

Internal Audit Update

University of Minnesota Regents Audit and Compliance Committee
February 13, 2020

This report includes:

- Audit Observations/Information/Status of Critical Measures/Other Items
- Status of “Essential” Recommendations & Bar Charts Showing Progress Made
- Audit Activity Report
- Audit Reports Issued Since October 2019

Details for any of the items in this report are available on request. Individual reports were sent to the President, Provost, Vice Presidents, and Chancellors about these internal audit issues.

Audit Observations/Information

Status of Critical Measures

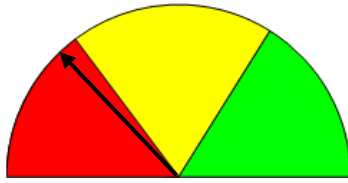
As part of our on-going efforts to provide the Audit and Compliance Committee with critical information in as concise a format as possible, we have developed the following three charts to present a quick overview of work performed by the Office of Internal Audit.

The first chart, “Essential Recommendation Implementation,” provides our overall assessment of the success University departments had during the last period in implementing our essential recommendations. Readings in the yellow or red indicate implementation percentages less than, or significantly less than, our expected University-wide rate of 40%. Detailed information on this topic, both institution-wide and for each individual unit, is contained in the next section of this Update Report.

The second chart, entitled “Progress Towards Annual Audit Plan Completion,” is our assessment of how we are progressing towards completion of the FY 2020 Annual Audit Plan. Readings less than green could be influenced by a variety of factors (e.g., insufficient staff resources; increased time spent on non-scheduled audits or investigations).

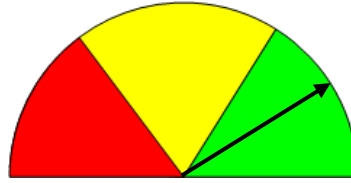
The final chart, “Time Spent on Non-Scheduled Activities,” provides a status report on the amount of time consumed by investigative activities, special projects and other management requests. Our annual plan provided an estimated budget for this type of work, and the chart will indicate whether we expect that budget to be sufficient. Continued readings in the yellow or red may result in seeking Audit and Compliance Committee approval for modifying the Annual Audit Plan.

Essential Recommendation Implementation



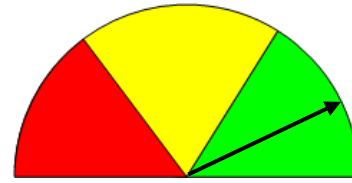
Implementation rates were 23% for the period, less than our expected rate of 40%.

Progress Towards Annual Audit Plan Completion



Time spent to date on the FY 2020 audit plan is what was expected and budgeted for the year to date.

Time Spent on Non-Scheduled Audit Activities



Time spent on investigations, special projects and management requests is less than expected and budgeted for the year to date.

As noted above, additional information related to the essential implementation rate can be found on the “Status of Essential Recommendations” schedule. While we believe all units are still making satisfactory progress towards remediation at this time, the current essential recommendation implementation rate of 23% is considerably lower than our expected rate of 40%. There are several contributing factors to this low rate, including 42% of the essential recommendations this period were from audits receiving first time follow-up; these units have only had a few months to implement solutions. In addition, many of the outstanding essential recommendations are related to complex issues, which we expect may take more time to remediate. However, in order to ensure ongoing management of institutional risk it is important that this lower rate does not become a trend going forward.

Other items:

- The Institute of Internal Auditors’ (IIA), the international governing body for internal audit, requires an external Quality Assessment Review be performed at least every five years. In accordance with this requirement we completed a quality self-assessment to evaluate conformity with IIA Standards, assessing the efficiency and effectiveness of the internal audit activity, and identifying opportunities for improvement. The results of our quality self-assessment have been reviewed by an outside team of audit professionals who validated our assertions and conclusions made in the self-assessment report. They have concurred that the audit function and the execution of its audit work is being carried out in conformance with Institute of Internal Auditors Standards and the Code of Ethics.

Status of Essential Recommendations

■ On-Schedule
 ■ Past-Due
 ■ Complete

Current Period Metrics

Total Recommendations **64**
 Completed Recommendations **15**
 Recommendation Completion Percent **23%**
 Percent of Total Recommendations On-Schedule Not-Complete **31%**

Past Completion Percents

June 2019 **42%**
 Oct 2019 **39%**

Project Overview

| Audit | Year | Month | Status | Overall Progress Toward Implementation |
|---|------|-----------|-----------------------|--|
| 2019 Review of Select Advancing HRP | 2019 | September | Not Implemented | Satisfactory |
| | | | Partially Implemented | |
| AHC-IS | 2018 | December | Completed | Satisfactory |
| | | | Partially Implemented | |
| Athletic Other Revenues | 2019 | June | Partially Implemented | Satisfactory |
| Athletics IT | 2017 | May | Not Implemented | Satisfactory |
| | | | Partially Implemented | |
| Employment Eligibility Verification | 2018 | August | Completed | Satisfactory |
| Facilities Management District Operations | 2019 | September | Not Implemented | Satisfactory |
| | | | Partially Implemented | |
| Family Medical Leave Act Review | 2018 | May | Partially Implemented | Satisfactory |
| Hospitality and Other Special Expenses | 2019 | July | Partially Implemented | Satisfactory |
| Libraries ¹ | 2019 | January | Partially Implemented | Satisfactory |
| Plant Sciences/BBE | 2019 | September | Completed | Satisfactory |
| | | | Partially Implemented | |
| Psychiatry & Behavioral Sciences Research | 2019 | September | Completed | Satisfactory |
| | | | Not Implemented | |
| Public Health IT, School | 2018 | January | Completed | Satisfactory |
| Public Safety, Department of | 2018 | January | Completed | Satisfactory |
| Residency Determination | 2019 | January | Not Implemented | Satisfactory |
| | | | Partially Implemented | |
| Review of ROC & REPA Processes | 2019 | January | Partially Implemented | Satisfactory |
| UMC | 2019 | January | Completed | Satisfactory |
| | | | Not Implemented | |
| | | | Partially Implemented | |
| UMD Fine Arts ² | 2019 | March | Not Implemented | Satisfactory |
| | | | Partially Implemented | |
| UMD Stores | 2019 | August | Partially Implemented | Satisfactory |
| UMDPD | 2019 | January | Completed | Satisfactory |
| University Information Security | 2018 | May | Partially Implemented | Satisfactory |
| Veterinary Medicine, College | 2019 | May | Partially Implemented | Satisfactory |
| Weisman Art Museum | 2019 | June | Completed | Satisfactory |
| | | | Partially Implemented | |

1- Despite being past due, four of the outstanding recommendations relate to IT processes where OIA believes Libraries IT is taking appropriate steps to ensure risks are not only remediated, but strong and durable control processes are being established. All of these items are expected to be implemented next follow-up period.

2- Three outstanding recommendations are related to the Tweed museum; limited progress was made partly due to the museum being without a director until January, 2020.

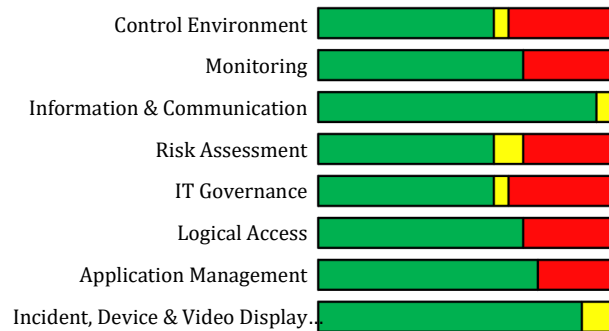
Current Status of Recommendations Rated as "Essential" That Are Over Two Years Old and Are Not Fully Implemented

| Audit/ Report Date | Status- Partially Implemented (P) or Not Implemented (N) | Senior Management Contact | Summary of the Issue/Risk Involved | Current Comments From Management |
|--------------------------|--|---------------------------|--|---|
| Athletics IT May 2017 | Not Implemented Partially Implemented | Rhonda McFarland | <p>Athletics should implement processes to obtain logs for AHMS to ensure that the system captures all pertinent user access and activity as required by HIPAA and University policy.</p> <p>Athletics should implement patient record view monitoring for the AHMS system to demonstrate compliance with HIPAA requirements regarding audit controls. Athletics should implement procedures to review all such activity on a regular basis and notify the Health Information Privacy & Compliance Office in the event the monitoring indicates that any patient records are being viewed without patient authorization or for purposes other than treatment, payment or health care operations.</p> | <p>Two recommendations for issue #3 from the 2017 Intercollegiate Athletics IT audit remain open. Athletics has replaced its health management system by switching to Fairview's Electronic Medical Record system (EPIC). The migration to EPIC was delayed due to the lengthy contract negotiations between the University and Fairview. ICA staff has discontinued use of the previous AHMS system and is now utilizing EPIC. In EPIC, Athletics has implemented a monthly review of patient record view monitoring that has been approved by the Health Information Privacy & Compliance Office. The final step to shutting down the prior health management system is to export the historical data to a secure location. As of December 12, 2019, the University Information Security department approved the proposed storage option. As of 1/27/2020, 83% of the historical records had been exported to the new location. As soon as all records have been exported, the previous system will be inactivated. We expect to have the recommendations for issue #3 fully implemented by the next review period.</p> |
| # of Items 2 | | | | |

