboration and a lack of clarity around operational complexities.

At the same time, RDS leadership reported difficulty prioritizing strategic planning over the rigorous pace of operations. Near constant renovation of food service facilities and an increase in workload for management has added another level of complexity to operational management and oversight.

Recommendations: Housing leadership should continue to clearly define and communicate expectations for the RDS Director position. Take care to include significant and proven expertise in both strategic planning and operational management in the position requirements.

In recognition of the need for better communication and collaboration, Housing instituted discussion forums last year, and has already begun to plan retreats and "work days" with each Housing unit, including RDS. Housing leadership intends to work side-by-side with operational and administrative staff to improve their understanding of each unit's operational challenges. Housing is encouraged to continue these efforts in various dining halls, along with other initiatives already under way.

Management Plan: Housing and RDS leadership are in the process of creating an inclusive vision for all Housing units. Goals and metrics have been developed and are being reviewed to ensure they align with the vision. Housing is currently engaged in a benchmarking study to review employment structures in other organizations. This involves reviewing duties and responsibilities for RDS leadership to identify whether reclassification of job titles are necessary.

The recent opening of the RDS Director position has provided the opportunity to further define expectations. These expectations include a strong operational background with an in-depth knowledge of strategic planning.

Financial Management and Oversight
Discussion: Overall, RDS is highly ranked in financial performance among peer institutions. Productivity ratios as detailed in the National Association of College and University Food Services (NACUFS) survey indicate that RDS is more productive than its peers in almost every category. While productivity ratios may be an indicator of fiscal performance, they do not necessarily correlate with a sound control environment.

Numerous financial control weaknesses were noted during the course of the audit. The control gaps listed below appear to primarily result from limited availability of resources, and not a disregard or lack of understanding for the importance of the internal controls. The Division of Student Affairs will be implementing unit-level certification for the current years Certification of Financial Results and Internal Controls. When completing the gap analysis process, be mindful of improvement opportunities in financial areas, including those identified in the audit.
- Lack of standardized financial management policies and procedures at the unit level. Although some operations had their own policies and procedures, they varied widely from one operation to the next. This became particularly problematic as staff relocated to accommodate renovation projects.
- Inadequate access to financial training and reporting for operational staff. Although financial training and reporting is available through Housing, scheduling is difficult and operation managers do not have access to performance metrics.
- Untimely and incomplete Statement of Activity reconciliation in some food service operations, which appears to be due to a lack of administrative support.
- Lack of University Treasury cash handling training (My LINC course TME103) for some employees, primarily students.
- Untimely cash deposits by some units due to a lack of backup depositors.

- Inadequate inventory tracking and control.

Housing Business and Finance has developed metrics such as labor cost per meal and food cost per meal. These metrics include trends on the number of meals served and the cost per meal. This information is useful for RDS leadership and management and should be shared regularly. Some dining hall managers are spending time deriving their own statistics rather than focusing on operations. Business and Finance is willing to provide additional data but needs direction on what information would be helpful.

Recommendations: RDS financial control environment could be improved by:
- Developing and deploying standardized RDS policies and procedures for use by all food service operations.
- Considering financial management needs in staffing assessment. Identify key metrics needed to support decision-making and monitoring.
- Identifying and implementing opportunities to improve inventory tracking and monitoring.
- Enhancing unit financial training. Include guidance on:
  o SOA reconciliation
  o Expense reporting documentation standards
  o University Treasury cash handling training and deposit certification
  o University compliance resources, including the Compliance Hotline

Management Plan:
- As dining unit managers rotate through different units, attention will be focused on identifying best practices that can be more widely adopted.
- Key metrics to support decision making have been identified and will be disseminated to dining management. A team led by a Systems Support Specialist, composed of dining management and culinary staff, has been charged with identifying key metrics to support decision making. This information will provide management with more tools to make strong and timely business decisions. RDS will:
  o Define useful metrics
  o Develop sample reports and work with Housing Business and Finance and IT to automate
  o Ensure management have access to reports
- Management will assess training and development needs to identify areas where additional training is necessary. Centralized training will be coordinated with unit managers to ensure appropriate dissemination of information while limiting impact to operations.
- Explore options for inventory tracking and monitoring.

Auditor's Note: Review of time reporting and approval processes revealed some improvement opportunities. Controls were in place for approval and oversight of time entry. However, recommendations to improve the efficiency of the Gross Pay Register reconciliation and accuracy of payroll expenses were provided to management in a more detailed management advisory memo.

Employment Practices
Discussion: Housing and RDS management are in the process of reviewing RDS' organizational structure for opportunities to improve efficiencies. Housing leadership worked with University Human Resources to develop a new job classification to meet the need for a manager with culinary as well as administrative expertise. A review of employee workload balance at all levels, including staff-to-student employee ratios, is also needed. With the continued expectation of two percent cost containment, it is necessary to restrain employment expenditures to meet financial targets.

RDS employs significantly more students than its peer institutions according to a benchmarking survey conducted by NACUFS. RDS also utilizes many temporary and seasonal employees. A disproportionate

number of regular staff compared to student and temporary workers has resulted in operating problems and inefficiencies.

For example, reliance on student employees has resulted in operational gaps during exam time or lunch hours when multiple students call off to study for exams or participate in University activities. Employing students in clerical roles also results in administrative inefficiencies as students are not generally given access to the University's central administrative systems.

Recommendations: Continue to work with Housing HR to evaluate the effectiveness of RDS' organizational structure and assess human resource needs. Review staff-to-student ratios along with temporary employment and overtime statistics to identify opportunities to improve productivity and oversight while balancing workloads. Consider administrative, seasonal, and managerial staffing needs as part of this review.

Management Plan: Housing is currently engaged in a benchmarking study to compare and contrast against employment structures in other organizations. This study will include an in-depth analysis of staff to student ratios, temporary employees, and overtime in hopes of identifying a healthy and efficient balance that can be deployed at RDS.

A new position, chef de cuisine, has been created that blends expertise in cuisine and administrative duties in one position. This newly implemented position will most likely improve internal controls and operational efficiency throughout RDS operations.

CBORD Training and Development
Discussion: The majority of RDS operations are not fully utilizing all of the functionality available in the department's primary information system, the CBORD Food Service Management System. CBORD is a mission-critical program used to leverage efficiencies and has been identified as a unit-specific application. RDS is assessing resources necessary to implement additional CBORD software.

Recommendations: Work with Housing Business and Finance to investigate options and assess training and development needs. The use of CBORD's purchasing and inventory management modules may help address control gaps discussed above. If possible, secure additional funding or reallocate funds to support:
- Ongoing development of CBORD
- Development of training courses and/or materials for all CBORD modules that could be used to maximize productivity
- Professional development of IT staff and other RDS employees

Management Plan: With the support of ITS, RDS will investigate CBORD's scalable functionality, specifically for inventory, purchasing, and cost allocation.
- CBORD Purchasing Module – Software has been tested and is ready for implementation.
- CBORD Inventory Module – RDS is in the process of evaluating the cost of implementation, including necessary software and hardware.

Training and development needs will be reviewed to ensure that current CBORD modules are effectively used. Some of the RDS leadership team attended the CBORD User Group Conference in October of this year to expand knowledge and discuss best practices.

CORRECTIVE ACTIONS IN PROGRESS
Safety and Security
RDS recently created a Safety Committee charged with identifying and helping to resolve institutional safety concerns. Interviews and a review of committee meeting minutes indicate the group is well organized, informed, and productive. Safety concerns/barriers identified during the audit and discussed with the Chair of the Safety Committee include:

- RDS operations adhere to HACCP Food Safety guidelines; however a standardized HACCP plan for all units does not exist. HACCP is a systematic preventative approach to ensure safe and effective production processes in all stages of the food chain. RDS efforts to standardize procedures for all units were noted during the review.
- Use of designated Occupational Safety and Environmental Health (OSEH) resources
- Insufficient documentation of emergency communication procedures
- Insufficient security around loading docks and storage areas

The RDS Safety Committee was aware of most of the issues identified during the audit and is working on ways to address them. University Audits will revisit these issues during follow-up to assess progress.

Capital Planning

Housing has used the experience gained during its participation in the construction of North Quad, U-M's first new residence hall since 1967, to improve its internal capital planning processes. The North Quad project was complex and challenging in that it involved numerous stakeholders from across the University and required collaborative and thoughtful allocation of a limited amount of space among both academic and non-academic priorities. Adjustments to the interior design and structure of the building were made in an effort by stakeholders to balance these priorities. Despite these efforts, capacity issues in the dining hall were noted, particularly during the lunch service. This issue is reported to be a result of both insufficient seating capacity and the popularity of the cuisine. It appears the seating capacity issue would have been difficult to avoid given space constraints. It should be noted that the North Quad dining staff was observed to be highly effective and capable of serving up to 1,000 meals during a single service.

Housing has used lessons learned during its participation in the North Quad construction process to:
- Enhance working relationships with Architecture, Engineering and Construction
- Involve operational staff with implementation level expertise in construction phase decision-making, as well as pre-construction planning, to ensure optimal outcomes
- Include regular review and adjustment of strategy throughout construction to minimize post-construction design and infrastructure changes

Throughout the audit, RDS staff reported a much greater degree of involvement in pre-construction planning for renovation of the dining halls in East Quad and South Quad. Housing and RDS leadership are encouraged to remain involved in capital planning throughout all phases of construction. Continue to attend status meetings jointly to ensure both RDS and Housing have a voice in any decisions made. This will allow management to stay informed of necessary changes that may call for adjustments to design layout, future equipment, and other asset purchases.

SUMMARY

RDS has the respect of its peers and the university dining industry. This is emphasized by having won the NACUFS most prestigious award this past year, the Gold honor for the 2011 Loyal E. Horton Dining Award. During the audit, employees were helpful, productive, and courteous, often answering questions while simultaneously preparing meals, stocking shelves, and wiping down tables.

RDS involvement in strategic and capital planning is essential to ensure the operation benefits from the knowledge of those charged with implementation. A comprehensive review of staffing needs is necessary to address heavy workloads and insufficient staff to student ratios. This effort should also seek to address the lack of administrative support needed to ensure well-controlled financial processes.

Housing Business and Finance is poised to provide the data and metrics needed to support performance.

Central support is needed to assist with training and development, oversight reporting, and data analysis. Strong communication and collaboration between Housing and RDS management is critical to building a strong control environment that will help RDS progress toward its objectives effectively and efficiently.

A formal follow-up to the outstanding issues will be conducted during the third quarter of fiscal year 2013.

Travel and Expense Management System   2012-103
Report issued November 27, 2012

The University of Michigan uses the Concur Travel and Expense Management System (Concur) to enter, track, submit, approve, and reconcile employee business travel, hosting, P-Card, and reimbursable out-of-pocket business expenses for all University employees (approximately seven thousand faculty and thirty-five thousand staff). Concur is a third-party provider of web-based, integrated travel and expense management solutions. More than 10,000 customers globally in various industries, including several higher education institutions, use this product.

Concur includes an online travel booking tool that is integrated with the expense portion of Concur. This tool can be used to make travel arrangements, and is used in conjunction with TSI (Travel Services International) USA, the University's designated travel agency. TSI USA offers faculty and staff access to U-M negotiated rates on airfare, hotels, rental cars, and other business travel services. U-M discounts are offered when booking business travel with TSI USA, either through the Concur online travel-booking tool or via agency-assisted calls. Concur also has a data warehouse and reporting tool for reporting and exception flagging.

U-M's Procurement Services (Procurement) is primarily responsible for managing the Concur process. Procurement develops training and communications, manages the contract with Concur Technologies, Inc., monitors expenses for compliance with University guidelines, performs audits of expense reports submitted through Concur, and coordinates with Information Technology Services to manage the data transfer process.

Units are responsible for establishing and documenting unit-specific business processes for submitting, approving, and monitoring their travel and expense reports by:
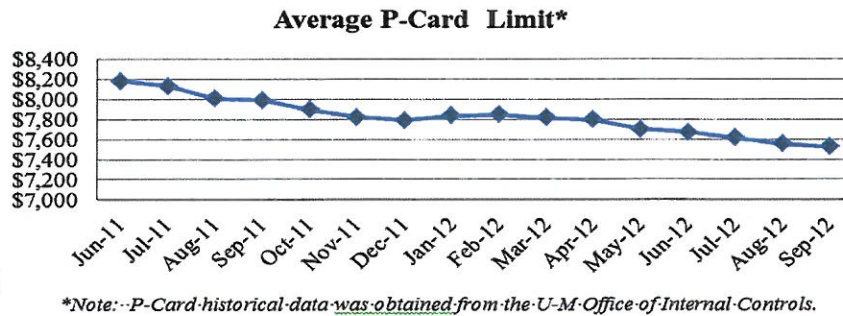- Ensuring timely submission of expense reports
- Clarifying who is authorized to approve, including what they are authorized to approve and for whom (approvers must be a higher authority)
- Reviewing expense reports to ensure fiscal responsibility and compliance with University guidelines
- Monitoring travel and expense activity to validate expense reports were approved by a higher authority and reviewing for potential inappropriate activity.

Prior to the introduction of Concur, travel and expense reimbursement was handled with a combination of internal electronic tracking systems and paper-based, manual systems. The implementation of Concur began in fall 2009 with a pilot program and was gradually expanded to the entire University by winter 2011. U-M has benefited from using Concur in the following main areas:
- Improved internal controls, transparency, and enhanced audit structure
- More meaningful spend reporting resulting in greater negotiating power for the University (Procurement recently established strategic contracts with catering suppliers such as Food Art, Produce Station, and Zingerman's Catering using Concur spend analysis.)
- Quicker payment turnaround, while allowing employees the ability to track their report status, e.g., waiting for approval, in audit, sent for payment (This information was not available with the previous manual system.)
- Vendor provided electronic receipts (vendor dependent, but major vendors are included)
- Reports can be submitted and approved electronically from anywhere with internet access

- Procurement estimates an annual savings of over $600,000 from using Concur's online travel booking tool. This savings is mostly from airline discounts, voided ticket refunds, waived fees, and banked tickets.

