



AUDIT AND ADVISORY SERVICES
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November 6, 2018

Marc Fisher
Vice Chancellor
Administration

Vice Chancellor Fisher:

We have completed our audit of business continuity per our annual service plan in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter.

Attached is our audit report including its observation and management action plan. Thank you to the Office of Emergency Management and the Office of Homeland Security and Emergency Management for their cooperative efforts throughout our audit process.

Please destroy all copies of draft reports and related documents. Also, please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Jaime Jue
Interim Director

cc: Chief of Police Margo Bennett
Assistant Vice Chancellor and Controller Delphine Regalia
Associate Chancellor Khira Griscavage
Senior Vice President and Chief Compliance and Audit Officer Alexander Bustamante



AUDIT AND ADVISORY SERVICES

Business Continuity
Audit
Project No. 18-709

November 6, 2018

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Jaime Jue
Interim Director

**University of California, Berkeley
Audit and Advisory Services
Business Continuity**

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OVERVIEW

Executive Summary

The purpose of the audit was to assess the effectiveness of campus business continuity planning and its alignment with subordinate continuity plans, evaluate the campus' preparedness in the event of a major business disruption, and identify issues that may limit interim business processing and restoration.

Based upon our audit fieldwork, we observed the campus has made incremental but noteworthy progress by the Office of Emergency Management (OEM) continuing their work with campus units to develop and/or refine unit-level business continuity plans, prioritizing high impact administrative units first. However at staffing levels observed during our testing only a handful of units could be assisted in a given year. Projecting forward, it would take several years if not decades to obtain coverage over the majority of campus units. There is likely an opportunity to concurrently develop tools and resources that units can utilize on a self-service basis in the interim to develop, implement and test their own business continuity plans in advance of being scheduled for full assistance from and review by OEM.

In addition, these efforts do not currently extend to development of an entity-wide continuity plan that would facilitate and coordinate the execution of unit-level plans in the event of a business disruption nor address potential gaps in individual unit-level plans, such as in the event of multiple campus buildings being unavailable for occupancy. This gap was also identified in our fiscal year 2012 audit of emergency management. We believe there is still a need for the development of a robust entity-wide continuity plan.

However, more significantly and subsequent to our audit fieldwork, continued forward progress related to business continuity planning appears to have stopped due to the departure of all key OEM personnel, for various reasons, in spring 2018 without a clear succession or transition plan in place to continue their work. As such, we believe this is a critical matter for management attention.

Source and Purpose of the Audit

The purpose of the audit was to assess the effectiveness of campus business continuity planning and its alignment with subordinate continuity plans, evaluate the enterprise's preparedness in the event of a major business disruption, and identify issues that may limit interim business processing and restoration.

Scope of the Audit

Based on our risk assessment, the scope of the audit included an examination of documentation related to the current campus business continuity program, including relevant campus policies and interviews with management of the OEM.

We also considered external standards for emergency management programs namely the National Fire Protection Association (NFPA) Standard 1600, *National Standard on Disaster/Emergency Management and Business Continuity/Continuity of Operations Programs*. Additionally, we accessed and reviewed the campus units' continuity plans via the UC Ready program maintained by UC Office of the President to determine the level of completion of subordinate continuity plans as well as a campuswide continuity plan. The purpose of the review was also to evaluate the campus' level of preparedness in the event of a major business disruption.

Our audit fieldwork was completed between July 2017 and February 2018.

Background

The mission of the OEM is to strengthen how the campus mitigates and prevents risk; prepares for, responds to, and recovers from emergencies; and protects the campus' mission from disruption.

In 2012 our audit conducted of emergency management/preparedness observed that the campus had made a significant investment in the UC Ready tool for the purpose of assisting departments and units with creating and maintaining their business continuity plans. The audit noted that the OEM, formerly known as the Office of Continuity Planning was in the process of reviewing and updating existing continuity plans and developing a standardized process for conducting the annual plan review.

In fiscal year 2016, to strengthen the ability to protect and continue the campus mission through any disruption, the OEM commenced continuity planning for high impact campus units with mission or operations critical charges. High impact campus units' continuity plans and components of the plan had been prioritized as follows:

- For the 16 High Impact Administrative Units on Information Services and Technology's (IST's) Application Restore List, it planned to have identified and/or completed the units' essential functions, business impact analysis, critical resources, recovery strategies, and continuity plans by 2019.

- For the 36 Non-IST Application Restore List High Impact Administrative Units, the OEM planned to complete the above by 2021.