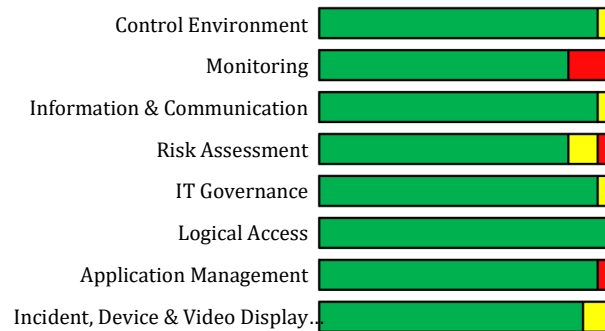
Total: 2

The bar charts shown below are presented to provide pictorial displays of the progress units are making on implementing audit recommendations rated as "essential." The bar chart included in the original report is shown in the left column, along with updated bar charts showing the previous quarter and the current status of the "essential" recommendations only (those bars that have red segments). The chart in the center column displays the status as of October 2019, while the chart on the right represents the current status. Charts are not presented for investigations. Charts for those units having implemented all "essential" recommendations during the current quarter are shown at the end of this report.

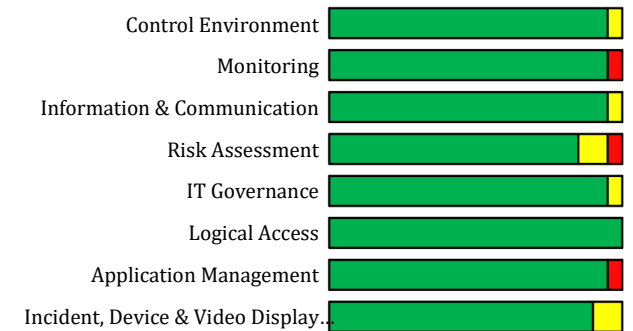
Original Report Evaluation



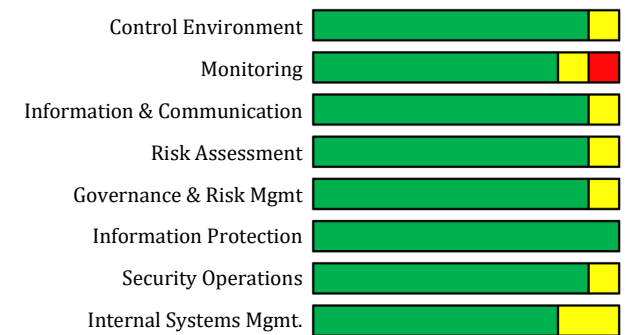
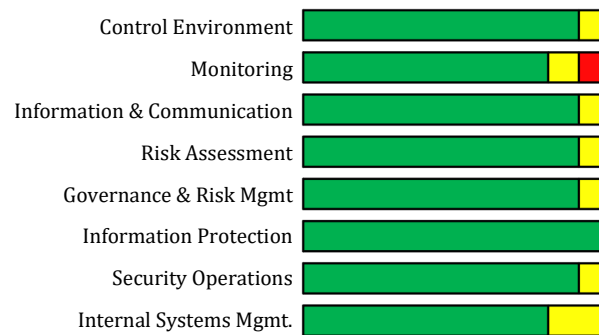
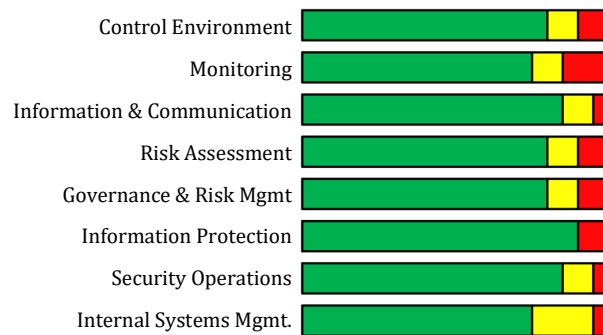
Previous Quarter Evaluation
Athletics IT (May 2017)



Current Quarter Evaluation

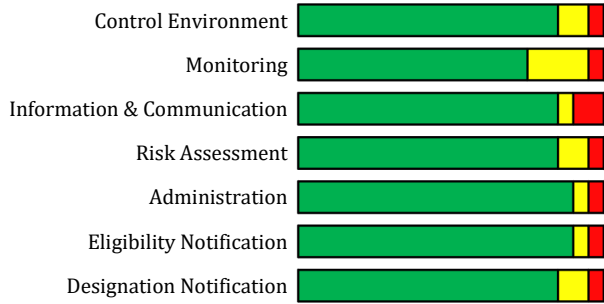


University Information Security (May 2018)



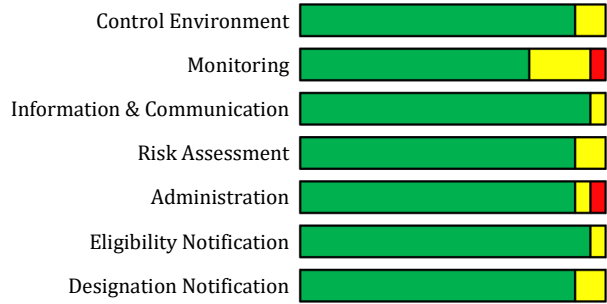
■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

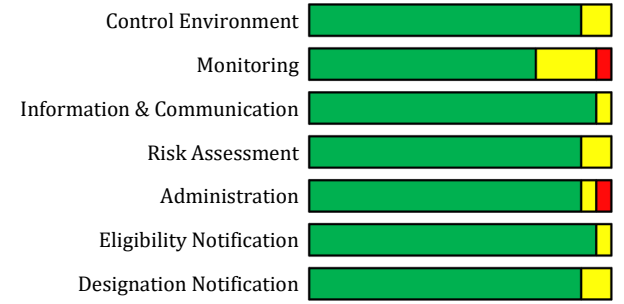


Previous Quarter Evaluation

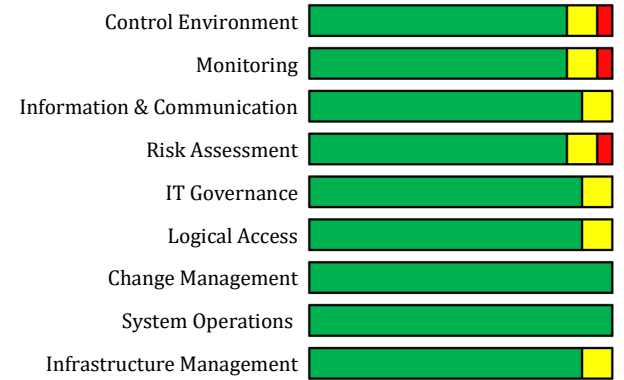
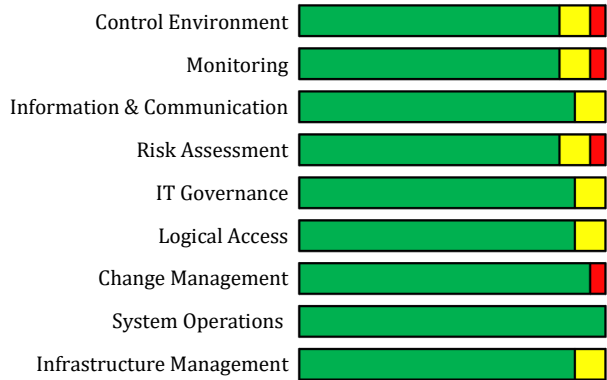
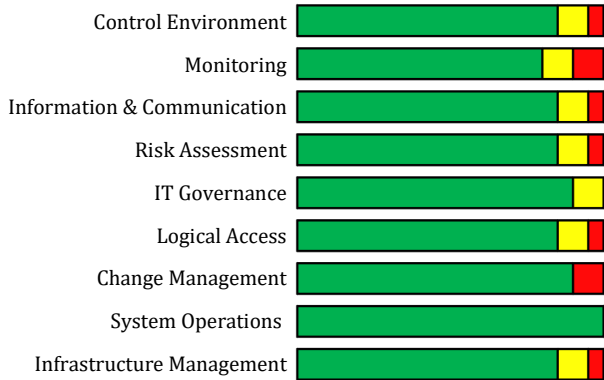
Family Medical Leave Act Review (May 2018)