Since implementing Concur, the University has reduced exposure to P-Card risks. With Concur, the turnaround time for reimbursement is quick so more employees are comfortable not having a P-Card. Additionally, from June 2011 to September 2012, the total P-Card limit amount decreased by $4.7 Million. The following chart displays the average limit based on the number of P-Cards, which has also decreased:

Average P-Card Limit*

Note: P-Card historical data was obtained from the U-M Office of Internal Controls.

During fiscal year 2012, more than 149,000 expense reports totaling over $135 million were processed through Concur. The graph below displays travel and expense information for the past four years. P-Card spend as a percentage of total travel and expense has decreased each fiscal year since implementation of Concur.

Travel and Expense Detail By Fiscal Year
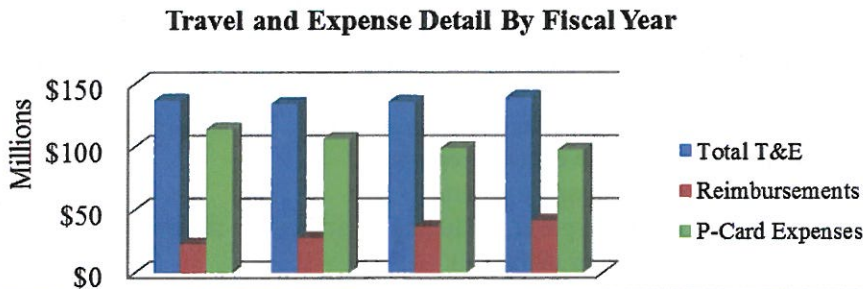
Travel and hosting expenses remains a significant portion of total Concur activity. Concur has specific audit rules, alerts, and system controls that help ensure compliance with the University's travel and hosting guidelines.

FY12 Concur Spend by Account
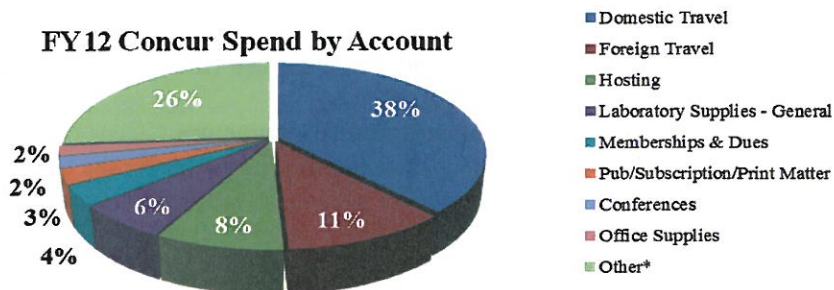
Other includes all expense categories that represented less than 2% of the total spend for fiscal year 2012. Some of the higher volume categories include: Advertising, Building and Hardware Supplies, Electronic Supplies, Cellular Phone, Computer Software/Supplies, Computers - Under $5,000, Equipment Maintenance, Freight Charges, Research Publication Costs, Supplies-Instruct Materials, Surgical/Medical Supplies, Wearing Apparel, and Employee Development.

PURPOSE AND SCOPE

Audit objectives:

- *Training and Customer Service*: Assess the adequacy of training and customer service to ensure the Concur system is understood and used properly across the University.
- *Expense Report Auditing*: Confirm that internal and external expense report auditing procedures are effective and efficient.
- *Concur Reporting*: Evaluate procedures to ensure the University is using Concur reporting tools and information to its full potential.
- *Data Management*: Assess process to manage data maintained in Concur and exported from Concur to M-Pathways.
- *Internal Control Improvement*: Verify that internal controls have improved with the implementation of Concur.
- *Contract Management*: Obtain an understanding of procedures to ensure the contract with Concur Technologies, Inc. is managed appropriately to guarantee consistency with terms and a maximum benefit for the University.

To complete the review, University Audits interviewed several staff from Procurement Services, obtained feedback about Concur from a sample of business administrators across the University, reviewed relevant documentation, policies and procedures, and analyzed travel and expense data University-wide.

INTERNAL CONTROL IMPROVEMENTS

One of the main benefits from implementing Concur is the overall improvement in internal controls around travel and expense processing.

- Reduced exposure to cash risks from travel advances and ATM withdrawals. The travel advance account balance has reduced 49% from $1.70 million to $.83 million. 1,252 cardholders no longer have access to ATM withdrawals; an approximate reduction of $1.9 million in potential risk. (This information is based on data analysis provided by Procurement Services who explained that the current travel advance account amount includes additional balances that were not included in the past, therefore the comparative reduction is more significant)
- Electronic attestation by the employee and approver that expenses are appropriate and consistent with University guidelines.
- Improved data for identifying employees who are not in compliance with University policy and standards:
  - Personal charges on P-Cards
  - Outstanding P-Card transactions
  - Potential duplicate payments
  - Purchases outside of strategic contracts
- Electronic audit trail that is visible to the employee, approver, and Concur auditor. This enables the auditor to determine whether receipts and supporting documentation were reviewed by the approver.
- Over 70 potential exception rules and flags are built into Concur. Some require the user to make a necessary update before the report can be submitted. The system will automatically educate users on U-M policy based on various exceptions.

OBSERVATIONS AND RECOMMENDATIONS

<u>Central Monitoring</u>

Procurement uses several reports to monitor travel and expense activity. The following are a few examples of these reports:

- *Timed-Out (Monthly)*: Displays approvers who let expense reports time out, which results in the report being returned to the employee who submitted it.

- *Split P-Card Transactions (Monthly)*: Identifies individuals that may have purchased items costing $5,000 or more by making two or more P-Card charges of less than $5,000 each to avoid the competitive bidding process, using the same card or multiple cards.
- *Outstanding/Late P-Card Transactions (Quarterly)*: Identifies individuals with outstanding P-Card expenses six months and prior; cards are suspended until the transactions are reconciled.

Data analysis performed by University Audits identified two main areas that would benefit from additional monitoring to ensure proper controls in Concur:
- Monitoring the approver role
- Monitoring the use of vague business purposes

Approver Role
Thorough and effective review of individual expense reports is one of the most critical controls in the travel and expense process. Concur, as currently implemented, does not have system controls that designate a specific approver for each employee using Concur or monetary limits for each approver. Users can readily change approvers without higher level knowledge or approval. Collaboration between units and the University's decentralized environment are two of the reasons for this design. While this capability allows flexibility, it increases the risk of inappropriate approvers.

- *Approvers Lacking Higher Administrative Authority*: University Audits identified numerous reports that were submitted by someone with the words Director, Manager, or Professor in their title that were approved by someone with Assistant or Secretary in their title[1]. A few examples of the results are included in the table below. The lack of higher authority review and approval for expenses is a common theme and root cause for findings in audits and investigations.

Submitters Title	Approvers Title
Associate Director	Administrative Assistant Intermediate
Project Management Office Assistant Director	Administrative Assistant Intermediate
Executive Director	Administrative Assistant Senior
Director of Student Affairs	Administrative Assistant Senior
Administrative Director	Admin Asst Sr Healthcare
Manager of Graduate Education	Student Admin Asst Sr
Admin Manager Inter Healthcare	Admin Asst Sr Healthcare
Project Manager Senior	Admin Asst Sr Healthcare
Program Director	Senior Secretary

- *Approvals Outside of Department Expense Group*: Since fiscal year 2012, there are approximately 3,800 expense reports (totaling approximately $2.7 million) that have one or more expenses on them that were not reviewed by anyone in the department group where the expense was charged[2]. These expenses are not necessarily inappropriate; however, the lack of a system maintained approval hierarchy increases the risk of unallowable expenses, budget overruns, errors, and misappropriation.

- *Improve Approval Workflow and Monitoring*: Establishing an authority workflow hierarchy in

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[1] It is not possible to determine the actual volume of expense reports that were approved without a proper higher-authority review because data that clearly defines who is an appropriate authority level for an expense does not exist.
[2] Transactions where the approver is an appropriate higher authority, but has a different department group than the submitter were removed from the results.

Concur would ensure that the right individuals approve expense reports. The Concur Implementation Steering Committee, in consultation with users and stakeholders, decided this system control would be too costly to maintain and would not fit the complex needs of the University. As an alternative, to mitigate risk and help ensure approvers have proper authority:
  o Require all employees to set a default approver in their profile
  o Provide guidance on who constitutes an appropriate higher authority that should be set as the default approver
  o Monitor the data to ensure default approvers have been properly established

Continue to educate department and school administrators to periodically monitor approval flows in their units. Default approvers receive automatic notifications about their employees' expense report activities. These default notifications provide them with the awareness and knowledge to ask questions when necessary. Requiring use of the default approver field would also permit improved reporting to monitor that appropriate individuals are approving expense reports.

The following table details opportunities to monitor the approver role more closely.

Results from University Audits Data Analysis	Additional Monitoring Opportunity
54% of people who have approved an expense report have not taken the required approver training; additional 20% took it more than one year ago (analysis performed as of May 2012)	Centrally confirm and monitor that approver training has been completed at least annually
350 individuals approved more than 25 expense reports in at least one single month 41 individuals approved more than 100 expense reports in at least one single month (Analysis performed for fiscal year 2012)	Monitor the number of expense reports approved by each person in a single month for situations where approvers may not be conducting a thorough and effective review prior to approval
209 individuals are set as the "Default Approver" for more than 25 employees 87 are set for more than 50 26 are set for more than 100 (Analysis performed as of June 2012)	Review of approvers that are the default approver for more than a designated number of employees
14% of employees that submitted at least one expense report during fiscal year 2012 have not established a default approver. This does not include employees who have a profile in Concur, but have not submitted an expense report. 2,550 employees have a default approver who is not in the same department group. Some of these are the appropriate higher authority. (Analysis performed for fiscal year 2012)	Require and confirm that users establish a default approver of appropriate authority
343 expense reports were approved by 5 or more individuals (excluding any auditor or system approvals) (Analysis performed for fiscal year 2012)	Reach out to units that have a pattern of five or more individuals approving their expense reports to ensure they understand the controls in Concur and have established efficient processes

Transactions with a Vague Business Purpose
The business purpose is one of the essential fields used to demonstrate the appropriateness of an expense and fiscal responsibility. It is also an Internal Revenue Service requirement to support the University's tax exempt status. Procurement reviews the business purpose field as part of their expense report auditing process and recently created a user job aid explaining how to document an appropriate business purpose.

Although Concur requires the business purpose field to be populated, University Audits identified approximately $14 million in expenses that were approved with a vague business purpose[3] during fiscal year 2012 (representing about 10% of total expenses). The following are some recent examples of the types of business purposes identified: July P-Card Transactions, Lab Supplies, P-Card Reconciliation, Office Supplies, Reconcile PCard Statement, Lab PCard Expenses, Supplies, and Graduate Supplies.

In recent months, Procurement reached out to approvers to discuss the information that should be included in a business purpose. The chart at the right shows that the volume of expense reports that have one or more transactions with a vague business purpose decreased in the last three months of fiscal year 2012, compared to the first three.

Fiscal Year 2012: No. of Expense Reports with Transaction(s) that have a Vague Business Purpose
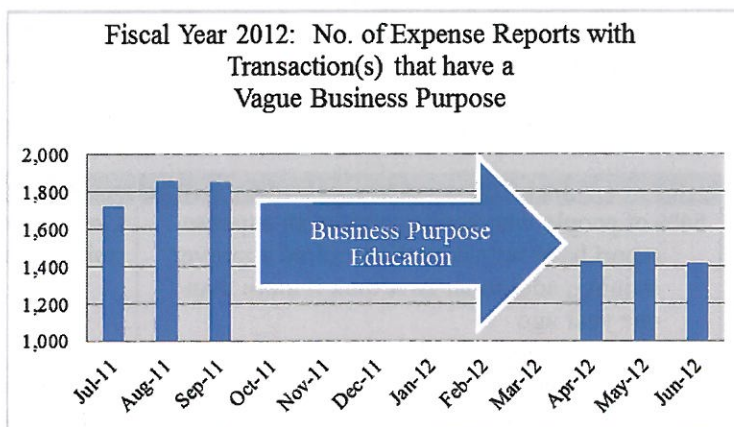
It is not reasonable or cost effective to expect follow-up for all expenses that may have a vague business purpose. Several individual approvers have approved a high volume of expenses with a vague business purpose. Data could be used to target specific approvers and departments that have large and repeated volume of vague business purpose.

Unit Reporting
Procurement has provided several resources to help units monitor their travel and expense activity.
- A Concur reporting team exists to manage and create additional reports in Concur as needed.
- Three monitoring reports are automatically distributed to department administrators on a monthly basis. (Outstanding P-Card Transactions, Expense Exception Analysis, Unsubmitted Expense Reports)
- Several U-M maintained reports are available in Business Objects, including reports to validate that user roles are suitable and to confirm expense reports were approved by an appropriate level authority. There is also a link to some of these reports in M-Reports.
- The Travel and Expense Advisory Committee advises Procurement on an on-going basis about additional reporting needs.