At the time of the audit, continuity plans had been completed only for the OEM, Campus Shared Services, and University Health Services and, according to the OEM, the campuswide continuity plan remained under development until all units on the High Impact Administrative Units list complete their individual continuity plans.

As of January 2017, the OEM began reporting through the UC Police Department within the organization of the Vice Chancellor for Administration. This was a change from the previous reporting structure in which the OEM began reporting through the executive director of Environment, Health & Safety and Emergency Management in July 2012. At the time of the audit, OEM had four individuals on staff, the OEM manager, training and exercise coordinator, continuity planner, and emergency management coordinator. The staff was overseen by the director of Homeland Security & Emergency Management. During the course of the audit it was communicated that the number of OEM staff positions would be reduced from four to two resulting in the remaining OEM manager and the continuity planner positions. However, as of this spring, all positions within the OEM will have been vacated due to a combination of reduction of staff, rotations to the UC Office of the President, and resignations for other reasons.

Summary Conclusion

Based upon our audit fieldwork, we observed the campus has made incremental but noteworthy progress by the OEM continuing their work with campus units to develop and/or refine unit-level business continuity plans, prioritizing high impact administrative units first. However at staffing levels observed during our testing only a handful of units could be assisted in a given year. Projecting forward, it would take several years if not decades to obtain coverage over the majority of campus units. There is likely an opportunity to concurrently develop tools and resources that units can utilize on a self-service basis in the interim to develop, implement and test their own business continuity plans in advance of being scheduled for full assistance from and review by the OEM.

In addition, these efforts do not currently extend to development of an entity-wide continuity plan that would facilitate and coordinate the execution of unit-level plans in the event of a business disruption nor address potential gaps in individual unit-level plans, such as in the event of multiple campus buildings being unavailable for occupancy. This gap was also identified in our fiscal year 2012 audit of emergency management. We believe there is still a need for the development of a robust entity-wide continuity plan.

However, more significantly and subsequent to our audit fieldwork, continued forward progress related to business continuity planning appears to have stopped due to the departure of all key OEM personnel, for various reasons, in spring 2018 without a clear succession or transition plan in place to continue their work. As such, we believe this is a critical matter for management attention.

SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN

Current Status of Business Continuity Efforts

Observation

We observe that the campus has made incremental but noteworthy efforts by the Office of Emergency Management (OEM) continuing their work with campus units to develop and/or refine unit-level business continuity plans, prioritizing high impact administrative units first. However, at the staffing levels we observed during our audit test work, only a handful of units can be assisted in a given year. Projecting forward, it would take several years if not decades to obtain coverage over the majority of campus units. There is likely an opportunity to concurrently develop tools and resources that units can utilize on a self-service basis in the interim to develop, implement and test their own business continuity plans in advance of being scheduled for full assistance from and review by the OEM.

In addition, these efforts do not currently extend to development of an entity-wide continuity plan that would facilitate and coordinate the execution of unit-level plans in the event of a business disruption nor address potential gaps in individual unit-level plans. This gap was also identified in our fiscal year 2012 audit of campus emergency management at which time campus agreed to focus efforts on unit continuity plans first. We believe there is still a need for the development of a robust entity-wide continuity plan.

There is also risk that the current level of forward progress may further be impacted by the departure of key personnel that occurred after the close of our fieldwork. As of this spring, all positions within the OEM will have been vacated due to a combination of reduction in force, rotations to the UC Office of the President, and resignations for other reasons. We are concerned that the approach that has been developed to date, which we view as constructive, will be abandoned as positions are vacated. It may be difficult for UC Police Department management to fill these resource gaps internally, as their professionals have traditionally been focused more on immediate emergency response and not toward resumption of business processes after an initial emergency or disruption has been stabilized. Resources elsewhere in the Vice Chancellor of Administration organization or through external recruitment may need to be employed to continue the forward progress to ensure smooth continuity of business operations. In particular, recent important efforts between the OEM and Information Services and Technology (IST) to coordinate business continuity work by the OEM and disaster recovery work by IST will be likely impacted by vacancies in both organizations as the IT disaster recovery manager has also recently announced his retirement.

Management Response and Action Plan

Management agrees with the observation and is recruiting to fill the three OEM open positions: OEM director, OEM manager, and continuity planner. The estimated target date for completion

is January 31, 2019. Once these positions are filled, management will share the audit observation and direct staff to coordinate with ongoing campus IST efforts to continue business continuity and disaster recovery work. However, in the event recruitment is significantly delayed, management will consider hiring an external consultant to continue the forward progress of developing campus unit-level and entity-wide business continuity plans.