Current Quarter Evaluation

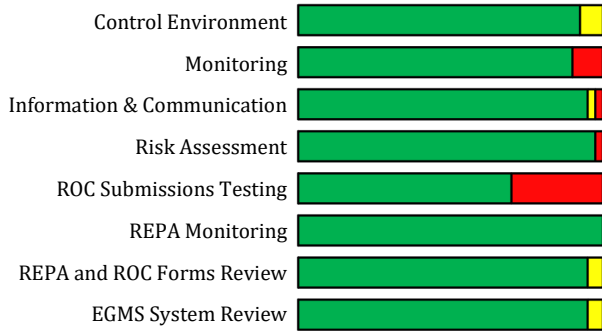


Academic Health Center Information Systems (Dec 2018)

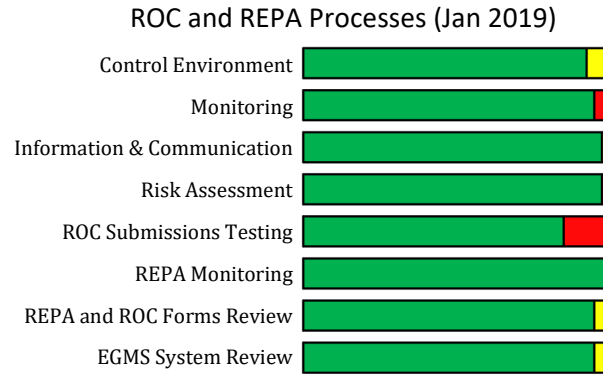


■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Essential Control Issue(s)

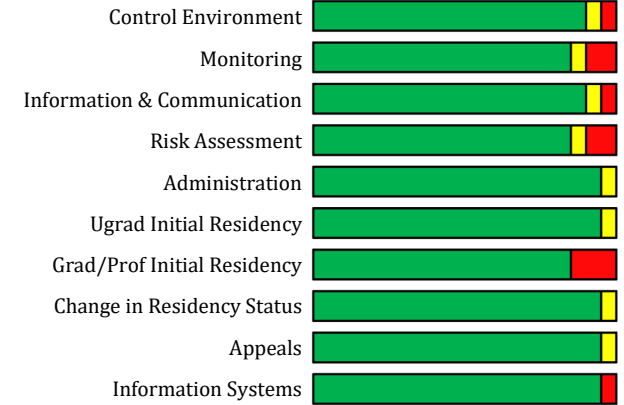
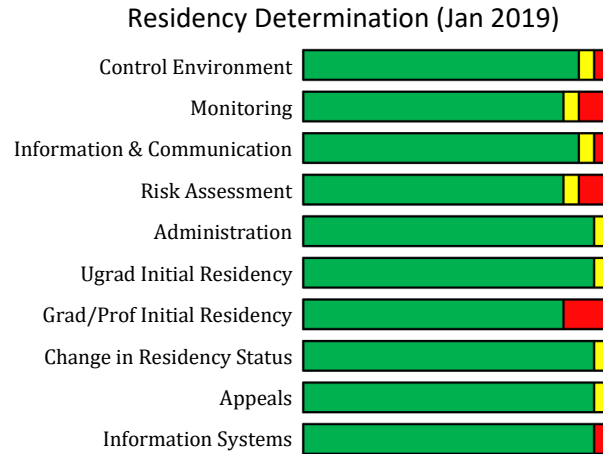
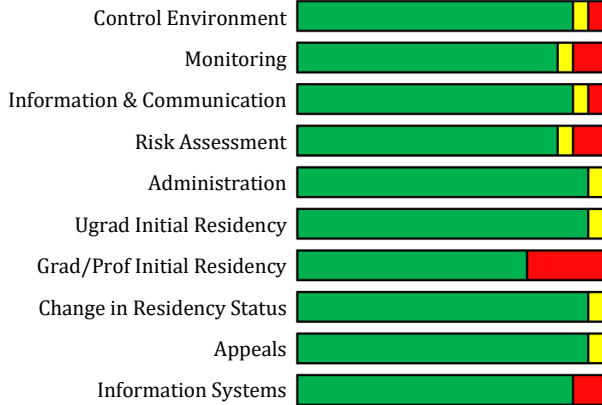
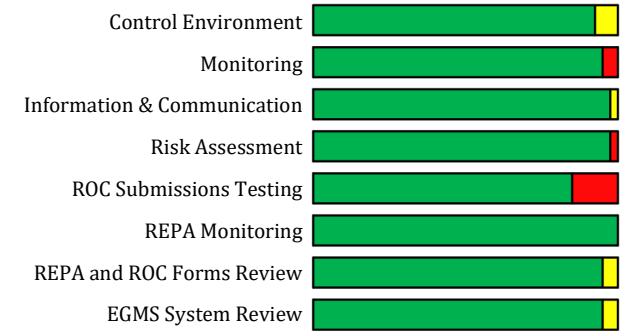
Original Report Evaluation



Previous Quarter Evaluation



Current Quarter Evaluation



■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Essential Control Issue(s)

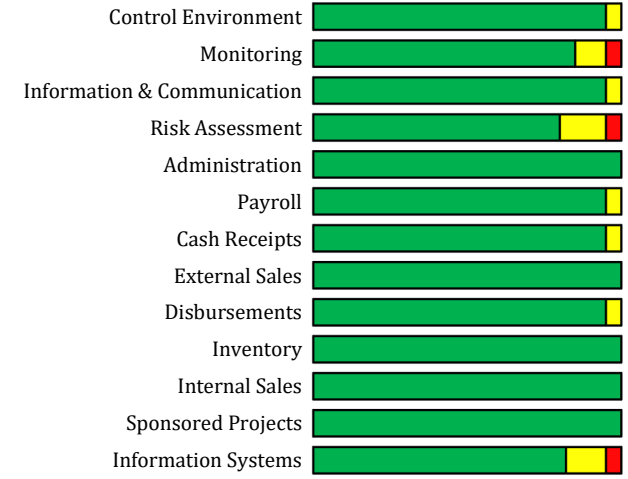
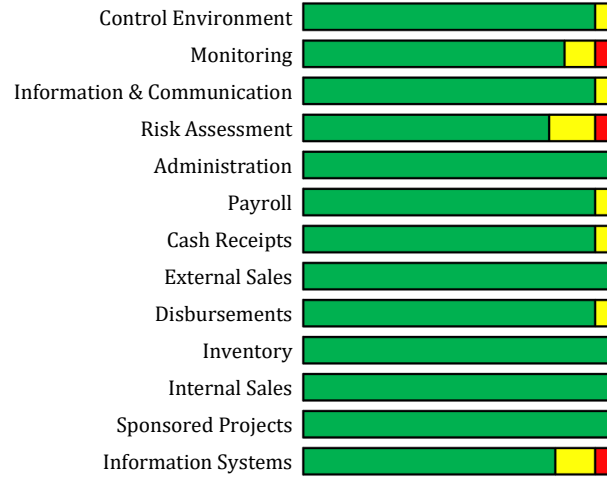
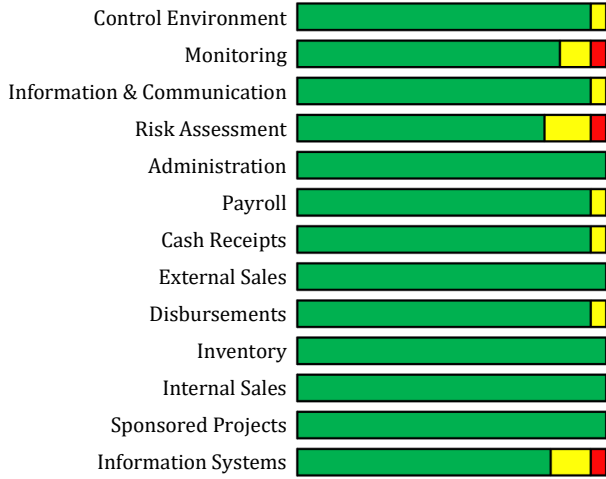
Original Report Evaluation