A common theme in the feedback provided by users is the need for additional data and reports to monitor their travel and expense activity and that the existing reports are not user-friendly. One of the main obstacles

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[3] The logic used to identify expense reports that have a vague business purpose extracted records that had the following words in the transaction line business purpose: "PCard", "P-Card", "supplies," "general," "business," "expenses." University Audits then used some additional filters to remove "false-positives." The logic was not perfected; there are false positives included in the results as well as additional exceptions that are not included in the totals. Totals are approximate, but support the recommendations. Determining whether a business purpose is well documented is also subjective.

with travel and expense reporting is that users are not aware of existing resources or do not understand how to properly navigate or use reports. For example, there is a Business Intelligence role that, if properly set up in a unit, would allow users access to additional reporting in Concur. Currently, only half of the U-M's department groups have at least one employee designated as a Business Intelligence Manager. Also, the M-Report links to the travel and expense reports may be difficult to locate for someone who does not use them frequently.

To help administrators progress to the next level with reporting and monitoring travel and expense activity:
- Reach out to administrative groups, such as the Business Administrators Group and chief department administrators in the Health System, to share existing resources such as the Business Intelligence role, U-M Maintained Business Objects reports, and using the department reference field to link related expenses. This would also be a good opportunity to obtain user feedback for making further enhancements.
- Develop alternative ways to make travel and expense reporting more accessible and easier to use. One suggestion that would enhance monitoring for unit administrators is to move the links to the existing reports from the Compliance tab in M-Reports to the Financial Management tab. Create a Travel and Expense section that could include valuable data and trends, such as:
  - *Cash Advance Activity*: Highlighting advances that were reconciled late, the amount actually used compared to the advance amount, the purpose for the advance, and increase/decrease in advance activity
  - *Concur Exceptions*: Highlighting patterns in the various exceptions rules in Concur, such as users or departments that submit late reports, meals above the limits, mileage reimbursements with rental car expenses, high volume of personal expenses
  - *Approver Analysis*: Highlighting approvers that have not taken the training, approvers with a high volume of approval activity, approvers outside of the department group for the expense, too many approvers for one report, approvers not reviewing receipts
  - *Fiscal Responsibility/Budgeting*: Displaying activity by the department reference field so managers have better reporting to analyze the total cost of specific events
- Periodically evaluate the fields that are exported to the Data Warehouse for reporting through Business Objects. For example, several users indicated it would be helpful to have the comment field from Concur in the Data Warehouse for reporting or the expense approver on the Statement of Activity.

Training and Customer Service
- *My LINC Training Materials*: Several resources are available to help employees use Concur. There are approximately 40 Concur training documents in My LINC, the University's Web-based training and documentation repository. Procurement and Information Technology Services manage these materials together to ensure they have accurate and relevant information; materials are updated on a quarterly basis. Many users are not aware of the breadth of resources available or do not understand how to find and navigate the My LINC step-by-step training guides. Determine ways to make the existing training documentation and information more readily available to users and easy to navigate. Quick tips or job aides that are available through a link in Concur may be helpful.

- *Procurement e-Newsletter*: In December 2011, Procurement started an e-Newsletter that often includes topics related to Concur. Since then, Procurement has issued two additional newsletters. The most recent includes helpful information about submitting Concur expense reports and using strategic contracts instead of the P-Card for supplies. The newsletters are posted on Procurement's website; however, they are "opt-in" and are currently only delivered to about 300 people. Expand the audience for the e-Newsletters and other training updates. Consider using other communication outlets such as the Record Update, Business Administrators Groups, and the Research Administrators Network.

- *User Feedback*: At the start of fiscal year 2012, Procurement established a Travel and Expense Advisory Committee. Faculty and staff from various units across the University serve on the committee on a two-year rotating schedule. The purpose of the committee is to provide a direct line of communication between Procurement and University representatives as Procurement continues to pursue opportunities for improvement to Concur and related travel and expense policies. Procurement also began to target specific units, such as UM-Dearborn and the Medical School to obtain feedback about Concur through surveys. The survey results were used to develop unit-specific training and suggest solution enhancements to Concur. University Audits encourages Procurement to continue developing new ways to obtain and use feedback from Concur users to further improve use of the system and the overall benefit to the University. The cause of individual unit issues with Concur is often due to a lack of understanding of the system's capabilities. Consider formalizing the process for conducting unit surveys to reach more units and identify additional enhancement and training opportunities. Share and promote cost savings information with the University community as well as the amount of potential savings that have been lost due to individuals not booking travel through Concur. This will help department managers and administrators encourage their employees to use the system's travel booking tool.

- *Approver Training*: Procurement is evaluating the required Concur approver training to determine the most effective and efficient way to ensure approvers have the information needed to properly review and approve expense reports. As of July 2012, approximately 54% of people who were the approver for at least one expense report had never taken the required approver training; an additional 20% completed the training over a year ago (approver training is required annually). Finalize evaluation of the approver training and monitoring methods. Consider developing a separate, annual "refresher" training with key reminders about compliance and any lessons learned from detected fraud or errors. Sending reminders to complete the training will also improve participation.

Data Validation

There are two data extracts from Concur to M-Pathways:
- A Standard Accounting Extract (SAE) file is downloaded from Concur to M-Pathways Financials each evening. This data is used to create both non-PO vouchers for employee reimbursements and cash advances, and P-Card vouchers. If money is owed to or from the employee, the data is written to the Concur Payroll Process table in M-Pathways.
- Data is sent from the Concur Data Warehouse to the U-M Data Warehouse each Sunday as eight .csv (comma-separated values) files based on six Concur Intelligence Reports. This data is then available for units to monitor their activity through Business Objects queries.

The SAE file is the primary source of data from Concur to M-Pathways. To ensure the integrity of the data, ITS compares a summary report from Concur to a summary report from M-Pathways for each nightly extraction. University Audits was not able to obtain additional information from Procurement regarding data validation processes, and therefore, cannot conclude on the adequacy of the procedures to validate either of the two data extracts.

Procurement should review and document the process for reconciling both the SAE extract and the .csv files sent to the U-M Data Warehouse to ensure it is designed to effectively identify and resolve any potential errors:
- Clarify what triggers exceptions in the summary reports for the SAE extraction. Confirm how the error values are determined.
- Verify a process to follow-up and validate potential errors.
- Confirm the existence of a process to validate the data transferred from the Concur Data Warehouse to the U-M Data Warehouse.
- Ensure trained back-up persons exist as part of continuity of operations procedures.

Expense Report Auditing

The University's contract with Concur Technologies, Inc. included Concur Audit Services – Enhanced (CAS). With this service, U-M paid a monthly base fee for a specific number of audits, then an incremental per audit transaction fee for anything above the base. On average, CAS was performing 65% of expense report audits and U-M's internal Accounts Payable audit team completed the other 35%.

In October 2011, Procurement began using weekly audit statistics reports to monitor both U-M's internal audit process and the audit services provided by Concur. For the month of March 2012, Procurement identified that CAS had not sent back a single report to an employee for questioning, compared to U-M's internal audit team's average return rate of 18%. Procurement performed a detailed analysis of CAS audits and identified concerns around CAS audits that led to Procurement and Concur renegotiating their contract. As of August 2012, the University performs all expense report audits. Due to this changing situation at the time of the audit, University Audits performed only a limited review of the expense report audit process.

Several users expressed frustrations with the inconsistency in the expense report audit process. At the start of the audit, there were no documented guidelines for U-M's internal expense report audit process. Procurement has now formalized and documented this process and improved the audit rules and sampling methodology. This will help ensure that expense report audits are consistent and effective. University Audits will conduct a follow-up review to assess the new process for auditing expense reports.

MANAGEMENT PLAN

We agree with the observations. Procurement Services will enhance monitoring of the approval role to ensure proper controls are in place. We will investigate reporting capabilities to monitor the appropriate higher level authority of approvers, to review approvals outside the department expense group, and to encourage that all employee profiles have a default approver designated. In addition, ongoing education opportunities will be conducted to better educate units about appropriate approvers and business purpose.

We will continue to educate units on appropriate business purpose, including links on Concur to quick tips and examples. We will explore options to track trends by unit so that we can focus our education efforts.

Procurement Services will enhance reporting available to units. We will reach out to units to communicate what is available as well as to collect feedback on what other information would be helpful. We will work to develop reports to help units monitor patterns and trends. Procurement Services will engage ITS to assist with making the reports more accessible and ensuring that the appropriate fields are in the Data Warehouse.

There are complexities in using an online system and we will have links on the Concur page to training, job tips, and our eNewsletter. Additionally, we will make efforts to communicate to users what resources are available and where these resources are located. We will review approver training for a refresher course and work with ITS to implement an automated email reminder when training is needed. We will explore opportunities to get user feedback on the system.

Procurement will document the process for data validation and file reconciliation and use cross training to ensure that we have trained staff to follow the process.

SUMMARY

Overall, Concur has improved the University's procedures for processing P-Card transactions and employee reimbursements. Controls that are built into the system, including several audit rules and required fields, help ensure compliance with University guidelines. Leadership now has additional reporting tools that can be used for monitoring expenses and negotiating better rates and discounts for the University.

Procurement is adequately monitoring the contract with Concur Technologies, Inc. The monitoring is a collaborate effort between the process owners in Procurement and the designated Procurement Agent. The contract is evaluated on a regular, ongoing basis. Through its monitoring, Procurement identified concerns about the contracted audit services and addressed the gap. The University now performs all expense reports audits internally.

The entire University has been using Concur for over a year and a half. For this initial phase, Procurement has effectively managed the implementation of Concur, creating several training documents and reaching out to individual users through surveys and the Travel and Expense Advisory Committee. The following are some of the ways that Procurement can help the University evolve in its use of Concur to maximize the benefits from the system:
- Continue training and communication efforts through creative methods such as the Procurement newsletter, departmental surveys, and job-aids.
- Expand central monitoring to include analysis of approvers and business purpose across the University and target specific departments that may need additional guidance and training.
- Develop additional user-friendly, trend-based reporting tools that department leadership can use to ensure fiscal responsibility and proper procurement processes in their units.
- Evaluate and document procedures to validate and reconcile data transferred between Concur and M-Pathways to confirm existing processes facilitate identification and resolution of potential errors.

University Audits will assess management's progress towards achieving goals for improvement during the second quarter of fiscal year 2014.

Information Technology

MiShare Secure File Transfer	2013-305
Report issued November 28, 2012	

The University of Michigan Health Systems (UMHS) consistently handles large data files that contain sensitive data that need to be sent to other departments or people in and outside of UMHS. UMHS email limits the size of file attachments and is not an option for sending sensitive data outside of UMHS due to security and privacy concerns. MCIT purchased a managed file transfer (MFT) solution (MOVEit™) from a commercial vendor (IPSWITCH File Transfer) and rebranded it as MiShare. MiShare provides a method for UMHS personnel to transfer files securely including files that contain electronic protected health information (ePHI), protected research data, or other sensitive information between UMHS personnel or external partners. By using secure protocols to transmit the data and encrypting the stored files, MiShare enables individuals with a level 2 account[4] to send all types of files to other parties.

Using MiShare, departments or units can request regularly scheduled file transfers, such as service unit billings, for jobs that reoccur. Scheduled file transfers to a business partner are configured individually with connection information provided by the business partner. At U-M, the MCIT Linux team creates accounts for external parties that initiate scheduled file transfers that require a connection to UMHS servers to send or retrieve files.

PURPOSE AND SCOPE
The UMHS Compliance Office conducted a risk assessment of MiShare based on a blended methodology from the Centers for Medicare and Medicaid Services (CMS) and the National Institute of Standards and Technology (NIST). University Audits' objective for this audit was to review areas of risk in MiShare that were not covered by the UMHS Compliance Office's risk assessment. University Audits sought to:

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[4] UMHS uses levels to distinguish between campus-issued (level 1) and UMHS-issued (level 2) computer accounts

- Review and assess configuration management techniques
- Identify the protection mechanisms in place to prevent computer viruses from being transmitted via MiShare
- Determine if proper data is being collected in the audit logs for security and job purposes

Prior to conducting the audit of MiShare, University Audits reviewed the risk assessment completed by the UMHS Compliance Office. Intentions were not to duplicate the efforts of the Compliance Office but to identify any areas that the Audits Office may be able to add value to the process. The risks and controls within MiShare identified and validated by the UMHS Compliance Office's risk assessment report dated June 2012 were deemed out of scope for this audit.

RISK AND CONTROL DISCUSSION

MiShare services are supported by Infrastructure and System Operations (ISO)-Enterprise Hosting and Integration Services (EHIS)-Linux team while the servers are supported by the ISO-EHIS-Windows team. Medical Center Information Technology (MCIT) has documented configuration controls, and the Linux and Windows teams worked together to ensure that configuration controls were in place prior to deployment of the MiShare services. They also worked with ISO-Network and Security Services -TechSecu team to validate security of the servers and services by conducting vulnerability scans. All issues were addressed and mitigated by MCIT prior to the MiShare service deployment. University Audits, with the assistance of the TechSecu team, conducted additional vulnerability scans during the audit to ensure proper configuration controls were still in place. All scan results verified that these controls were implemented properly and are effective.

MCIT deploys anti-virus software on all common core workstations they maintain. Such workstation-based deployment of anti-virus software provides an important level of control for securing data transfers. Although MiShare has the capability of transferring uploaded files to an anti-virus system for scanning, this functionality would require additional server infrastructure and is unnecessary because of the implementation of workstation-based anti-virus protection described above.

Business-to-Business transfers can be done securely and monitored via the MiShare audit logs. A comprehensive review of these audit logs was included with the UMHS Compliance Office's risk assessment. University Audits also reviewed scheduled business-to-business file transfers in these audit logs and found no discrepancies with the content the logs were storing and the alerting methods used when the transfer of a file failed.

