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ABBREVIATIONS

AFD     Administration and Finance Division
BC      Business Continuity
BCP     Business Continuity Plan(s)
CGC-1   Continuing Guidance Circular 1
COOP/COG Continuity of Operations/Continuity of Government Plan
CSU     California State University
EO      Executive Order
OES     Office of Emergency Services
ORM     Office of Risk Management
OUA     Office of the University Auditor
EXECUTIVE SUMMARY

As a result of a systemwide risk assessment conducted by the Office of the University Auditor (OUA) during the last quarter of 2009, the Board of Trustees, at its January 2010 meeting, directed that Business Continuity (BC) be reviewed. Similar audits of Business Continuity were performed during our Disaster and Emergency Preparedness audits in 2006.

We visited the San José State University campus from August 23, 2010, through September 3, 2010, and audited the procedures in effect at that time.

Our study and evaluation revealed certain conditions that, in our opinion, could result in significant errors and irregularities if not corrected. Specifically, the campus did not maintain adequate internal control over the following areas: business continuity planning. These conditions, along with other weaknesses, are described in the executive summary and body of this report. In our opinion, except for the effect of the weaknesses described above, the operational and administrative controls for BC activities in effect as of September 3, 2010, taken as a whole, were sufficient to meet the objectives stated in the “Purpose” section of this report.

As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

The following summary provides management with an overview of conditions requiring attention. Areas of review not mentioned in this section were found to be satisfactory. Numbers in brackets [ ] refer to page numbers in the report.

PROGRAM ADMINISTRATION [6]

The campus had not fully implemented a business continuity program.

AVIAN PANDEMIC INFLUENZA RESPONSE PLAN [7]

The campus’ avian pandemic influenza response plan needed further development.
INTRODUCTION

BACKGROUND

Business continuity (BC) is the ability of an organization to provide service and support for its customers and to maintain viability following a catastrophic event. BC is closely related to emergency preparedness, as they both involve substantial planning, risk assessment, and evaluation of impact to the business. However, the two areas differ in scope. The goal of emergency preparedness is to address the immediate impacts of a disaster and to respond as needed to end the emergency. In contrast, BC is a broader process of preparation that includes disaster, response, recovery, mitigation, risk reduction, prevention, and preparedness.

A business continuity plan (BCP) defines how business activities will be restored after an interruption. Key resources for guidance in creating such a plan include the Federal Emergency Management Agency Continuity Guidance Circular 1 (CGC-1), Continuity Guidance for Non-Federal Entities, which provides broad principles that are applicable to agencies and businesses nationwide. In addition, the Continuity of Operations/Continuity of Government Plan (COOP/COG), released by the California Office of Emergency Services (OES) (now the California Emergency Management Agency), provides guidance on applying the principles put forth in CGC-1 within the State of California.

The California State University (CSU) system has been involved in BC activities for many years. However, it was not until recently that the CSU established formal guidelines for BC activities. In early 2006, the CSU Office of Risk Management (ORM) requested that each campus prepare a written BCP in the event a pandemic influenza were to occur. The ORM distributed the Avian Pandemic Influenza Business Continuity Planning Guide to all CSU campuses in order to aid campus staff involved in emergency and restoration planning to develop their own BCP. To ensure the adequacy and consistency of pandemic influenza BCPs systemwide, the ORM commissioned James Lee Witt Associates, a part of GlobalOptions Group, Inc., to review all pandemic influenza BCP and report the results to the ORM. In August 2007, James Lee Witt Associates’ Pandemic Influenza Business Continuity Plan Assessment Final Report was issued, and it provided key recommendations in the form of strategic themes for each campus and the entire CSU system as a whole.

In October 2007, the CSU finalized and implemented Executive Order (EO) 1014, California State University Business Continuity Program. It models the California OES COOP/COG, though in a streamlined format, and is a fundamental guidance document for the chancellor’s office and the campuses as they develop and implement BCP for essential business units. EO 1014 clearly defines responsibility for BC, including significant roles at the campuses, and outlines specific procedures for the business impact analysis, risk assessment, and development of BCP, as well as testing and exercising of BCP, maintenance of BCP, required communications, training, and record retention. It also indicates that BC programs at campuses must include disaster recovery planning, and therefore necessitates BCP for significant information technology areas.

Under the plan, any business unit that a campus deems essential must develop a business impact analysis, which is defined in EO 1014 as:

A process designed to prioritize business functions by assessing the quantitative (financial) and qualitative (non-financial) impact that might result if an organization was to experience a catastrophic
event. The business impact analysis will identify essential functions and workflow, determine the qualitative and quantitative impacts of a vulnerability/threat to essential functions, prioritize and establish recovery time objectives for the essential functions, and, if appropriate, establish recovery point objectives for essential functions.