Previous Quarter Evaluation

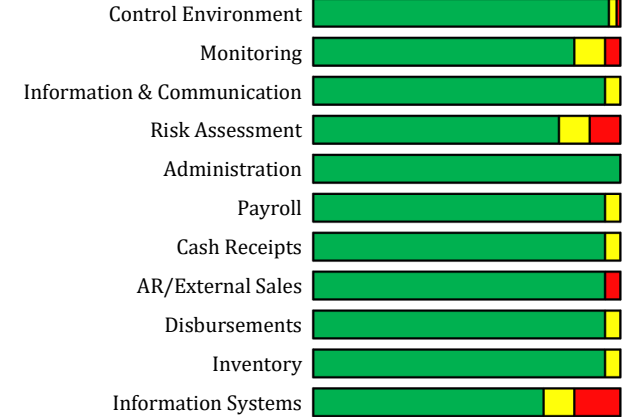
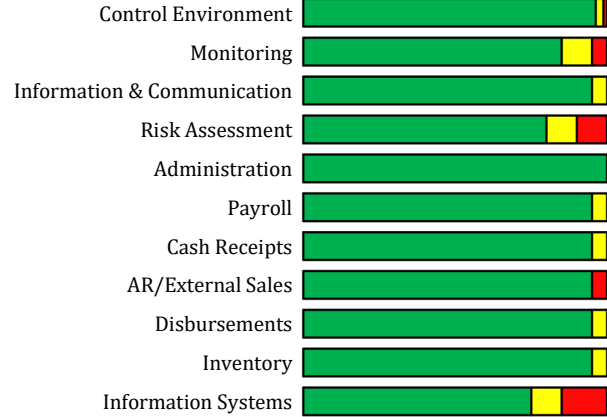
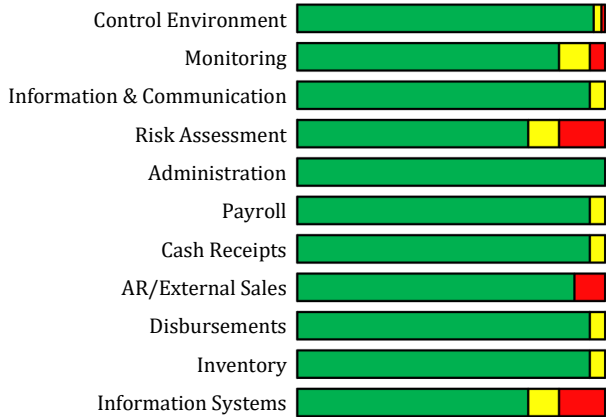
Current Quarter Evaluation

University of Minnesota Libraries and Minitex (Jan 2019)

Libraries

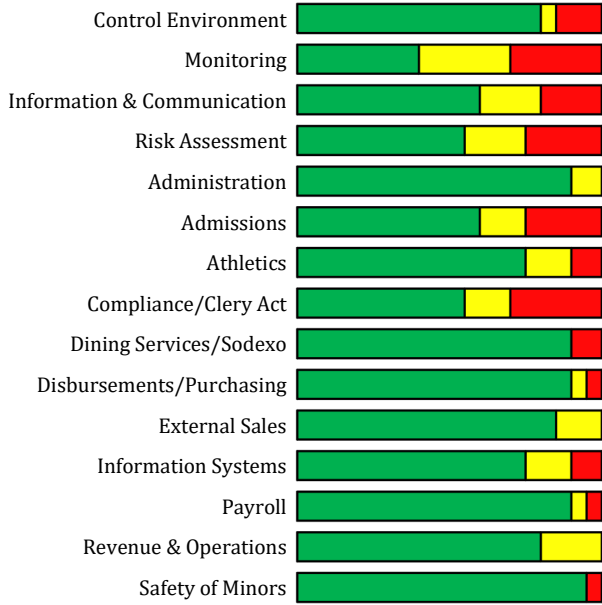


Minitex



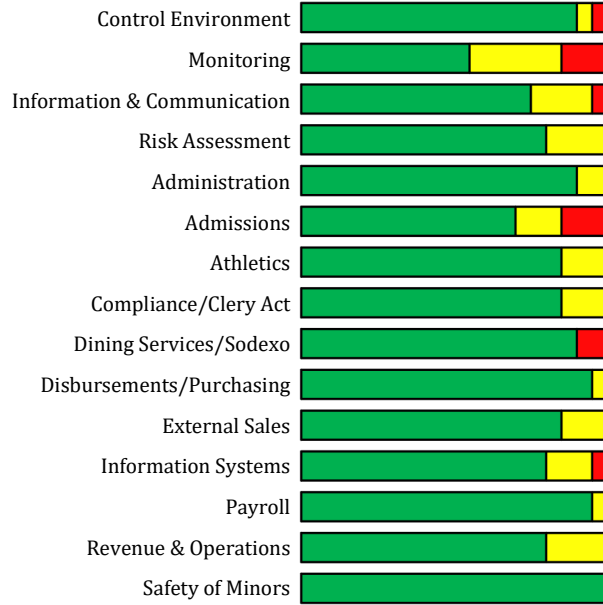
■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

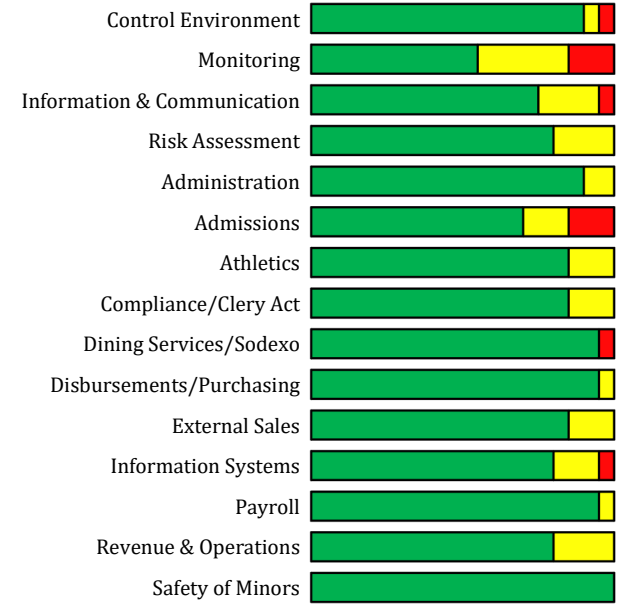


Previous Quarter Evaluation

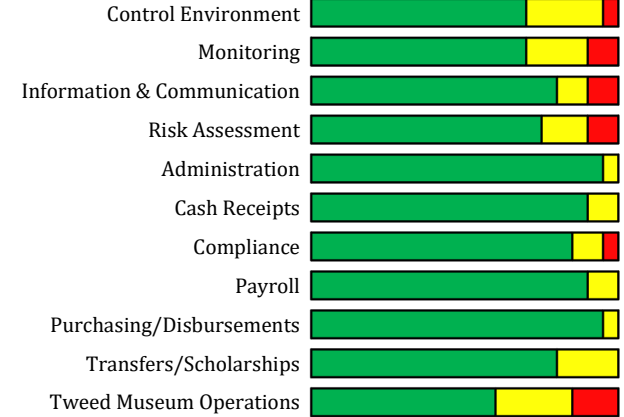
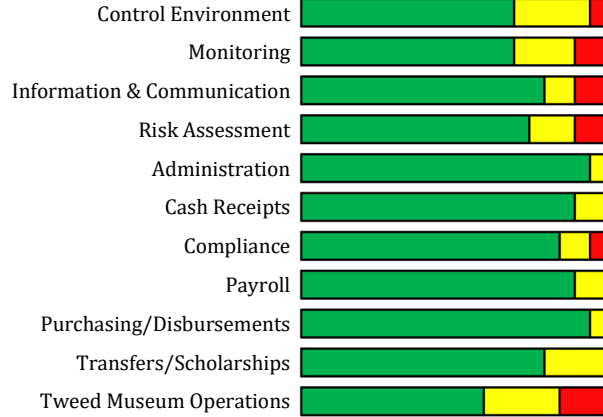
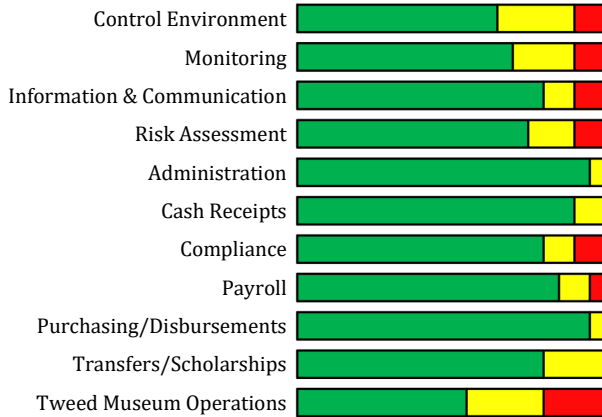
University of Minnesota, Crookston (Jan 2019)



Current Quarter Evaluation



UMD Fine Arts (Mar 2019)