SUMMARY

Use of the secure protocols in MiShare allows UMHS personnel to send and receive large and/or sensitive information in a secure and efficient manner. Effective policies and procedures are in place governing the administration of MiShare. Maintaining the current level of control over MiShare will ensure this service will continue to be a reliable and secure method for UMHS and its partners to transfer sensitive data. University Audits did not identify any issues concerning system administration or configuration of MiShare. This audit is closed.

Hospitals and Health Centers

U-M Hospitals and Health Centers Wireless Medical Devices and Networks Report issued October 29, 2012	2012-315

A growing percentage of the advanced medical devices used to provide and support patient care at the University of Michigan Health System (UMHS) interface wirelessly with other devices and networked systems. Wireless devices enable caregivers to monitor patients continuously, including in their homes, without impacting patients' mobility. Wireless connections facilitate real-time exchange of diagnostic results

in locations where wired network connections are not always available. Eliminating cables also reduces trip hazards and improves patient comfort by making devices more flexible and less cumbersome.

Patients in UMHS benefit from all of these aspects of wireless technology in the form of portable X-ray machines, wireless infusion pumps, wireless electrocardiography (ECG) carts, wireless medical telemetry, and implantable defibrillators (ICDs) among many others. UMHS also uses wireless technology in a multitude of clinical and operational support roles, including tablet and laptop computers, equipment location tracking, foot-operated imaging controls, telephones, and headsets. The pervasiveness of wireless communication in a hospital environment requires careful and deliberate planning and management. Wireless technology is being integrated with more and more diverse types of equipment, and more departments own and operate wireless devices. Ensuring that wireless risks have been appropriately addressed in the equipment selection and deployment process becomes a significant challenge.

RISKS
Wireless networking exhibits several established risks. The impact of those risks when patient care is involved raises the stakes considerably. Following are some examples.

Security - Sensitive patient information could be exposed to eavesdroppers if there ia a failure to ensure a device only connects to trusted wireless devices and networks, and uses strong encryption when exchanging data. A demonstration in 2011 at the Black Hat information security conference showed that an insecure wireless insulin pump could be remotely reprogrammed or disabled, endangering the patient's safety. Later analysis proved this hack is fully remotely exploitable – no physical access to the patient or pump is required.[5]

Safety - The capacity of wireless spectrum to carry wireless communication is limited. Carelessly configured devices and vast numbers of consumer devices threaten to overwhelm the spectrum, squeezing out or disrupting operation of wireless medical devices. Such disruptions, while unlikely to be life-threatening, could cause delays in patient care as caregivers pursue alternative approaches.

Regulatory Compliance - The Health and Human Services (HHS) Office of Civil Rights (OCR) includes wireless on its list of enforcement priorities for the HIPAA Security Rule. OCR's concerns include authentication requirements, encryption, and intrusion detection. In addition to HIPAA Security compliance, wireless in healthcare facilities is becoming a specific target of medical device regulation by the Food and Drug Administration (FDA).

PURPOSE AND SCOPE
The purpose of this audit was to:
- Determine whether UMHS effectively manages the acquisition and operation of wireless medical devices.
- Determine whether Medical Center Information Technology (MCIT) effectively manages the UMHS enterprise wireless network and control of the Wi-Fi transmission space in UMHS facilities to ensure the stability and security of Wi-Fi communication, including by wireless medical devices.

The key objectives addressed in this audit were:
- Ensure institutional policies and procedures support safe and effective use of wireless technology
- Identify wireless medical devices supported by UMHHC ancillary units
- Ensure wireless medical devices currently deployed by UMHHC ancillary units are configured for secure wireless operation

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[5] http://www.cso.com.au/article/404909/

- Ensure that the equipment acquisition process gives due consideration to the technical risks of wireless medical devices
- Confirm wireless networking is systematically managed through access restriction, authorization, monitoring, and enforcement
- Ensure that wireless networks and systems effectively control access through authentication and encryption
- Verify that unauthorized wireless access points are effectively counteracted to prevent circumvention of the controls implemented in approved wireless networks

RISK AND CONTROL DISCUSSION

UMHS has two policies addressing wireless data communication:
- Policy 05-02-004 focuses on wireless communications equipment interference with medical devices.
- Policy 01-04-508 focuses on protecting the UMHS Wi-Fi wireless communication space, naming MCIT Networking as the sole provider of Wi-Fi networks within Health System buildings and establishing a course of action by which MCIT may address interfering or competing wireless devices. This policy was updated in 2011 to include the assurance of adequate bandwidth for mission-related activities.

These policies adequately establish responsibility and authority to ensure safe and stable wireless communication within Health System facilities.

Pursuant to these policies, MCIT Networking maintains an Enterprise Wireless Network that employs authentication and encryption. The medical devices reviewed during this audit connect to this Enterprise Wireless Network, but the specific security mechanisms applied dep
end on the capability of the device. Newer devices generally support 802.1X, the strongest and most commonly deployed wireless security mechanism at UMHS.

With cooperation from units managing electronic medical devices including Cardiology, Radiology, and Biomedical Engineering, we identified a wide range of medical devices known to use wireless communication. Based on those responses we selected the following types of devices for review:
- Portable X-ray
- ECG Carts
- Infusion Pumps
- Cardiac Device Programmers

The control and security of the Enterprise Wireless Network, including the degree to which it exposes wireless-connected medical devices, was also reviewed in this audit.

Wireless Connection Security
Discussion: Some of the devices reviewed do not support current strong wireless encryption modes because the device manufacturers have ceased updating the wireless capabilities. The UMHS Enterprise Wireless Network includes older network names (SSIDs) with reduced security to accommodate these devices. MCIT employs additional controls, such as registering the hardware addresses of clients connecting to these SSIDs, but these controls cannot truly compensate for flawed encryption.

Unauthorized individuals exploiting security weaknesses in wireless medical devices may endanger patients by manipulating devices or violate patient privacy by intercepting confidential data.

Network statistics showed that at least 335 unique devices connected to the older SSIDs during an eight-day period. The purposes for which these devices are used are not easily ascertainable. Some may be standard

computing devices such as laptops, tablets, and smartphones. They may also be specialized equipment like the medical devices reviewed here that do not support modern security standards.

Control Recommendation: Systematically identify medical devices that connect to weakly encrypted Wi-Fi SSIDs, and pursue upgrades to their Wi-Fi capability or replacement as warranted. Share a summary report of findings with administrators of all clinical service units to increase awareness of this issue.

Management Plan: Management in Biomedical Engineering, MCIT, and Cardiology recognize the risk associated with weak encryption, and are undertaking a proof of concept designed to mitigate it. Biomedical Engineering and Cardiology will consult with equipment vendors to determine whether U-M's specific devices support more advanced encryption methods, and if not, determine replacement costs under current contracts. MCIT is reviewing the full record of devices registered to use these networks, and will work with owners of these devices in a similar manner to determine an appropriate transition strategy prioritizing patient care.

Inclusion of MCIT in the Procurement Process
Discussion: UMHS Contracts and Procurement evaluates new equipment under a host of criteria including clinical performance, patient safety, usability, and cost. If IT compatibility and security concerns are brought up by the unit requesting to purchase the equipment, they are fully investigated in conjunction with MCIT, which is responsible for the stability and security of the UMHS network. All of the medical devices reviewed in this audit were purchased and deployed in this manner.

On some occasions, however, the network capabilities or wireless functionality of devices has not been recognized or made clear until after the devices have been purchased and deployed. If such devices cause problems for other hospital systems, MCIT must retroactively assess the devices and help the unit devise a mitigation strategy.

Control Recommendation: Develop clear guidelines in the hospital procurement process for including and involving MCIT in the evaluation and selection of any device that will connect to the UMHS network, including the UMHS Enterprise Wireless Network, and verifying that devices do not contain functionality violating the Restricted Devices section of UMHS Policy 01-04-508. Potential process improvements include:
- Providing a list of keywords or phrases for Procurement to watch for in RFPs that describe device functionality or operation to trigger queries with MCIT or IT staff in the acquiring department
- Obtaining an assertion by the acquiring department that the device does not connect to the UMHS network and complies with UMHS policy
- Designating one or more point persons in MCIT to coordinate MCIT consideration and review of device proposals, including routing to experts in networking and enterprise systems
- Developing an MCIT process flow and integrating with the UMHS Contracts and Procurement process
- Establishing a sign-off indicating MCIT approval of the proposed device(s), without which procurement agents will not proceed
- Leveraging the Capital Equipment Committees for escalation and resolution of disagreements

Management Plan: MCIT and Procurement agree on the need to address this issue. An effective solution requires analysis of a number of business processes and coordination between several teams. MCIT and Procurement will create a working group to design and implement control enhancements so that wireless and other IT issues with medical devices are identified and addressed in a consistent and effective manner.

Wireless medical devices are improving patient care and enabling new forms of patient care at the University of Michigan Health System. However, this technology also carries safety and security risks. Many of the

wireless medical devices currently in use at UMHS have controls sufficient to mitigate these risks, but some older devices do not. Prioritizing the upgrade or replacement of these older devices and ensuring that Medical Center Information Technology participates in the evaluation of new wireless medical devices will protect the stability and integrity of the wireless data environment in the Health System. These steps will allow MCIT to streamline and simplify the Enterprise Wireless Network, further improving the performance and capacity of this strategic resource.

University Audits will follow up in the third quarter of fiscal year 2013 to assess the implementation of corrective action.

School of Nursing   2012-209
Report issued November 21, 2012

The academic nursing programs on the University of Michigan's Ann Arbor campus are housed in the School of Nursing (UMSN). UMSN prepares nurses at the baccalaureate, master's, doctoral, and postdoctoral levels. UMSN is consistently ranked among the top nursing schools in the nation and follows the University's mission of education, research, and service. The primary mission of UMSN is to improve the health and well-being of society through the impact of research and by educating nurses for leadership in academic and practice roles. Total student enrollment in fall 2012 is 988, compared to 720 total students eleven years ago in fall 2001.

In March 2012, the U-M Board of Regents approved the design for a new $50 million UMSN building planned for the northwest area of campus, across the street from the school's current location. The building will provide upgraded classroom space and an improved

A rendering of the approved $50 million School of Nursing classroom and student services building.

student services and learning environment for the increasing student population. Administrative and faculty offices will remain in existing facilities. Formal groundbreaking is set to take place in spring 2013 with anticipated move in during fall 2015.

UMSN recently closed their community-based nurse managed clinics in the Ann Arbor area and entered into an agreement with the Community Health and Social Services Center (CHASS). CHASS is affiliated with the Henry Ford Health System and is a community-based, not-for-profit organization. Both faculty and students are actively practicing at CHASS.

UMSN has a Faculty Practice Plan (FPP) that is comprised of UMSN faculty who maintain an active nursing practice. UMSN encourages their faculty to develop practices that address specific clinical, educational, research, or business needs based on their area of scholarly interest. The FPP exists as an innovative partnership between UMSN faculty, local communities, and organizations. University of Michigan Health System is the primary practice partner for both the student clinical practice and the FPP, but there are other external locations.

PURPOSE AND SCOPE
The scope of the audit focused on central operational processes in the School of Nursing on the Ann Arbor campus to determine if policies, procedures, and the internal control structure are adequate, effective, and comply with University policies and procedures. The nursing program on the Flint campus is part of the Flint School of Health Professions and was not part of the audit scope.

University Audits evaluated the adequacy and effectiveness of controls governing the following processes in the School of Nursing:

- International travel/Global Outreach
- Payroll
- Faculty Practice Plan
- Clinical Practice Affiliations
- Purchasing
- Cash and credit card transactions
- Admissions
- Financial aid
- Grant management
- Budget monitoring and financial oversight
- Conflict of interest/conflict of commitment
- Information technology
- Development

RESULTS

Controls over business processes were strong and conformed to University standards in the following areas:

- UMSN Office of Global Outreach manages the Visiting Scholar Program. The Program has a documented process flow for creating an initial relationship and entering into a memorandum of understanding (MOU) between UMSN and a foreign institution. The Office of General Counsel reviews and approves the MOUs to ensure the relationship meets U-M legal requirements. UMSN has developed and uses a checklist to ensure all visiting scholars meet pre-arrival and arrival requirements.

- Controls over the payroll function are strong. Early in calendar year 2012, UMSN moved to using the online timekeeping system. UMSN appropriately uses static groups to organize faculty and staff for timekeeping purposes, and has hired a central timekeeper to oversee the timekeeping process. Controls are in place to ensure accurate time entry and approval. Monitoring of payroll expenditures occurs on a regular basis.

- The Faculty Practice Plan is well controlled. UMSN has entered into a contractual agreement with the participating sites specifying the faculty member, time period the agreement covers, the expected faculty effort, and the financial commitment to cover the salary and benefits for the faculty effort. The effort certification process documents and monitors the faculty effort. The UMSN Office of Business and Finance bills the practice sites for the faculty effort on a quarterly basis and monitors accounts receivable to ensure payments are received.

- Purchasing activity in UMSN is centrally monitored and well controlled. P-Card users are appropriate and approvers have taken the required training. UMSN has documented guidelines in addition to University Standard Practice Guidelines for travel and hosting. Travel and hosting expenditures are approved and have supporting documentations for purpose and attendees.

- Cash deposits are minimal since the closing of the Nurse Managed Clinics in January 2012. Cash and checks are collected primarily for Faculty Practice Plan billing, UMSN merchandise sales, proctor site student exam fees, and professor lecture fees. UMSN recently restructured their cash deposit function to a centralized cash depositor. Cash and checks are received in the divisions and units, recorded in a cash log, and then collected on a daily basis for deposit preparation by the central depositor.

- The admissions process is well controlled and uses documented procedures and criteria for acceptance. Selection committees evaluate the applicants. Their evaluation and decision notes are documented and stored securely. Conflicts of interest are identified and managed when present. UMSN coordinates regularly with the U-M Office of Undergraduate Admissions and Rackham Graduate School Office of Admissions.