In addition, each of these business units must develop a risk assessment, which is defined in EO 1014 as:

A process of identifying risks to an organization, assessing the essential functions necessary for an organization to continue business operations, defining the controls in place to reduce organization exposure, and evaluating the cost for such controls. Risk analysis often involves an evaluation of the probabilities of a particular event. The risk assessment will identify vulnerabilities and threats that may impact the business units’ ability to fulfill the mission of the campus and define the controls in place to reduce the exposure to vulnerabilities/threats.
INTRODUCTION

PURPOSE

Our overall audit objective was to ascertain the effectiveness of existing policies and procedures related to BC and to determine the adequacy of internal controls that ensure compliance with relevant governmental regulations, Trustee policy, Office of the Chancellor directives, and campus procedures.

Within the audit objective, specific goals included determining whether:

- Administration of BC incorporates a defined mission, stated goals and objectives, and clear lines of organizational authority and responsibility.
- The BC program as a whole coordinates and integrates with the emergency response plan, safety and health plans, or other related plans.
- Necessary contacts for essential business units have been identified.
- Policies and procedures around key aspects of BC programs have been documented and implemented.
- Business resumption and continuity strategies have been developed.
- Information backup procedures are sufficient to provide the availability of backup data subsequent to an emergency.
- Business impact analyses, risk assessments, and BCP have been developed for each business unit identified as essential to operations continuity.
- Campuses have developed campuswide pandemic influenza BCP, conducted periodic testing of the plans, and reviewed and updated the plans cyclically.
- BCPs are tested periodically, and test results and lessons learned are reviewed, documented, and applied.
- BCPs are adequately monitored and maintained.
- Ongoing communication of BC activities adequately provides oversight, monitoring, and feedback to involved management.
- A formalized BC training program exists, and all individuals responsible for developing and implementing BCP have been adequately trained.
- All BC records are maintained for no less than five years.
SCOPE AND METHODOLOGY

The proposed scope of the audit as presented in Attachment B, Audit Agenda Item 2 of the January 26 and 27, 2010, meeting of the Committee on Audit stated that BC includes program and facility readiness and resource planning for the recovery, within a predetermined time, from any catastrophic event, be it natural or man-made. Proposed audit scope would include review of Trustee policy, systemwide directives, and campus policies and procedures; a study of the essential functions or operations following a catastrophic event; business impact analysis and risk assessment; BC and disaster recovery plans; testing and exercising of plans; plan maintenance, communications, and training; and necessary retention of key records.

Our study and evaluation were conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors, and included the audit tests we considered necessary in determining that accounting and administrative controls are in place and operative. This review emphasized, but was not limited to, compliance with state and federal laws, Board of Trustee policies, and Office of the Chancellor policies, letters, and directives. The audit focused on procedures in effect from August 23, 2010, through September 3, 2010.

A preliminary risk-assessment of campus BC was used to select for our audit testing those areas or activities with highest risk. This assessment was based upon a systematic process using management’s feedback and professional judgments on probable adverse conditions and other pertinent information, including prior audit history in this area. We sought to assign higher review priorities to activities with higher risks. As a result, not all risks identified were included within the scope of our review.

Based upon this assessment of risks, we specifically included within the scope of our review the following:

- Organization and responsibilities for BC.
- Cooperative interaction between the BCP and other internal plans and policies.
- Strategies for business resumption and continuity.
- Policies and procedures documenting key aspects of BC programs.
- Existence of business impact analyses and risk assessments.
- Existence, review, and testing of BCP and pandemic influenza BCP.
- Sufficiency of information backup and recovery procedures for critical data.
- Monitoring and maintenance of BCP and pandemic influenza BCP.
- Sufficiency of BC communications both on and off campuses.
- BC training and formalized training programs.
- Recordkeeping for BC.
OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

PROGRAM ADMINISTRATION

The campus had not fully implemented a business continuity (BC) program.

Specifically, we noted that:

- The campus had not completed many of the program requirements for each business unit that had been determined by the university to provide essential functions.

- The campus had not established projected completion dates for the essential business units’ business continuity plans (BCP).

Executive Order (EO) 1014, *California State University Business Continuity Program*, dated October 8, 2007, states, in part, that the president is delegated the responsibility for the implementation and maintenance of an effective BC program on each campus. The president shall designate either a business continuity planning committee or a primary and secondary person with responsibility for business continuity planning activities. In addition, each business unit that is determined by the university to provide essential functions shall develop a BCP that reflects sufficient forethought and detail to ensure a high probability of successful maintenance or restoration of essential functions following an unfavorable event. For each business unit with essential functions, the BC program shall include, but not be limited to, the following procedures: a business impact analysis and risk assessment, a BCP, testing and exercising of plans, plan maintenance, ongoing communications of BC activities to campus communities, training, and record retention.

The director of internal control stated that the campus had not yet completed certain program requirements for all BC program essential units, nor had it established project completion dates for BCP, due to the considerable amount of time necessary to coordinate a multiyear phased project at a large institution.

Failure to fully implement a BC program, including all essential program requirements, increases the risk that essential campus functions would be unable to effectively and quickly recover from a catastrophe or disaster.