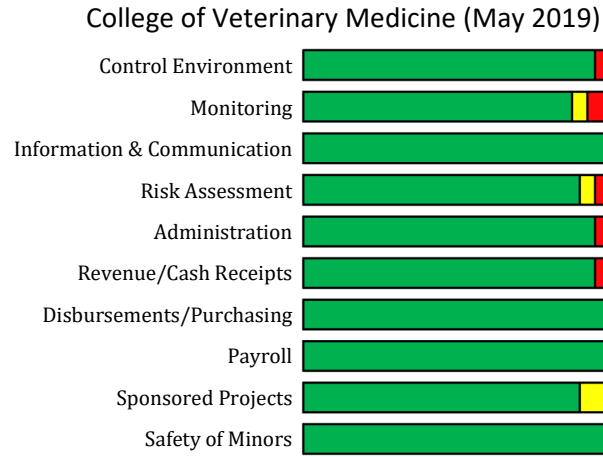


■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Essential Control Issue(s)

Original Report Evaluation



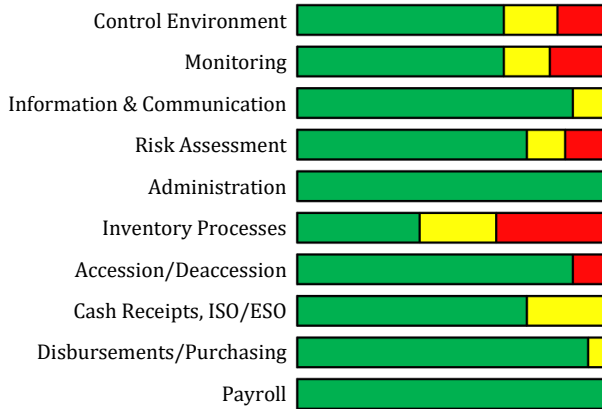
Previous Quarter Evaluation



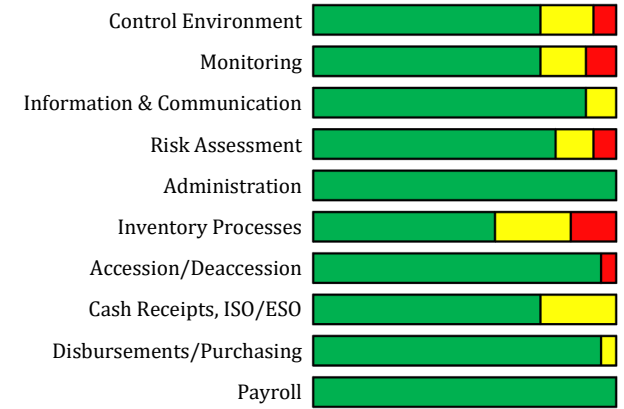
Current Quarter Evaluation



Weisman Art Museum (Jun 2019)



NO PREVIOUS
CONTROL EVALUATION
CHART



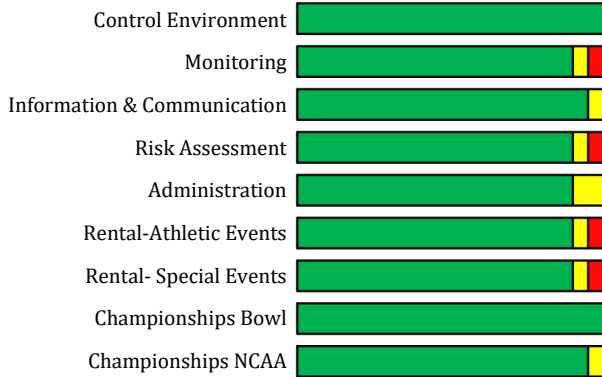
■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

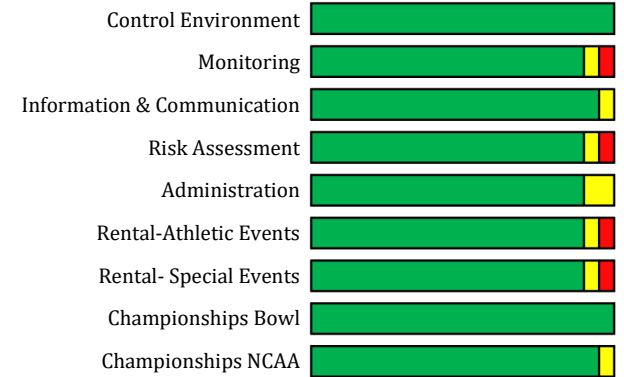
Previous Quarter Evaluation

Current Quarter Evaluation

Athletics Other Revenue (Jun 2019)



NO PREVIOUS
CONTROL EVALUATION
CHART



Hospitality and Other Special Expenses (Jul 2019)

A control evaluation chart was not developed for this report; however, there was one essential recommendation. As of this follow up period, it was partially implemented and not past its target implementation date.

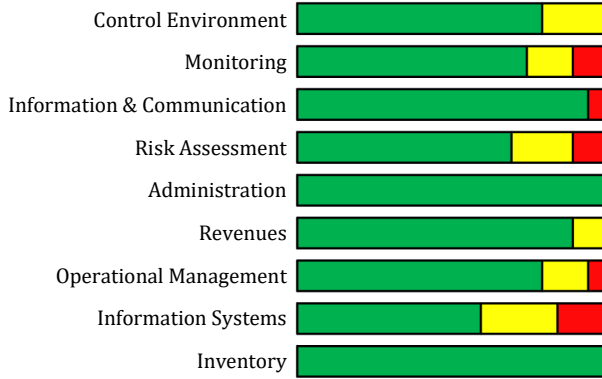
■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

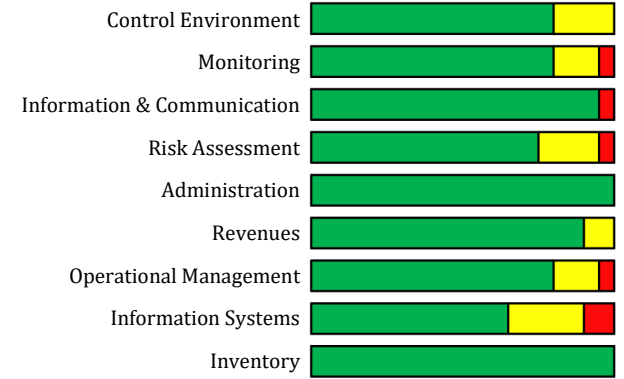
Previous Quarter Evaluation

Current Quarter Evaluation

UMD Stores (Including Print Shop and U Card Office) (Aug 2019)



NO PREVIOUS
CONTROL EVALUATION
CHART



2019 Review of Select Advancing HRP (Sept 2019)

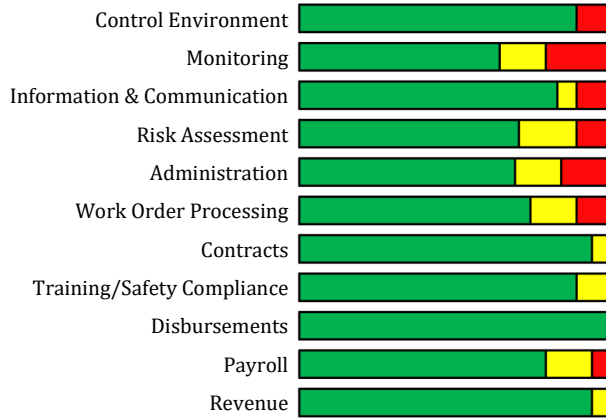


NO PREVIOUS
CONTROL EVALUATION
CHART



■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

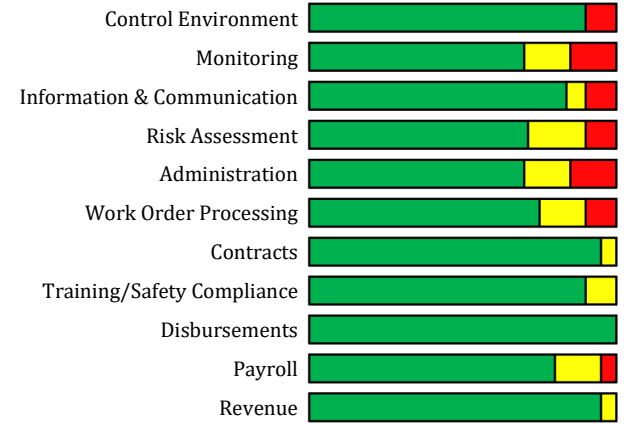


Previous Quarter Evaluation

Facilities Management District Operations (Sept 2019)