- The financial aid process is well documented and covers budgeting, awarding, and monitoring of awards to students. UMSN bases their award decisions on an established Award Principles and Allocation Strategy. Staff in UMSN Financial Aid coordinate with the UMSN Business Office, Admissions, Development, and the U-M Financial Aid Office. The students who receive financial aid meet the minimum criteria and the award is posted to their student account.
- Management oversight of grant administration is well developed. Grant staff work closely with administrative staff to actively and adequately prepare grant budgets and monitor grant expenditures. Grant staff meet regularly with administrative staff to review grant financials and any subrecipient activity. A process is established and followed for changing faculty effort and monitoring faculty effort certification.
- UMSN management takes an active role in the financial monitoring and budgeting process by meeting regularly with faculty and staff to review spending. Statements of activity are reconciled and central administrative staff perform a timely review. Senior management is made aware of any variations from budget.
- UMSN has a robust conflict of interest/conflict of commitment process and is in the process of converting to M-Inform, an online system to disclose and manage outside interests. UMSN did not have any reportable conflicts that required a management plan.
- The Office of Information and Infrastructure Assurance completed a RECON risk assessment on UMSN core infrastructure in both 2007 and 2011. Even though the resulting overall Risk Profile between the two assessments has improved, the risk assessment identified issues to be addressed. The UMSN Office of Information Technology is in the process of developing a Risk Treatment Plan document where personnel are assigned to lead the implementation of each recommendation along with estimated timelines for completion.
- The Development Office process for receiving donations has separated duties and a single source of accountability. Donations are logged when received, deposits are timely, and staff confirm funds are used according to donor intent.

OPPORTUNITIES FOR IMPROVEMENT
Clinical Site Affiliation Agreements
Discussion: Clinical practice is an integral component of the UMSN mission, which encompasses a significant portion of the student's educational curriculum. Students benefit from the knowledge and hands-on learning that is only possible through applying theoretical skills in practice. Students are exposed to a variety of facets and applications of nursing, from major health systems and hospitals, to community based facilities and educational enrichment programs. UMSN has entered into affiliation agreements, which date back to 2001, with a variety of practice sites. Most of the agreements are open ended with no contract end date. University Audits reviewed the listing of clinical sites that are actively hosting students for the winter and fall 2012 terms and found that 40% of the open-ended affiliation agreements had not been updated in at least five years. These contracts affect less than 15% of the current student placements.

University Audits compared the older agreement template with the current agreement template recommended by the Office of General Counsel (OGC) and noted the older template does not reference the following:
- Confidentiality of client/patient information
- Confidentiality of student records
- Criminal background checks and/or drug screening
- Proof of current immunization and/or physical examination of student

Control Recommendation: Work with OGC to update all site affiliation agreements where there is current student placement with updated agreement template language. If non-active clinical sites become active, update the affiliation agreements before placing students.

Management Plan: UMSN management will plan to meet with the OGC to explore current template language (in terms of risk), and will review with their office how UMSN currently mitigates these risks in other ways. We will, together with the OGC, arrive at a mutually agreeable course of action (e.g., addendum or notice to our clinical agencies using the former template) that minimizes our greatest risk for UMSN and our nursing programs, which is the loss of student placements to other educational institutions. Details of the management response to this issue can be found in Addendum 1.

International Travel/Global Outreach
Discussion: An important focus for UMSN is providing students a global experience and knowledge in population health management. UMSN is in the early stages of developing an International Travel Program for students and created the Office of Global Outreach to manage the international activity. The School has partnerships with nursing schools in Brazil, China, Japan, Korea, Lebanon, Mexico, Thailand, and Tanzania. Previously, nursing students traveled abroad under the auspices of other programs on campus, such as the Center for Global Health, Center for Global and Intercultural Study, and Global Intercultural Experiences for Undergraduates. Fiscal year 2012 was the first year that UMSN awarded Global Outreach scholarship funds to students for international travel. Management asked University Audits to review the program in its early development stage for process improvement recommendations.

The Office of Global Outreach has developed a draft process flow for faculty to follow when traveling with students internationally on school sponsored trips. University Audits reviewed the process flow and found that it was in conformance with Standard Practice Guide Section 601.31, *International Travel Policy,* regarding travel plan approvals, monitoring travel warnings and restriction lists, use of University Travel Registry and University-approved travel health insurance, and safety plans.

University Audits obtained a list of UMSN sponsored students traveling abroad in fiscal year 2012 and performed detailed testing. University Audits noted that one student traveling abroad was not registered with the Travel Registry, but all other students had complied.

Control Recommendation: Opportunities exist for improvements in International Travel/Global Outreach:
- Ensure all students traveling are registered with the Travel Registry.
- Develop a post-travel follow up process to document how award funds were spent and that stated travel objectives were performed.
- Continue to develop and document travel process and procedures. Include guidance on pre-departure essentials such as obtaining visa, travel insurance, and immunizations. Consider offering guidance regarding cultural differences and other travel resources available while abroad.

Management Plan:
- To ensure compliance with the requirement that all students be registered, UMSN Global Outreach Office (OGO) registers them as groups wherever possible; faculty members have been advised that the OGO will perform this service for them. Our website includes detailed instructions for both faculty and students (see http://www.nursing.umich.edu/global-outreach/going-global-faculty and http://www.nursing.umich.edu/global-outreach/going-global-students/pre-departure-preparation), so students traveling as individuals have access to everything they need in order to meet the requirements. The UMSN posts frequent reminders in The Pulse and to the C-TOOLS group, and also sends email reminders regularly to faculty.

- The Global Outreach Office's plan is to run regular checks in the travel registry and not disburse travel grants until we verify that the recipient has registered in the travel registry. That office will also require any student who receives a travel grant to a) submit copies of their airline ticket receipts upon return and either b) contribute photos for the OGO website or c) present at an OGO event to promote global engagement.

- Nursing students who participate in established programs through other units such as the Center for Global Intercultural Study (CGIS) receive thorough pre-departure preparation from those units. An integral part of the development of our own programs is the establishment of such pre-departure orientations like the one we did this past year for the Interdisciplinary Internship Team Project to Bolivia (a nursing student was included in the team; other members came from the School of Public Policy, the School of Social Work, and the College of Literature, Science, and the Arts.) The Global Outreach Office conducted a session that addressed registration and health insurance, travel health and safety, and cultural adjustment issues. All OGO-sponsored programs will include such an orientation, and the Global Outreach Office will offer the same service to any nursing faculty member taking a group of student abroad.

Low Risk Internal Control Opportunities
Opportunities to improve internal controls and procedures were identified related to P-Card approvals, usage and limits, credit card controls and cash receipts, and faculty engaged in professional activities outside the university. These low risk opportunities for improvement are reported in a separate management advisory memorandum.

SUMMARY
University Audits appreciates the time and effort that management and staff of the School of Nursing devoted to the audit and their commitment to internal controls. The UMSN Business Office is dedicated to providing their divisions and units with centralized support and guidance. Management has created a strong internal control environment over business operations. Good progress has been made in setting up a well-controlled travel abroad program within the School. University Audits will follow up on the status of international travel and clinical affiliation recommendations in the first quarter of fiscal year 2014.

U-M Hospitals and Health Centers Friends Gift Shop 2012-818
Report issued November 21, 2012

BACKGROUND
University Audits recently completed an audit of University of Michigan Health System (UMHS) Gift Shops. The Friends of the University of Michigan Health System (a volunteer organization formerly known as The Guild), opened the first gift shop in 1959, a single counter located in the lobby of the old U-M Hospital selling candy, gum, and sundries. In more than 50 years since the opening:

- The U-M Hospital Gift Shop moved into dedicated space in the main hospital
- Three additional locations opened in the Mott Children's Hospital, the U-M Cardiovascular Center, and the East Ann Arbor Health and Geriatrics Center
- Full and part-time paid employees were hired
- Gift shop merchandise expanded to include clothing, jewelry, flowers, and other giftware

Gift shop proceeds generate funds that support U-M patient care programs and educational projects. The chart (shown on the right) shows gross gift shop sales for the past four years.

The Friends Board of Directors oversees the disbursement of funds, which include gift shop net proceeds and direct donations. Friends funding is open to all units that benefit U-M patients. Recent funding examples include:

- Family and patient services

- Enrichment of the hospital environment
- Patient education
- Camps for children with special needs
- Equipment purchases for patient care areas

ORGANIZATIONAL STRUCTURE
In April 2012, Gift Shop operations became part of UMHS Community Programs and Services. Operations were previously part of UMHS Patient Business Services. A new retail store manager for gift shop operations was hired in May 2012 after the previous manager retired.

The Friends Board of Directors, via the Gift Shop Committee, plays a vital role in Gift Shops management by coordinating volunteers, advising on buying and operational decisions, and collaborating with Gift Shops management on strategic direction.
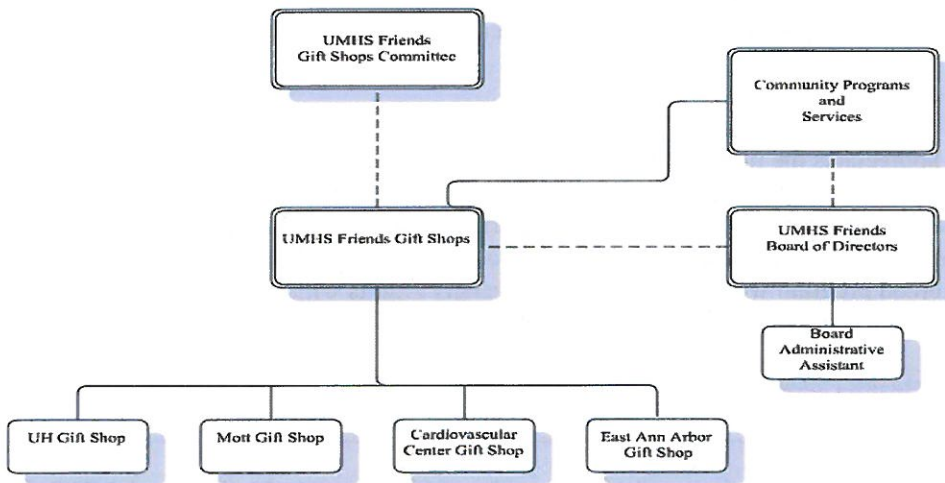
SCOPE
This audit focused on key operational processes in UMHS Gift Shops to determine if internal policies and practices comply with University and UMHS policies, and sound business practices. The Friends of the UMHS volunteer organization and Friends Board activities were not part of this audit. University Audits interviewed key personnel, performed walkthroughs, and performed other audit procedures to:
- Assess cash handling processes
- Appraise inventory management practices
- Evaluate financial monitoring and reporting practices
- Review timekeeping and scheduling processes
- Examine procurement practices

RECOMMENDATIONS
Historically, the Gift Shops have operated independently, with limited involvement from UMHS management and financial operations. The Gift Shops have grown over the years from a small, volunteer run organization into a multi-million dollar a year operation. In the past couple of years, the Friends Board of Directors and UMHS management have recognized the need to upgrade systems and improve the internal control environment at the Gift Shops. As part of the recent organizational changes, management requested University Audits assistance in identifying operational control improvements. An effective system of internal controls ensures integrity of financial records and managerial reports, decreased risks of unexpected losses or reputational damage, compliance with laws and regulations, and adherence to internal policies and procedures. The following is a road map for operational control improvements.

Cash Handling Processes

The University has policies to assist departments in the development of cash handling procedures to ensure proper internal controls, segregation of duties, and safeguarding of University assets. University Audits made the following recommendations to align Gift Shops cash handling processes with University policies and practices:

- Develop an adequate segregation of duties between staff who receive funds, deposit funds, and reconcile transactions
- Develop comprehensive reconciliation processes, including:
  - Tracing all deposits to Statements of Activity
  - Reconciling deposits to sales information in the point-of-sale system and providing explanations for significant differences
  - Tracing credit card payments to bank statements
- Adopt robust safeguards over the safe and the areas where cash is counted (e.g., restrict access to the cash office during counts, periodically change safe combination)
- Establish single accountability over cash register operations
- Reduce the amount of cash retained in the UMHS Gift Shop office over the weekend by utilizing the Hospital Cashier's Office drop box service
- Promptly destroy identifiable credit card information maintained on phone order forms
- Eliminate the practice of using current revenues to fund change needs. Establish official change funds with set balances for all gift shop locations.
- Ensure that staff and volunteers who handle cash complete the Treasurer's Office online cash handling training courses
- Develop written department cash handling procedures, including processes for managing:
  - Cash and credit card discrepancies – log discrepancies to facilitate management of shortages and overages
  - Refunds and voids – senior management should review and maintain documentation supporting rationale for refund, verify refunds were charged back to the correct credit card, and track refunds/voids to help discern potential problems
  - Stamp book sales – verify sales to the point-of-sale system on a daily basis and periodically reconcile use to inventory system information

The U-M Office of Internal Controls is a helpful resource and has a website that can assist with the development of strong cash handling policies and practices (http://www.finance.umich.edu/controls/tools). The Office is also available for consultation.

Management Plan: Management recognizes the need to enact a more robust system of checks and balances with respect to cash handling. While some recommendations have been initiated (reconciliation of deposits, SOA, and credit card payments), other components will require the feedback and assistance of other offices at the University. Also, the entire management staff has completed the recommended cash handling training module in MLearning. By mid first quarter for fiscal year 2014, the remaining deficiencies will be systematically addressed and new processes created. While constructing the paradigm will require a little time, instilling the approach and creating the culture will require significantly more time to achieve.