**Recommendation 1**

We recommend that the campus:

a. Establish projected completion dates for the implementation of BC program requirements for each business unit that has been determined by the university to provide essential functions.

b. Implement the BC program according to the projected completion dates.
Campus Response

We concur. We will complete compliance actions by end of March 2011 to:

a. Establish projected completion dates for the implementation of BC program requirements for each business unit that has been determined by the university to provide essential functions.

b. Proceed with implementation of the BC program according to the projected completion dates.

AVIAN PANDEMIC INFLUENZA RESPONSE PLAN

The campus’ avian pandemic influenza response plan needed further development.

We found that the current response plan:

- Did not include all control elements recommended in the California State University (CSU) Office of Risk Management (ORM) Avian Pandemic Influenza Business Continuity Planning Guide, and many of the control elements identified in the ORM planning guide existed, but needed further development.

- Did not address 21 of the 22 recommendations in the 2007 James Lee Witt Associates assessment of the campus’ compliance with the Avian Pandemic Influenza Business Continuity Planning Guide.

The Avian Pandemic Influenza Business Continuity Planning Guide, Appendix C, dated November 19, 2005, provides a template showing how each campus within the CSU system should prepare their draft pandemic influenza business continuity plan. Appendix C describes the key elements, which include:

- Introduction and purpose.
- Background.
- Preparations in business continuity planning.
- Knowledge management.
- Communications.
- Response actions.
- Recovery processes.

The assistant vice president of the administration and finance division stated that the campus response plan was not in full compliance with the Avian Pandemic Influenza Business Continuity Planning Guide and had not implemented all of the James Lee Witt Associates recommendations into the campus response plan due to the amount of time it has taken to incorporate continuous revisions, improvements, and new developments into the response plan since its inception in 2006.
Failure to include all recommended plan elements in the campus avian pandemic influenza response plan increases the risk that the campus would be unable to effectively and quickly recover from a pandemic influenza event.

**Recommendation 2**

We recommend that the campus:

a. Include, and fully develop, all control elements recommended in the *Avian Pandemic Influenza Business Continuity Planning Guide* in the campus response plan.

b. Address all James Lee Witt Associates recommendations in the campus response plan.

**Campus Response**

We concur. We will complete compliance actions by mid-June 2011 to:

a. Include and fully develop all control elements recommended in the *Avian Pandemic Influenza Business Continuity Planning Guide* in the campus response plan.

b. Address all James Lee Witt Associates recommendations in the campus response plan.
## APPENDIX A:
PERSONNEL CONTACTED

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don Kassing</td>
<td>Interim President</td>
</tr>
<tr>
<td>Ana Harris</td>
<td>Administrative Services Coordinator, Administration and Finance Division (AFD)</td>
</tr>
<tr>
<td>Rose Lee</td>
<td>Vice President and Chief Financial Officer, AFD</td>
</tr>
<tr>
<td>Ninh Pham-Hi</td>
<td>Director, Internal Control, AFD</td>
</tr>
<tr>
<td>Dorothy Poole</td>
<td>Assistant Vice President, AFD</td>
</tr>
</tbody>
</table>
January 12, 2011

Mr. Larry Mandel
University Auditor
The California State University
401 Golden Shore, 4th Floor
Long Beach, CA 90802

Campus Response to Business Continuity Audit (#10-58) at San José State University.

Enclosed is San José State University's response to the Business Continuity Audit (#10-58). The campus is committed to addressing the issues identified in this audit report.

Please let me know if I can provide you with additional information.

[Signature]
Rose L. Lee
Vice President for Administration and Finance

Enclosure

cc: Don W. Kassing, Interim President
Ninh Pham-Hi, Director, Internal Control
BUSINESS CONTINUITY
SAN JOSÉ STATE UNIVERSITY
Audit Report 10-58

PROGRAM ADMINISTRATION

Recommendation 1

We recommend that the campus:

a. Establish projected completion dates for the implementation of BC program requirements for each business unit that has been determined by the university to provide essential functions.

b. Implement the BC program according to the projected completion dates.

Campus Response

We concur. We will complete compliance actions by end of March 2011, to:

a. Establish projected completion dates for the implementation of BC program requirements for each business unit that has been determined by the university to provide essential functions.

b. Proceed with implementation of the BC program according to the projected completion dates.

AVIAN PANDEMIC INFLUENZA RESPONSE PLAN

Recommendation 2

We recommend that the campus:

a. Include, and fully develop, all control elements recommended in the Avian Pandemic Influenza Business Continuity Planning Guide in the campus response plan.

b. Address all James Lee Witt Associates recommendations in the campus response plan.

Campus Response

We concur. We will complete compliance actions by mid June 2011, to:

a. Include and fully develop all control elements recommended in the Avian Pandemic Influenza Business Continuity Planning Guide in the campus response plan.

b. Address all James Lee Witt Associates recommendations in the campus response plan.
January 31, 2011

MEMORANDUM

TO: Mr. Larry Mandel
   University Auditor

FROM: Charles B. Reed
      Chancellor

SUBJECT: Draft Final Report 10-58 on Business Continuity,
         San José State University

In response to your memorandum of January 31, 2011, I accept the response as
submitted with the draft final report on Business Continuity, San José State
University.

CBR/amd