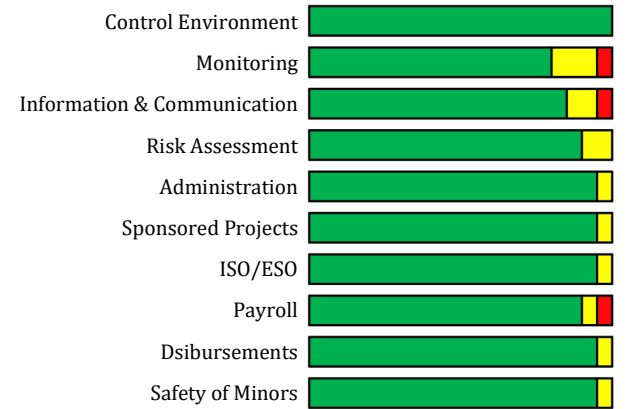
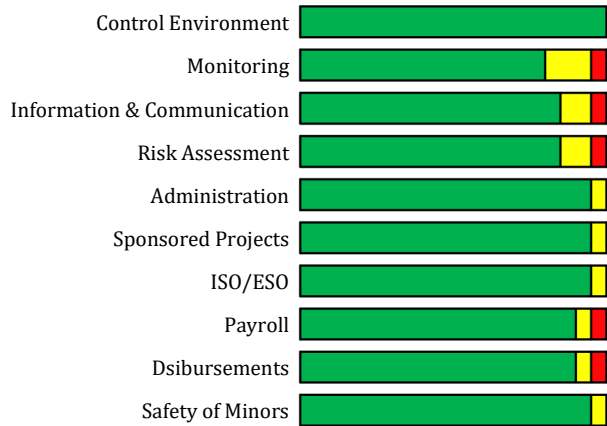
NO PREVIOUS
CONTROL EVALUATION
CHART

Current Quarter Evaluation



CFANS - Plant Sciences/BBE (Sept 2019)

NO PREVIOUS
CONTROL EVALUATION
CHART



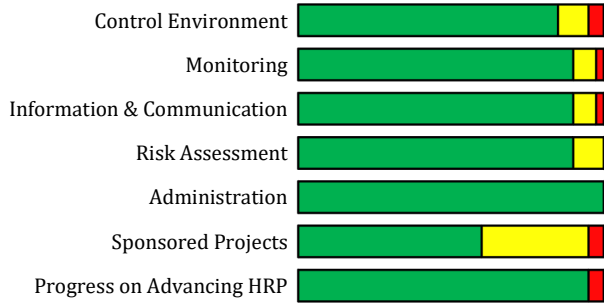
■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

Original Report Evaluation

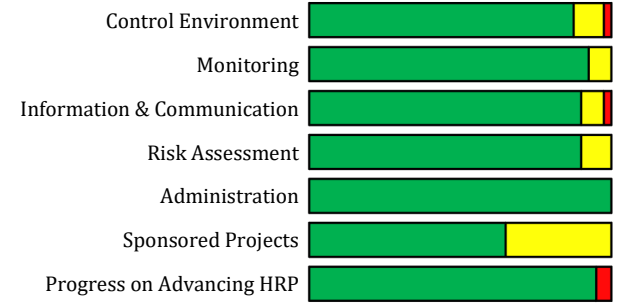
Previous Quarter Evaluation

Current Quarter Evaluation

Psychiatry & Behavioral Sciences - Research (Sept 2019)



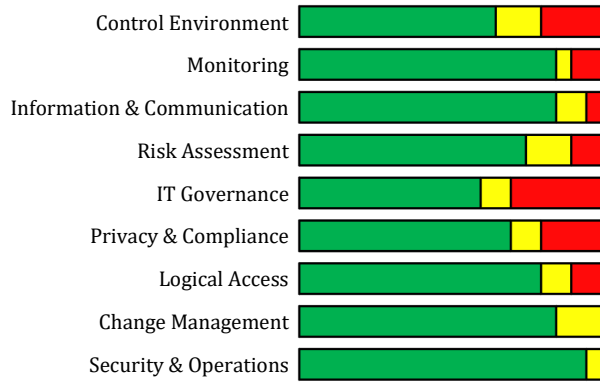
NO PREVIOUS
CONTROL EVALUATION
CHART



■ Adequate Control ■ Significant Control Issue(s) ■ Essential Control Issue(s)

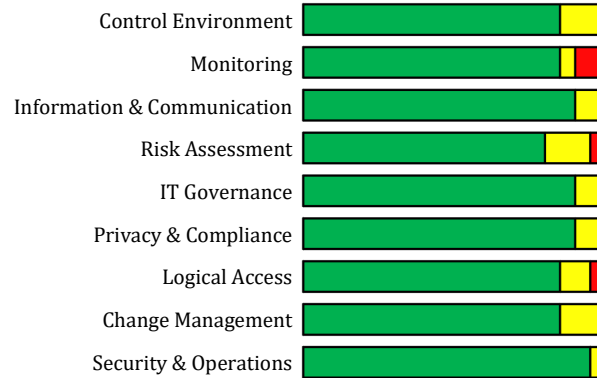
Units with Charts that Fully Implemented their "Essential" Recommendations During the Past Quarter

Original Report Evaluation

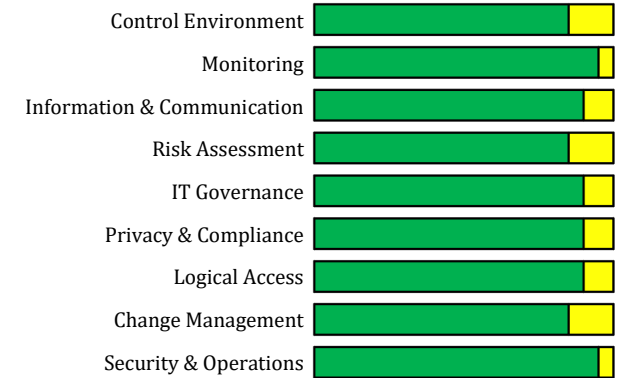


Previous Quarter Evaluation

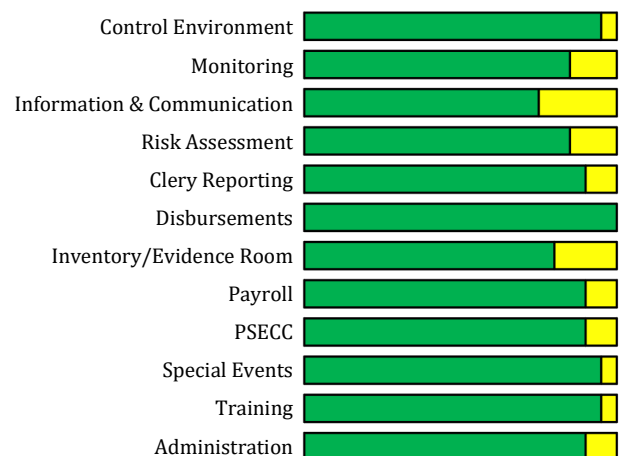
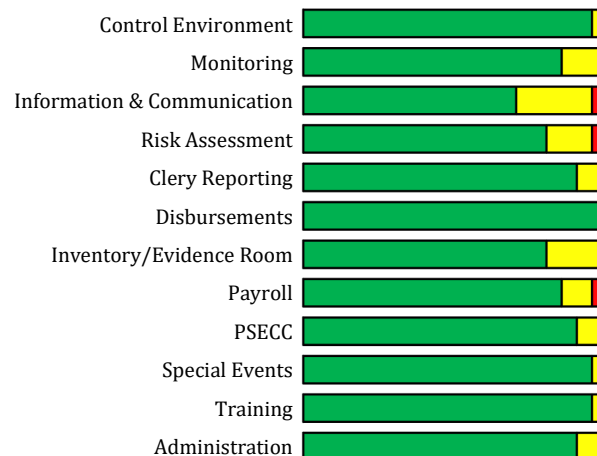
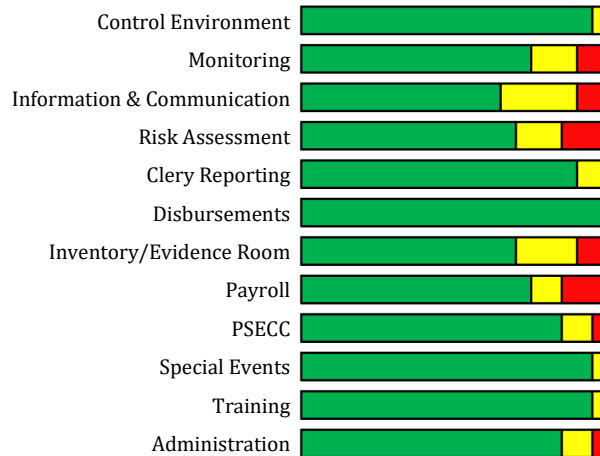
School of Public Health IT (Jan 2018)