Inventory Management Practices

Inventory management is the process used to order, receive, account for, price, stock, and manage the various products available for sale to customers. Volunteers primarily perform these processes. Gift Shop management needs greater focus on these activities as inventory represents the largest department expenditure.

- Develop checks and balances over the management of inventories by segregating procurement and receiving duties.
- Consider investing in scanners to facilitate inventory tracking (i.e., inventory receiving process, inventory movement between gift shop locations/carts).

UMHS Gift Shops Expenses - FY2012

$981,718 · $373,444 · $262,745 · $102,183 · $69,785 · $63,982 · $20,191

■ Inventory ■ Staff Salaries and Benefits ■ Grants ■ Supplies ■ Sales Tax ■ Board Expenses ■ Travel & Misc. Expenses

Source: M-Reports Source and Use Report

- Perform periodic counts to confirm that the number of items on hand matches the number of items recorded in the point-of-sale system as on-hand. Cycle counts (counting a specific number of items each day or week) and annual inventory counts are common physical counting methods.
- Streamline inventory books of record to facilitate accounting practices and keep inventory records up-to-date. Develop consistent processes for recording transactions to the appropriate U-M accounts.
- Leverage existing inventory modules in the point-of-sale system, including management reporting.
- Work with Procurement Services to establish strategic vendor contracts with recurring vendors to attain competitive product pricing, high-quality goods and services, and cost-savings, such as free standard shipping.
- Management should establish and approve price lists, mark-ups, markdowns, and discounting practices. Perform periodic price audits to verify items are priced correctly in the point-of-sale system.
- Work with the Tax Department to ensure the employee/volunteer discount rate practices comply with University tax guidelines.
- Develop written guidelines outlining department inventory management procedures.
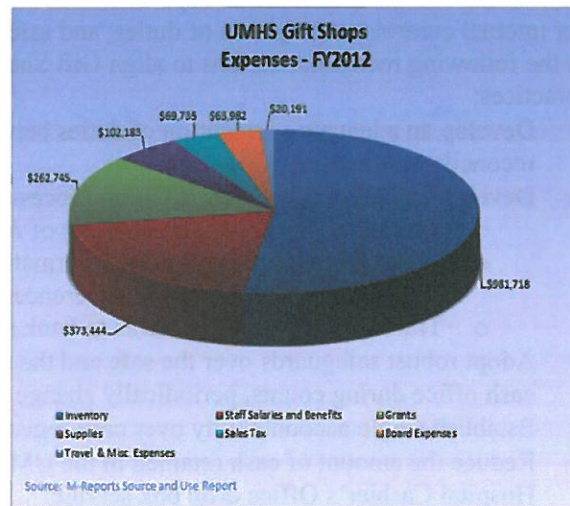
Management Plan: Most of the points in this section are directly related to the underutilization of the Shops software package, which was installed in 2010. It is our intention to present to the Board of Directors a comprehensive plan to train the staff on the inventory management features of the system and to augment the training with peripherals critical to the implementation (scanners, printers, portable devices). Management will also meet with University procurement to determine better sourcing and functionality. We think a target of mid first quarter of fiscal year 2014 is a reasonable target to implement and begin to show results.

Financial Monitoring and Reporting Practices
Fundamental responsibilities of financial stewards include:
- Monitoring expenditures and revenues regularly for accountability purposes
- Establishing basic internal controls to ensure that transactions are appropriately executed and recorded, including segregation of duties to maintain appropriate checks and balances
- Being alert to control weaknesses that can lead to waste, misuse, misappropriation, or destruction of assets (including data and data integrity) and taking action to correct such weaknesses

At the time of the audit, the Gift Shops did not perform standard reconciliations of Statements of Activity, Gross Pay Registers, and bank statements. Management oversight report reviews and budget to actual analysis were not regularly performed. It was unclear whether these practices were performed under the previous management, but no records or processes were transitioned. Gift Shops management is currently working with Community Programs and Services financial personnel to establish standard accountability

processes and procedures. University Audits also recommended that management work with staff from the University Tax Department to resolve issues associated with Gift Shops sales tax reports.

Management Plan: The Shops are in the process of hiring permanent employees in order to segregate the duties of the financial department and create a system of checks and balances with respect to its finances. The position is currently filled on a temporary basis and the position has added the segregation of duties sought. Several of the more basic controls (review of daily sales, receipts, and deposits) have been initiated as a result of this audit. Additionally, management has reached out to the Tax Department to gain a better understanding of all reporting requirements and implications. Finally, standard reconciliation of the SOA and the creation of supporting financial reports are now in place. Further work on data integrity and the handling of this data will require the input of others to include MCIT, our software provider Randal Data, and the Community Programs and Services group. Management has begun a dialog with MCIT and are meeting with the software provider in the coming weeks.

Timekeeping and Scheduling Processes

Gift Shops are staffed with both volunteers and paid staff. Volunteers primarily work weekday mornings, while temporary staff generally work late shifts, weekends, and holidays. Management actively reviews hardcopy time reports, including overtime hours, and verifies the proper employees were paid. Actions that will enhance payroll practices include:

- Review University Standard Practice Guide Sections 201.57 and 201.20, *Temporary Employment* and *Employment of Minors*, to ensure department practices comply with University policies in regard to staff breaks and reporting actual work hours (e.g., 5PM to 9PM)
- Reconcile monthly Gross Payroll Register reports to approved hardcopy time reports to ensure time data was entered accurately
- Document department timekeeping and scheduling policies, ensuring management delegates an alternate to review and approve time reports in the primary approver's absence
- Ensure timekeepers and staff understand the responsibility for obtaining proper review and approval for corrections to time data previously approved and entered into the University's time management system
- Consider the feasibility of moving from hardcopy time reporting to self-entry time reporting to facilitate timekeeping practices

Management Plan: All components of the timekeeping process have been strategized and long term solutions have begun. The installation of software on a dedicated terminal in the administrative office will afford all employees the opportunity to clock in electronically. Also, a delegation model has been created to timely process payroll in the absence of the primary approvers. Finally, the unit moved to an e-signature system, which grants employees the opportunity to approve their time before submission.

Procurement Practices

Sound purchasing policies and practices are among the essential elements of good governance. Based on our review, staff appropriately use the University's sales tax exemption when making inventory purchases and Gift Shops business expense reports are reviewed at the appropriate management level. University Audits made the following recommendations to strengthen current practices to align with University policy.

- Require interim and final expense approvers to complete the Concur Approver Training course to ensure they are knowledgeable about University/UMHS purchasing guidelines
- Document department purchasing policies and practices, ensuring staff understand the need to clarify unusual P-Card activity (i.e., duplicate booking fees, use of P-Card to purchases store inventory) in the comment field
- Conduct periodic reviews of cardholder spending limits and, if necessary, request limit changes based on the reviews

- Monitor outstanding P-Card transactions to ensure staff report expenses within 45 calendar days following the last day of a trip or event
- Consult with Procurement Services before using P-Cards to purchase restricted commodities such as furniture and shelving units

Management Plan: In response to this audit, management immediately enrolled all affected employees in Concur training. That training has been completed. Management also initiated a system whereby P-Card activity is reviewed twice monthly, thus eliminating any overdue submissions. Questions regarding the propriety of use will flow to the Store Manager for determination, with the potential aid of the unit's Director.

SUMMARY
Defining business practices, documenting policies and procedures, and implementing effective accountability, review, and reconciliation processes over key areas such as inventory management, cash handling, procurement, and timekeeping will improve gift shop control and operational performance and minimize risks. Creating a strong internal control environment will take measured action so as not to disrupt current operations. Cash handling practices can be improved with little operational disruption by adopting standard University policies and procedures, segregating duties, and training staff and volunteers. Other areas, specifically inventory and procurement management, will need to be prioritized and implemented in stages and will take additional time to fully develop.

University Audits will conduct a follow-up review in the first quarter of fiscal year 2014 to assess management's progress on action plans.

Follow–up Reviews

U-M Flint School of Health Professions and Studies	2010-209
Original Report issued January 15, 2012	Follow-up report issued October 31, 2012

University Audits completed an audit of the U-M Flint School of Health Professions and Studies (SHPS) and issued a report January 15, 2011. In response to the audit, management has made significant process improvements that have enhanced the overall internal control environment. Audit observations have been satisfactorily addressed as summarized below. **This audit is closed.**

- Segregation of Duties - At the time of the audit, several business processes were controlled by a single individual. SHPS management has implemented segregated roles in timekeeping, statements of activity reconciliation, cash handling, and journal entry preparation.

- Faculty and Staff Certifications - SHPS lacked standard processes to ensure required certifications and licensing were kept up-to-date. SHPS has developed a school-wide process during annual faculty and staff evaluations that requires review and documentation that certifications, licensing, conflict of interest disclosures, and training requirements have been satisfied. The Department of Nursing, which has the largest faculty and licensing requirements, has developed a database to monitor the process.

- Privacy and Data Security - Faculty and staff who access protected health information receive regular privacy training as part of the annual evaluation process. All SHPS-provided laptops are encrypted. Management also made a presentation to the faculty reminding them of the need to lock files and offices that contain sensitive data and to secure mobile devices such as smartphones.

- Policies and Procedures - SHPS did not have consistent or complete policies and procedures. The Dean's Office created comprehensive school-wide policies and processes in employment,

procurement, financial processes and monitoring, payroll, conflict of interest/conflict of commitment disclosures, annual faculty and staff evaluations, and grant management.

- **P-Card Controls** - SHPS faculty and staff no longer share P-Cards. Management implemented comprehensive P-Card policies and procedures using the Office of Internal Controls recommended template.

- **Conflict of Interest and Conflict of Commitment (COI/COC) Management** - During the audit we observed that certain SHPS faculty and staff were not submitting the annually required COI/COC disclosures. The disclosure process is now incorporated into the annual evaluation process and kept up-to-date.

- **Affiliate Payment Processing** - At the time of the audit, certain contractual payments from affiliated health care agencies were received directly by the School rather than Financial Operations. All contractual payments are now centrally received by Financial Operations.

LSA Information Technology Asset Management	2010-209
Original Report issued July 22, 2011	First follow-up report issued July 19, 2012
	Second follow-up issued November 2, 2012

University Audits reviewed the LSA ITAM process and issued an audit report on July 22, 2011. This is the second follow-up on ITAM. A previous follow-up took place in July 2012. Despite coping with reorganization in LSAIT and the loss of a full-time temporary employee, management has continued to make improvements that have enhanced the efficiency and effectiveness of the ITAM process since the July follow-up. Status of individual audit recommendations is summarized below.

- **Use of the K2 Client** - University Audits recommended mandatory use of the K2 client on each workstation. Management indicated that a policy would be drafted regarding the K2 client for LSA units, a provision would be placed in a Service Level Agreement (SLA) for non-LSA users, and a process to determine that the K2 client has been installed on all IT assets would be created. Previously, only managed Windows and Mac workstations received the key client automatically at build time. As of September, this has now been extended to Linux machines built using Red Hat Satellite. Additionally, the UmichITAM SLA language has been updated to reflect this policy. Regarding K2 client policy and exceptions, there will have to be exceptions for the likes of finely tuned research lab equipment or off-network computers. The work to document those exceptions is beginning. It has been discussed at a past ITAM quarterly community meeting. LSAIT expects the list of exceptions will not be short and outreach to unit IT staff in each of the schools/colleges/units will be necessary to be sure all their needs are met. Finally, with a firm list of exceptions UmichITAM would be able to work out policy with support from upper leadership. The SLA has not yet been put into production and work remains on documenting exceptions.

- **Firewalling License Servers** - University Audits encouraged LSA Information Technology to place the UmichITAM licensing servers behind the LSA firewall and require VPNs for accessing campus resources. Blocking machines by putting them into a deny pool in K2 is now part of standard operating procedure. The few remaining license servers not behind a perimeter firewall are scheduled to go behind one on October 31, 2012. Once the last few license servers are behind the firewall, LSAIT Infrastructure will start monitoring ports needed for software licensing to begin the second phase of restricting to VPN users. The next ITAM quarterly community meeting will be held in January where the plans will be finalized and communicated.

- **Key Process Areas** - University Audits indicated that Software Licensing should document all key process areas that support UmichITAM in order to ensure that ITAM is performed using systematic

and well-controlled processes. The ability to implement this change in SharePoint is an advanced skill. To further complicate matters, many of the KPA documents are limited to internal staff so care with regards to permissions is needed. Without support for such an undertaking in SharePoint, LSAIT will need to investigate other potential solutions such as Google Docs. This investigation is ongoing.

- Project Management - University Audits encouraged Software Licensing to create and document a project management methodology for ITAM to set priorities among competing projects. Work has resumed on this project but has been negatively impacted by loss of staff. More progress will be made on this issue when UmichITAM is able to hire and train replacement staff. The job is currently posted.

- Disaster Recovery and Business Continuity Plans Testing - University Audits recommended that LSA update and test their disaster recovery and business continuity plans on a regular basis. Some work has been done on this recommendation. The updating is complete but no actual testing has been done. LSAIT plans to discuss with senior leadership the possibility of performing a test during an upcoming server maintenance weekend in February 2013.

- Management of Copyrighted Software - Standard Practice Guide (SPG) sections related to software have not been updated in nearly twenty years. University Audits recommended that these SPG sections be reviewed and updated. UmichITAM planned to address this by forming a committee to review existing policy and develop new policy verbiage. The committee was to consist of members of OGC, Office of the CIO, the UM Copyright Office, and others who would add value to the discussion. At this time, the committee has not been formed and policies have not been updated. Instead, these policies are scheduled for review by Information and Technology Services' Information and Infrastructure Assurance area.