Current Quarter Evaluation

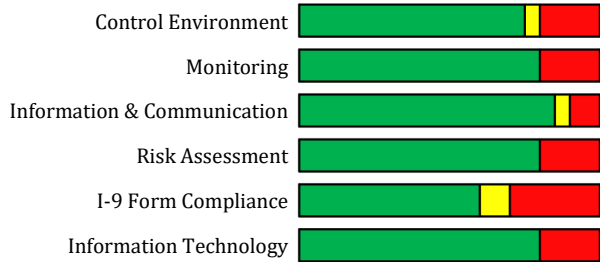


University Public Safety (Jan 2018)



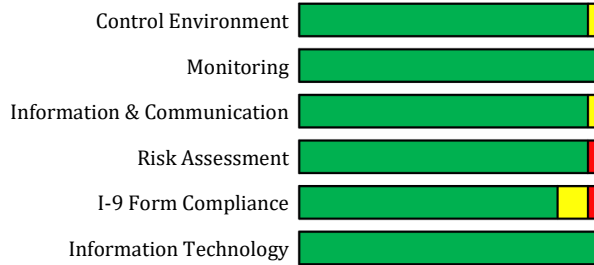
■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Essential Control Issue(s)

Original Report Evaluation

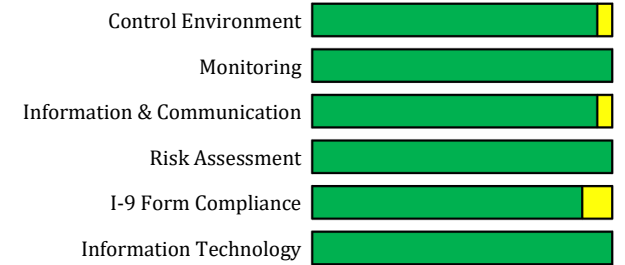


Previous Quarter Evaluation

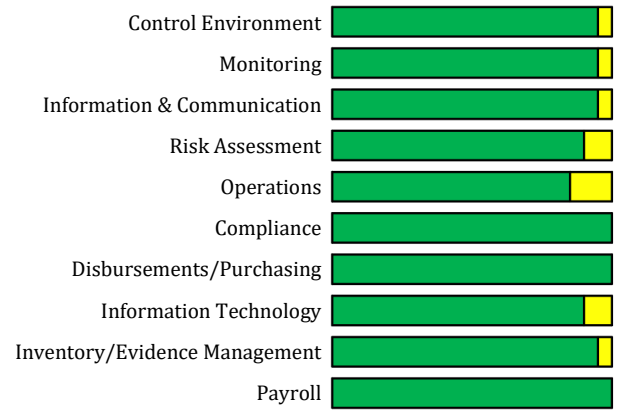
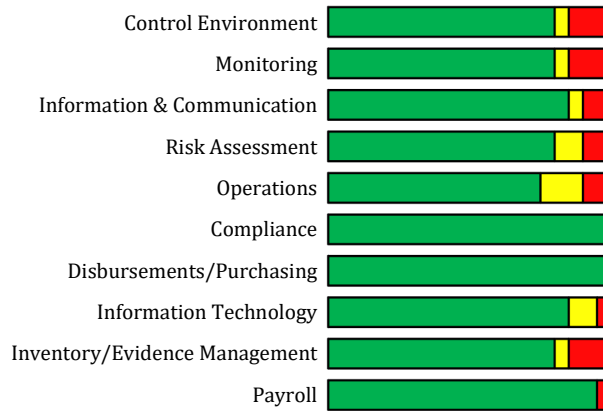
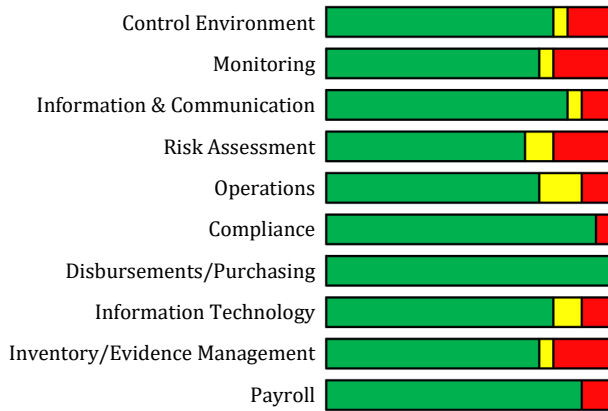
Employment Eligibility Verification (Aug 2018)



Current Quarter Evaluation



UMD Police Department (Jan 2019)



■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Essential Control Issue(s)

Audit Activity Report

Scheduled Audits

Completed Audits Of:

- Disaster Recovery of Information Systems
- Emergency Management and Continuity of Operations
- Institute for Social Research & Data Innovation
- UMN Duluth Office of Admissions
- Veterinary Diagnostic Labs (VDL)

Details are shown on the following charts.

Began/Continued Audits Of:

- University Identity and Access Management
 - Office of Student Finance
 - Internal/External Sales Organizations
 - Computer Science & Engineering
 - Public Safety IT
 - University Contract Management
 - Carlson School of Management
 - UMN Duluth College of Liberal Arts
-
- Continued a collaborative review of University Mental Health services with the Provost's Office. This included collaboration with University professionals from Boynton Health Services, Student Counseling Services, Student Affairs, Office of the Provost, Office of the President, and Office of Measurement Services. This team developed an electronic survey to compile an inventory of student mental health services, programs, and initiatives offered across the University of Minnesota system. The survey categorized student mental health services, programs and initiatives into five main areas: Clinical Services, Non-Clinical Program/Services, Committees/Task Forces, Training/Educational Programs, and Peer/Student Programs. The survey found the University has several initiatives in place related to Mental Health with varying levels of coordination. Specific details related to the survey are being presented to the February meeting of the Mission Fulfillment Committee.
 - Began review of the Enterprise Access Management (EAM) implementation project management to confirm ongoing oversight of: budget, timelines, and deliverables.

Investigations

- Performed investigative work on five issues in accordance with the University Policy on Reporting and Addressing Concerns of Misconduct.

Special Projects

- Provided consulting services related to University payroll exception testing.

- Provided technology consulting in several areas including: HIPAA security, GLBA, system logging and monitoring, IT service ticketing solution migration, account and vulnerability management, and the IT security framework and policies.
- Completed management requested review of faculty research support and course assignments at UMD's Swenson College of Science and Engineering.
- Completed self-assessment in support of the periodic external quality assessment review required by the Institute of Internal Auditor (IIA).

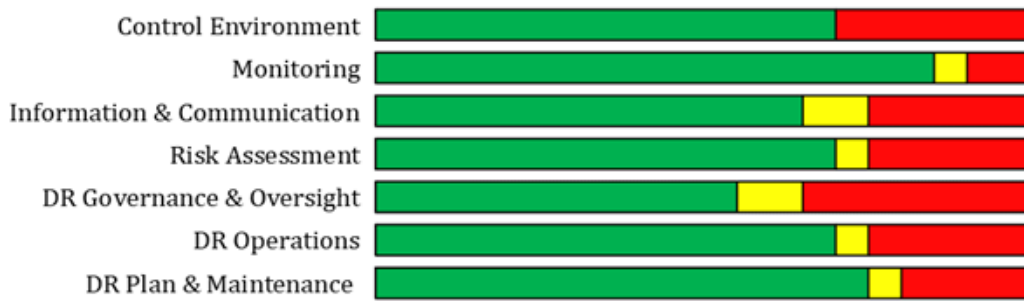
Other Audit Activities

Participated in the following:

- President's Cabinet
- Senior Leadership Group
- President's Policy Committee
- Policy Advisory Committee
- Board of Regents Policy Committee
- Executive Compliance Oversight Committee
- Institutional Conflict of Interest Committee
- University of Minnesota Foundation Audit Committee
- Fairview Health Systems Audit Committee
- IT Leadership Committees
- HRPP Advisory Committee
- Research Compliance Committee
- GDPR Consultation Committee
- P & A Senate
- Data Center Co-Location Initiative
- Data Storage Council
- Security Vulnerability Task Force
- VP HR Search Committee
- Metropolitan Council Audit Committee
- Quality Assessment Reviews of Internal Audit departments at the University of Kansas and Duke University

Audit Reports Issued Since October 2019

Disaster Recovery of Information Systems



| | | | |
|----------------------|-------------------|------------------|--------------|
| Report # | 2010 | Issue Date | Oct-19 |
| # of Essential Recs. | 9 | Total # of Recs. | 13 |
| Overall Assessment | Needs Improvement | Adequacy of MAP | Satisfactory |

Disaster Recovery (DR) planning aims to minimize system downtime and the loss of data in the event of a disaster. As IT systems are managed in a distributed manner throughout the University, responsibilities for DR are split between: OIT's DR team; OIT infrastructure and software support units; and other University IT units. The management of the University's DR program needs improvement. There is inadequate governance for the DR program including no defined process ownership, and insufficient oversight of IT support units' DR activities. There is also insufficient coordination between the DR program and emergency management and COOP programs. These governance issues have resulted in issues with DR plan activities for both OIT and non-OIT managed systems. In addition, the proximity of OIT's primary and secondary data centers, and capacity limitations for system recovery at the secondary location, create a risk that in the event of a largescale disaster data and/or some IT operations may not be recoverable. Many of the issues identified in the report predate current OIT and DR team leadership. OIT's DR team is highly capable and have continued to work to improve overall DR processes in recent years.