- Licensing Processes - To more effectively match supply and demand for software titles, University Audits recommended that UmichITAM create a communication mechanism between themselves and faculty. A good portion of the classrooms in the College are covered by some course software management system. UmichITAM may form a steering committee per the original recommendation to investigate extending software management.

University Audits will conduct a third follow-up during the fourth quarter of fiscal year 2013 to assess additional progress made addressing the action items that remain open.

Department of Emergency Medicine	2011-204
Report issued November 16, 2012	Follow-up report issued November 16, 2012

University Audits completed an audit of the Department of Emergency Medicine and issued an audit report December 5, 2011. The audit provided several recommendations on strengthening the internal control environment. The purpose of this memorandum is to report on the status of management action plans. Management has created a stronger internal control environment by developing standard policies and processes, ensuring transactions are approved at the right level, reassigning duties and roles, and creating monitoring tools. Details of management's actions are discussed below. **This audit is closed.**

- Internal Controls Assessment Certification - At the time of the audit the Department of Emergency Medicine was not fully aware or engaged in the annual internal controls assessment process. In prior years, annual certifications were signed as fully compliant without performing the underlying assessments of controls to detect existing internal control gaps. Over the past year, department management has worked closely with the Office of Internal Controls and UMHS Financial Services to assess and remediate internal control gaps. Standardized policies and processes have been

developed that address key control risks. Internal control assessments have been completed for all key business functions. In September 2012, the department was able to certify full compliance with the annual internal controls assessment process.

- Non-Certified Effort Reporting - An annual effort certification is required for all employees working on federal sponsored research or who allocate effort between functional activities such as instruction and administration or patient care and instruction. A review of effort certification for fiscal year 2010 and 2011 identified multiple employees who had not certified their effort. Management has put in place more robust monitoring and follow-up of missing effort certification, and compliance with effort certification has markedly improved in fiscal year 2012.

- Purchasing - The audit recommended several improvements and updates to departmental purchasing processes. Management has strengthened the control environment by:
  o Creating and disseminating up-to-date purchasing and travel and hosting policies and procedures
  o Instituting annual reviews of P-Card limits and approvers and adjusting as necessary
  o Segregating duties such as procurement and reconciliation responsibilities
  o Reminding departmental Concur expense report approvers of the annual on-line training requirement

- P-Card Transactions - The audit identified several opportunities to improve preparation and processing of Concur expense reports. Management has provided focused communication and training with departmental managers and staff on improving Concur report documentation and review and approval processes.

- Gross Pay Register Reconciliation - At the time of the audit, duties were concentrated in the payroll function. The reconciler of the gross pay register also initiated payroll and appointment transactions. The roles are now separated and the Human Resources Manager provides a higher level review.

- Statements of Activity Reconciliation - The Statement of Activity (SOA) reconciliation process was fragmented and in some cases incomplete. Roles were not always segregated; some reconcilers also performed purchasing and payroll functions without additional review. Written procedures were developed and department management provided comprehensive training to research administrators and other business staff responsible for performing SOA reconciliations. Roles were reviewed to ensure appropriate assignment of reconciliation and review duties. The department developed an Excel file structure and process that allows the Financial Manager to review and monitor the SOA reconciliation process going forward.

- Delegation of Authority - University Audits identified several situations where individuals were approving expenditures that require the approval of the department chair or grant principal investigator. Delegations of authority permissions were not documented. As part of the annual internal controls gap analysis process, managers are reminded of their accountability for delegated authority and of the need to keep delegated authority documentation up-to-date.

University Safety and Security: Communication, Reporting, and Incident Investigation   2012-809
Original Report issued February 10, 2012   Follow-up report issued November 27, 2012

In February 2012, University Audits completed a review of the internal control structure and environment related to safety and security at the University-Ann Arbor campus. The review was done at the request of President Coleman in response to a delay in a thorough investigation of a case of suspected possession of child pornography by a medical resident at the hospital. The original incident was subsequently investigated

by the Department of Public Safety and transferred to federal jurisdiction where it is currently in U.S. District Court.

As part of the review, University Audits evaluated University communication and reporting processes related to security and potential criminal activity on the Ann Arbor campus to gain an understanding of the interdepartmental relationships and communication protocols related to public safety and security. The Flint and Dearborn campuses were not part of the review. The review included:

- Examining and assessing existing documentation of policies and procedures
- Interviewing senior management and other key personnel

The purpose of this memorandum is to provide an update on the current status of management's response to report recommendations.

University senior management created a work group structure to implement policies and processes in response to the recommendations. Health System and Central Campus managers are working together to develop integrated responses, reflecting the collaboration and interactions required to implement positive and sustainable changes in policies, practices, orientation, training, and culture. A dedicated project manager is assigned to coordinate the process. The committee structure is presented below:

U-M Safety and Security Response Team Structure
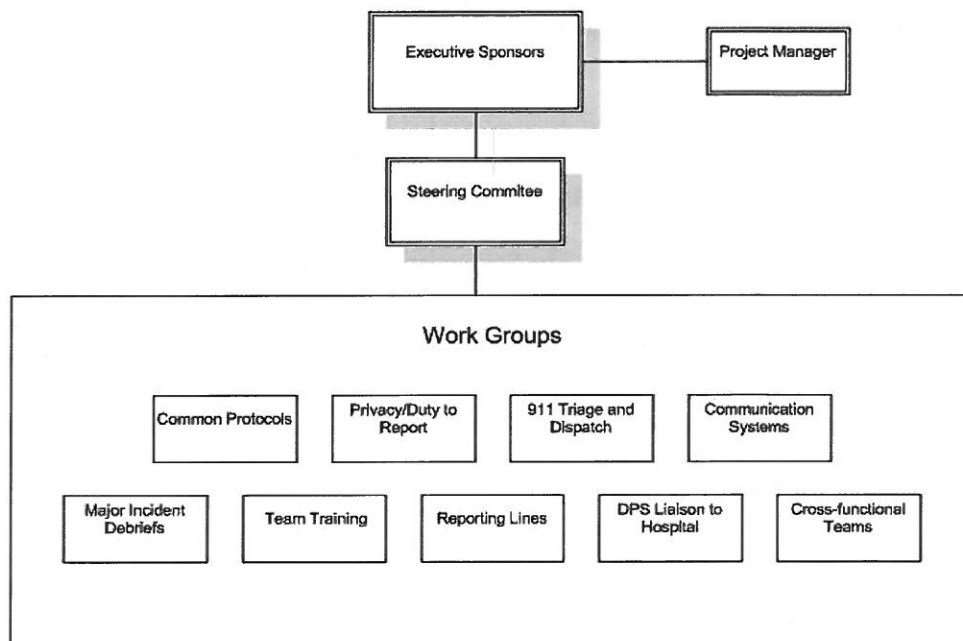
Executive Sponsors:
- Executive Vice President for Medical Affairs
- Executive Vice President and Chief Financial Officer
- Vice President for Student Affairs
- Interim Vice President and General Counsel

The Steering Committee is made up of management from the Health System, Facilities and Operations, University Human Resources, the Division of Student Affairs, the Office of the Vice President for Research,

and the College of Engineering. The Work Groups are made up of content experts and many are members of two or more groups and/or are members of the Steering Committee.

In addition to the U-M Response Team work, in February 2012, the University retained the firm of Margolis Healy & Associates to examine the cultural and organizational issues that may have contributed to the delay. The Board of Regents also retained the law firm of Latham & Watkins LLP to conduct a thorough and intensive investigation regarding the circumstances of the case. In response to this three-pronged review in October 2012, the Board of Regents approved the creation of the "Division of Public Safety and Security" to bring together all safety and security components of the University's Ann Arbor campus under a unified division.

Conclusion: Significant progress has been made in implementing the audit investigation recommendations. Details of specific actions are listed in the table below. Working relationships between the security organizations are positive, especially at the senior management level. The Safety and Security Steering Committee is moving from the design stage to full deployment and oversight stage to ensure sustainability. University Audits will schedule a full audit of the newly created Division of Public Safety and Security in fiscal year 2014. If you have questions, please contact Sherry Cogswell or Jeffrey Moelich at 734-647-7500.

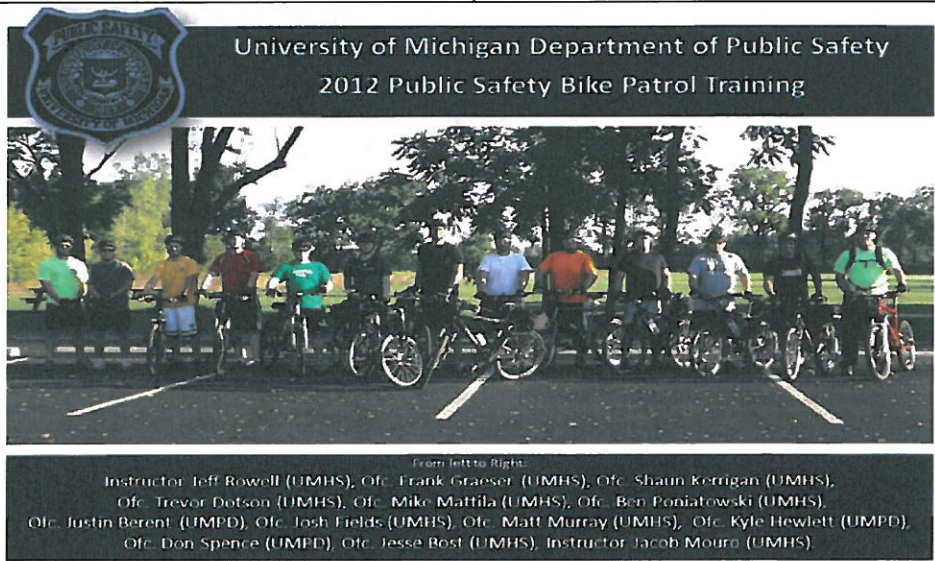| 1. Develop an extensive set of common guidelines and protocols for reporting security incidents throughout the University.	
Recommendation: The protocols need to be actionable and should establish clear communication and procedures for hand-off of cases between University safety and security organizations. These practices can be in the form of checklists, online training, decision trees, and formal policies and procedures.	*Response:* A comprehensive University-wide *Guidelines for Security Cooperation during Investigations* was drafted by the Common Protocols work group and approved by the Steering Committee and Executive Sponsors. The guidelines are intended to foster a culture that encourages University investigative departments to cooperate in the exercise of their responsibilities. The guidelines established an investigative process that is fair, free from intimidation, exhibits respect for all participants, and provides appropriate due process. **Action plans completed.**
Recommendation: Communication protocols should include roles and responsibilities for all parties who need to react appropriately to a specific aspect of the case. Examples include: • DPS, HHC-Security, and Housing Security when there is suspected criminal activity • University Risk Management when there is loss of property • Office of the General Counsel for legal analysis • The Health System Compliance Office in cases where health related regulations may have been breached • University Audits when internal controls may have been missing or	*Response:* Security department specific common reporting guidelines that contain specific incident types and defined roles were developed between the security unit and DPS. The new guidelines have been incorporated into staff training modules. **Action plans completed.**

• bypassed • Office of Clinical Affairs when a patient or health professional is potentially involved • OSEH for occupational safety or environmental issues	
Recommendation: Definitions of incident types are not well understood. Develop a comprehensive list of incident types. This should include definition of *potential* criminal activity as well as *proven* activity. Without a common definition of reportable activity, the course of investigation and ultimate resolution is seen differently and is one of the causes of disagreement and tension between departments.	*Response:* A chart of investigative duties was developed that cross references criminal incident types with applicable policies and investigative units. **Action plans completed.**

2. Raise awareness of the different patient, employee, and student privacy	
Recommendation: Law enforcement and security officers should receive regular HIPAA and FERPA training to raise awareness and sensitivity to privacy.	*Response:* Patient, employee, and student privacy training has been incorporated into law enforcement and security officer training programs and policy. All existing police and security personnel have completed training modules and the training is mandatory for all new hires. Management plans to periodically review and update the training materials and ensure regular updates are provided to existing staff. **Initial training plans completed, regular updates on-going.**
Recommendation: Commonly understood definitions are needed for when and under what circumstances protected information should be shared with security and law enforcement agencies. A streamlined process is needed when there is suspected criminal activity to ensure relevant protected information is shared with law enforcement through means that are legally appropriate.	*Response:* The University of Michigan Health System (UMHS) has issued *UMHS Policy 01-04-313 Disclosures of Protected Health Information for Law Enforcement Purposes* that provides specific guidance regarding sharing protected health information with law enforcement. **Action plans completed.**