Emergency Management and Continuity of Operations

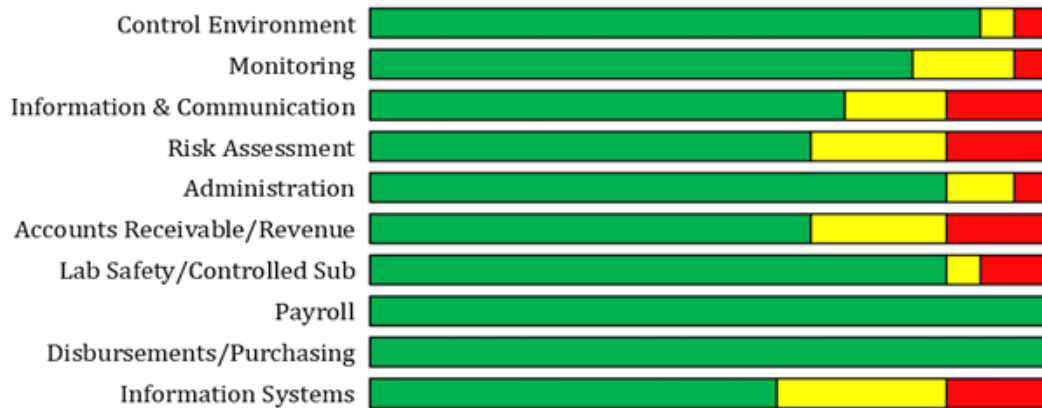


| | | | |
|---|------|------------------|--------------|
| Report # | 2011 | Issue Date | Oct-19 |
| # of Essential Recs. | 6 | Total # of Recs. | 16 |
| Overall Assessments: | | Adequacy of MAP | Satisfactory |
| DEM Central Activities = Good; Oversight and Distributed Activities = Needs Improvement | | | |

Both the University Emergency Management (EM) and Continuity of Operations (COOP) programs are overseen by University Services' Department of Emergency Management (DEM). EM focuses on preparing for, and coping with, hazards and disasters when they occur. COOP focuses on keeping operations running during or shortly after a disaster or emergency. The EM and COOP processes managed directly by DEM are generally well-managed. DEM has implemented an array of robust EM and COOP processes and practices that have better prepared the University to appropriately respond to operational disruptions or large-scale emergencies. However, additional oversight is needed of non-central activities as unit level activities are not consistently performed or operating effectively, including building emergency plans and insufficient governance mechanisms or coordination between DEM and information technology groups responsible for system disaster recovery and information security.

■ Adequate Control ■ Significant Control Issue(s) ■ Critical Control Issue(s)

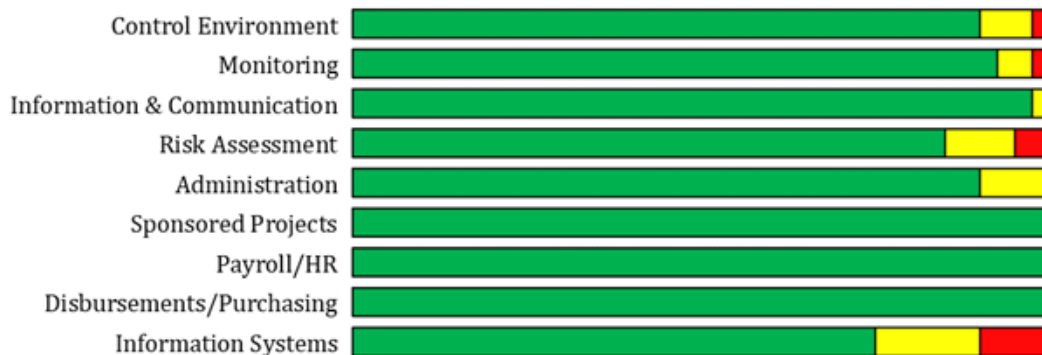
Veterinary Diagnostic Laboratory



| | | | |
|----------------------|----------|------------------|--------------|
| Report # | 2012 | Issue Date | Jan-20 |
| # of Essential Recs. | 8 | Total # of Recs. | 19 |
| Overall Assessments: | Adequate | Adequacy of MAP | Satisfactory |

The University of Minnesota's Veterinary Diagnostic Laboratory (VDL), within the College of Veterinary Medicine, is a national leader in providing rapid diagnosis of animal diseases, identifying emerging diseases, developing new diagnostic methods, and training diagnosticians and veterinarians. Results of the audit work performed determine that IT governance, IT coordination and oversight, and financial management warrant improvement to ensure appropriate internal controls are in place. Development of an IT strategy among the IT partners would assist in aligning technology goals and reduce risk. The opportunities to strengthen financial management include increasing financial oversight, performing reconciliations, and reducing processing inefficiencies.

Institute for Social Research and Data Innovation

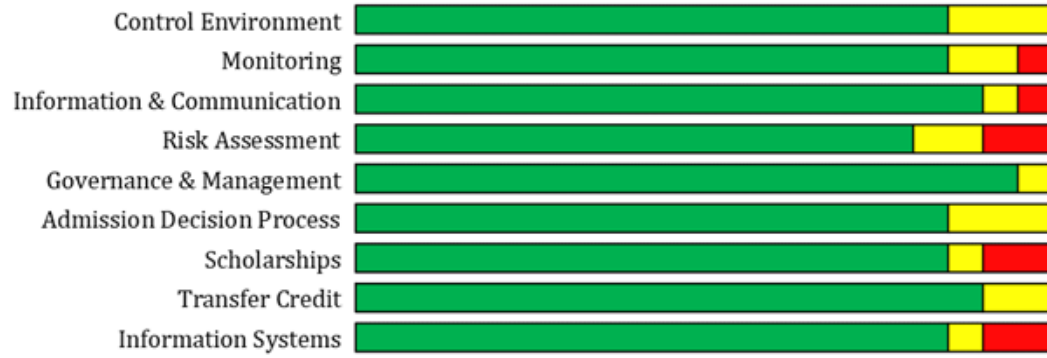


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|----------------------|------|------------------|--------------|
| Report # | 2013 | Issue Date | Jan-20 |
| # of Essential Recs. | 2 | Total # of Recs. | 7 |
| Overall Assessment | Good | Adequacy of MAP | Satisfactory |

The Institute for Social Research and Data Innovation (ISRDI) is comprised of the Minnesota Population Center, the IPUMS Center for Data Integration, the Minnesota Research Data Center, and the Life Course Center and is under the Office of the Vice President for Research. The work of the Institute and its centers advances knowledge of societies and populations across time and space, including economic and demographic behavior, health, well-being, and human-environment interactions. ISRDI has developed a control environment and a system of internal control that addresses most major business and compliance risks. Both payroll and disbursement testing indicated no issues rated as significant or essential; this is a noteworthy accomplishment based on an unanticipated staffing constraint during the audit period. Information technology controls are for the most part well managed and robust; however, some IT controls warrant improvement for user administration processes and access reviews.

■ Adequate Control
 ■ Significant Control Issue(s)
 ■ Critical Control Issue(s)

UMN Duluth Office of Admissions



| | | | |
|----------------------|------|------------------|--------------|
| Report # | 2014 | Issue Date | Feb-20 |
| # of Essential Recs. | 3 | Total # of Recs. | 9 |
| Overall Assessments: | Good | Adequacy of MAP | Satisfactory |

UMN Duluth Admissions has established processes that address most major risks while performing its mission critical functions. We found no evidence of major inconsistencies with admission and scholarship award decisions, or decision appeal processes. Risks associated with information technology are reduced by practices that limit the amount of data transfers and/or duplication of critical information between systems, and by leveraging centrally provided University solutions. However, improvement of management of user access to critical systems and data is warranted. Some improvements are also needed related to documentation, quality assurance, and process consistency. Finally, UMN Duluth needs to continue to look for ways to address the current gap between target and actual undergraduate enrollment.