3. Foster better understanding and sensitivity of duty to report requirements.	
Recommendation: Develop legal guidance and training to help responders navigate the complexities and grey areas of reporting suspected criminal activity.	*Response:* Twice a year, the executive vice presidents and general counsel are sending an electronic communication to deans, directors, and department heads reminding faculty and staff of their responsibilities to report suspected criminal activity and other wrongdoing. Duty to report is included in annual mandatory training for all health care providers, law enforcement, and security officers. DPS provides annual notification regarding Clery Act disclosure

	requirements. The Clery Act is a federal statute that requires all colleges and university to disclose information regarding crimes on or near campus. DPS is also in the process of developing an online Clery Act training module for the University. **Action plans substantially completed, Clery Act training under development.**
4. Review the use of 911 triage and dispatch.	
Recommendation: DPS and HHC-Security should have formalized dispatch procedures for the operation of each facility control center. Security officer responders should clearly identify themselves as security and not law enforcement.	*Response:* At the time of the audit, DPS had formal dispatch procedures as part of its standard operating procedures. Hospitals and Health Centers (HHC) call center operator scripts now clearly inform the caller they have reached Hospital Security and who will respond to the call (Hospital Security, U-M Police, or the medical emergency team). HHC call center calls are logged, classified as emergency/non-emergency, and reviewed by management. The majority of the internal HHC 911 calls are medical emergencies or patient management calls occurring inside the main hospitals and clinics. The HHC call center phones were recently equipped with the ability to conference U-M Police into a call, and/or perform a dedicated transfer to U-M Police for crimes in progress. DPS and HHC-Security share the same radio system, and DPS has the ability to monitor all dispatched calls and portable radio traffic. The Department of Public Safety (U-M Police) is in the process of hiring an outside consultant to review the quality of its communications center operations. **Current action plans completed, longer-term review will occur as part of consolidation of police and security units.**
5. Create a shared communication system that facilitates accountability and cooperation.	
Recommendation: Both HHC-Security and Housing Security need to be aware of crimes that have occurred in nearby areas of their responsibilities. Shared reporting mechanisms should be seamless, designed to share University-wide safety and security information, and facilitate communication protocols and decision processes.	*Response:* DPS and the Communication Systems workgroup created a temporary solution to bridge communication and report sharing gaps that occurred when DPS moved from an internally-developed information management system to a regional law enforcement system (CLEMIS) in January 2012. The temporary solution is a web-based reporting tool that allows relevant incident reporting and other information to be shared between DPS, HHC-Security, and Housing Security. Management acknowledges that the work-around solution is not ideal, as it does not provide real-time information and smooth integration with work processes. A request for proposal is underway to procure and implement computer aided dispatch software that will create

	an integrated shared communication system between campus law enforcement and security units. **Temporary solutions in place, pending development of integrated system.**
6. Formally debrief on major security incidents.	
Recommendation: Develop a process that gathers all groups involved in a case to discuss what worked well and what could have been done better. Learn from the experience so that positive actions are reinforced and the things that did not work to the satisfaction of everyone involved are discussed and resolved so that the process will be improved the next time there is a similar incident.	*Response:* The Major Incidents Debrief Work Group created policy and a process for formal debriefs and lessons learned after major security incidents. Management reported it has used the process several times between DPS and HHC-Security with good results. **Action plans completed.**
7. Develop ongoing team-building training programs.	
Recommendation: Develop a comprehensive training program that builds knowledge and understanding of processes from all perspectives, and builds a collaborative team effort for addressing many types of issues. Training can assist all parties understand the reasons for perspectives and regulations that impact the prescribed protocols, actions, and philosophies of others involved in a particular chain of response. Training should encompass the viewpoints of all parties and be attended by a cross-section of safety and security organizations.	*Response:* Multiple joint-training and orientation activities are underway. Newly hired DPS, HHC Security Officers, and Housing Security Officers have shared training experiences. A DPS and HCC-Security Officer are regularly providing joint presentations at the weekly new staff orientation session in the Health System. Joint specialty training is also occurring. An example of such training is the recent bike patrol training, see photo below. **Action plans completed.**

University of Michigan Department of Public Safety
2012 Public Safety Bike Patrol Training

From left to Right:
Instructor Jeff Rowell (UMHS), Ofc. Frank Graeser (UMHS), Ofc. Shaun Kerrigan (UMHS),
Ofc. Trevor Dotson (UMHS), Ofc. Mike Mattila (UMHS), Ofc. Ben Poniatowski (UMHS),
Ofc. Justin Berent (UMPD), Ofc. Josh Fields (UMHS), Ofc. Matt Murray (UMHS), Ofc. Kyle Hewlett (UMPD),
Ofc. Don Spence (UMPD), Ofc. Jesse Bost (UMHS), Instructor Jacob Mouro (UMHS)

8. Review reporting lines and communication structure of police and security units.	
Recommendation: Benchmark with other universities to provide examples of effective safety and security models. Consider the optimal structure given the complexities of our University	*Response:* Management hired an outside consulting firm to provide benchmarking and consulting regarding police and security reporting lines. The final report with recommendations was

for ensuring public safety and security.	shared with the University community as part of the October 19, 2012, Board of Regents Meeting. In response to report recommendations, the Board of Regents approved the immediate creation of the "Division of Public Safety and Security" to bring together all safety and security components of the University's Ann Arbor campus under a unified division that will report to the University President. **Action plans completed.**
9. Consider a DPS liaison office within the Health System.	
Recommendation: There is no consistent DPS presence within the Health System. DPS officers are only interacting with hospital faculty and staff when there is a criminal investigation or an emergent situation. This contributes to tense working relationships and miscommunication.	*Response:* Specific DPS liaison officers are assigned by shift and area. The need for an onsite "office" within the hospital is not required because of regular daily visits. DPS officers are encouraged to visit and use the hospital security offices on the main medical campus as well as the off-site hospital security offices. Consultations are on-going between HHC-Security and DPS at all levels. The recent creation of the Division of Public Safety and Security (DPSS) continues to strengthen working relationships. **Action plans completed.**
10. Develop cross-functional teams.	
Recommendation: Safety and security teams should be defined by incident type, and will ensure that the right skill sets are matched to respond to the particular issue. Teams should meet regularly in non-crisis mode to further develop understanding and trust.	*Response:* Multiple collaborations between DPS, Housing Security, and HHC-Security personnel are underway. Teams include Domestic/Workplace Violence, Crime Alerts/Clery Act, Emergency Preparedness Team, Weekly Crime Meetings, and Special Events/VIPs. In addition, HHC-Security members are working at large campus events, such as football games. **Action plans completed.**
11. The culture must change.	
Recommendation: Define a plan to enhance team culture. Engage an outside expert to work with the leaders of the various security units and related areas to examine cultural issues that limit achievement of the common goals of the various units. This could be accomplished through a series of facilitated offsite meetings that bring the various parties together with a single vision. Without a cultural shift, there will continue to be breakdowns in the effectiveness of the organization as a whole. Once there is willingness to come together with common goals and understanding, the points discussed in this report should be considered by all groups and individuals involved. Not all of these recommendations may be implemented as stated, but all should be part of the consideration in	*Response:* Many of the pieces are in place to improve communication and achieve shared goals. but the culture will continue to develop over time as the units reorganize under a new structure.

finding a working relationship that supports the best safety and security of all stakeholders at the University of Michigan.	

Open Audits Follow-up Table
November 30, 2012

Audit Title	Report Date	Issues	Expected Completion
UM–Flint Business Continuity 2011–303	8/12/11	University impact analysis; BCP standards template; business continuity testing; disaster recovery plan	First Follow-up March 2012 December 2012
College of Literature, Science, and Arts Information Technology Asset Management 2011–311	7/22/11	Use of the K2 client; firewalling license servers; key process areas; project management; disaster recovery and business continuity plans testing; management of copyrighted software; licensing processes; maintenance of access control lists	First Follow-up July 2012 Second Follow-up November 2012 March 2013
Information and Technology Services eResearch Proposal Management 2010–304	6/27/11	Contractual restrictions on vendor access; "Site Manager" access	First follow-up March 2012 December 2012
Information and Technology Services MCommunity Sponsored Accounts 2011–304	11/22/11	Sponsorship administrator roles; improper permissions; monitoring of sponsored accounts; data verification policy; recurring training; policy enforcement	December 2012
Institute of Social Research Data Security 2011-308	12/7/11	Identification and assessment of sensitive and critical systems; risk mitigation activities; ITsecurity incident management; security plan	December 2012
UMHS Lost Laptop Exercise 2011-809	12/16/11	Risk assessment; encryption; compliance and security awareness training	December 2012
North Campus Auxiliary Service Building/North Campus Data Center 2011-301	2/3/12	Security cameras; service level agreements	December 2012
Information and Technology Services DNS - Domain Name Service 2012-301	5/2/12	Recursion on authoritative name servers; recursion - external clients; zone transfer authorization; authenticated zone transfers; DNS architecture documentation; host operating system; performance metrics; server access	December 2012
Information and Technology Services Mobile Applications 2012-308	6/29/12	Accessibility	December 2012
IT Services Provided to North Campus Research Complex (NCRC) Third Party Companies 2012-312	7/18/12	VA Security Requirements; conflict of interest;	December 2013

ITS Michigan Academic Computing Center 2012-807	8/23/12	Role based access approval process; user access removal; third party employee vetting process; video monitoring; door alarm response; incident response procedure; load transfer test; disaster recovery hardware replacement contract;	March 2013
University of Michigan–Flint Educational Opportunity Initiatives 2010–211	2/18/11	Strategic oversight and guidance; campus support and collaboration; budget and financial management; staff management; event management; business continuity; documentation of policy and procedure	First Follow-up April 2012 December 2012
Conference Services 2010–102	2/25/11	Contract compliance; department accounting and reporting; billing and payment accuracy; payroll and time reporting; statement of activity reconciliation; background check verification; client management	First follow-up April 2012 December 2012
Division of Student Affairs Recreational Sports – Club Sports 2010–816	3/2/11	Sponsored student organizations; guidance; financial management; practice, game, and fitness space; medical support; property	First Follow-up April 2012 March 2013
University Unions 2011–814	6/15/11	General control environment; financial monitoring and oversight; purchasing management; human resource management; building renovation and maintenance	January 2013
Financial Considerations for International Activity 2011–101	6/30/11	Coordination of effort; documented policies and procedures; currency exchange; cash purchases; international bank accounts	December 2012
UM–Dearborn Office of the Provost 2011–210	6/30/11	Segregation of duties; timekeeping; policies and procedures; Fairlane Center procedures; collections and exhibitions	First Follow-up July 2012 December 2012
Ross School of Business 2011–202	10/19/11	International programs coordination; verification of Aramark reported data; sub–certification of internal controls; continuity of operations planning; unit assessments	First follow-up June 2012 December 2012
School of Dentistry Admissions and Financial Aid 2011–812	10/26/11	Multiple Mini Interviews (MMI); application review; documentation; application fees; spreadsheet controls; need–based aid	First follow-up June 2012 December 2012

Intercollegiate Athletics Complimentary Tickets 2011–110	11/16/11	Documented policy and procedure; monitoring and oversight; recording of complimentary tickets; complimentary parking and access passes; system access and use; compliance monitoring	December 2012
Plant Operations Information Management and Reporting 2011-102	12/22/11	Data management; reporting and analysis	Review progress June 2012 ___ Follow-up December 2012
e-Verify 2011-302	2/20/12	Contract information; identification of employees; document retention; e-Verify notice requirements; subcontract language; e-Verify System user access	January 2013
Rackham Graduate School Institute for Human Adjustment 2012-219	2/27/12	Patient receivables; Patient Protection and Affordable Care Act of 2010; segregation of duties; cash and cash equivalent handling	December 2012
College of Literature, Science, and the Arts Museum of Natural History 2012-224	03/23/12	Inventory tracking system; cash handling and security; merchandise management; continuity of operations planning; hazard training and safety documentation; segregation of duties; internal controls certification; on and off-boarding checklists; student docent screening; payroll; conflict of interest or commitment process;	December 2012
University of Michigan School of Public Health Office of the Dean 2011-211	5/25/2012	Financial assistance; admission practices; internship funding; conflicts of interest and conflicts of commitment; timekeeping practices	March 2013
Automotive Research Center 2012-217	6/25/12	Administration; grant management; financial management/oversight; asset management	December 2012
UM-Dearborn College of Engineering and Computer Science 2012-302	6/29/12	Financial oversight; documented policies and procedures; conflict of interest and commitment; training and facility safety; contracts, grants, and agreements; asset management; gift handling and monitoring; Engineering professional development; incident response plan; key logs; vulnerability scans; configuration control policy; disaster recovery plans of IT; data security procedures	March 2013

International Institute 2012-101	6/29/12	Oversight and monitoring; international travel; Concur; unit subcertification of financial results and internal controls; copies of checks;	December 2012
Transportation Research Institute 2012-502	9/13/12	Standardized project management; compliance with University guidelines; fiscal responsibilities; monitoring and budget reporting; information technology controls; documented procedures and expectations	June 2013
Cooperative Institute for Limnology and Ecosystems Research 2012-221	10/23/12	Management oversight; grant management reporting; laboratory training, documentation, and certification; retroactive salary distribution changes	June 2013
Residential Dining Service 2012-216	11/21/12	strategic planning, implementation, and evaluation; financial management and oversight; employment practices; cbord training and development	March 2013
Travel and Expense Management System 2012-103	11/27/12	Central Monitoring; unit reporting; training and customer service; data validation; expense report auditing;	December 2014
University of Michigan Facilities and Operations Parking Operations 2012-107-1	3/27/12	Staff use of patient/visitor parking; override controls for gate operations; monitoring of parking activity; imprest cash funds; credit card controls; special events parking contract	December 2012
U-M Hospitals and Health Centers Valet Parking 2012-107-2	3/26/2012	Reconciliation practices; vendor employee use of patient/visitor parking space; valet parking vouchers, imprest cash fund and cash handling practices; annual certification of internal controls and gap analysis; background checks on vendor employees	December 2012
UMHHC Community Health Services-Community Programs and Services 2012-214	6/28/2012	Monitoring loan activity; cash handling practices; credit card controls; interpreter services program; monitoring accommodations activity; training and performance evaluations for hospital volunteers; annual certification of internal controls and gap analysis	March 2013
Office of Medical School Education 2012-105	6/29/12	Restricted funds; financial aid; admissions; payroll controls; financial training	March 2013

UMHHC Wireless Medical Devices 2012-315	10/29/12	Wireless connection security; inclusion of MCIT in the procurement process	March 2013
School of Nursing 2012-209	11/21/12	Clinical site affiliation agreements; international travel/global outreach; low risk internal control opportunities	September 2013
University of Michigan Health System Friends Gift Shops 2012-818	11/21/12	Cash handling processes; inventory management practices; financial monitoring and reporting practices; timekeeping and scheduling processes; procurement practices	September 2013