BUSINESS CONTINUITY

CALIFORNIA STATE UNIVERSITY,
BAKERSFIELD

Audit Report 10-60
January 18, 2011

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### ABBREVIATIONS

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BAS</td>
<td>Business and Administrative Services</td>
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<tr>
<td>BC</td>
<td>Business Continuity</td>
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<tr>
<td>BCP</td>
<td>Business Continuity Plan(s)</td>
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<tr>
<td>BCPC</td>
<td>Business Continuity Planning Committee</td>
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<tr>
<td>CGC-1</td>
<td>Continuing Guidance Circular 1</td>
</tr>
<tr>
<td>COOP/COG</td>
<td>Continuity of Operations/Continuity of Government Plan</td>
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<td>CSU</td>
<td>California State University</td>
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<td>EO</td>
<td>Executive Order</td>
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<td>OES</td>
<td>Office of Emergency Services</td>
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<td>ORM</td>
<td>Office of Risk Management</td>
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EXECUTIVE SUMMARY

As a result of a systemwide risk assessment conducted by the Office of the University Auditor 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 BC were performed during our Disaster and Emergency Preparedness audits in 2006.

We visited the California State University, Bakersfield campus from October 25, 2010, through November 5, 2010, and audited the procedures in effect at that time.

Our study and evaluation did not reveal any significant internal control problems or weaknesses that would be considered pervasive in their effects on BC activities. However, we did identify other reportable weaknesses that are described in the executive summary and body of this report. In our opinion, the operational and administrative controls for BC activities in effect as of November 5, 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 BC program.

BUSINESS CONTINUITY PLANNING [7]

Essential units and their subunits were not clearly defined in the BC program, and not all business continuity plans (BCP) reflected the same organizational structure. Additionally, BCPs did not contain all required plan elements.
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 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 BCPs have been developed for each business unit identified as essential to operations continuity.
- Campuses have developed campuswide pandemic influenza BCPs, 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 October 25, 2010, through November 5, 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.

We reviewed the existing BC program status and found that although the campus had completed significant planning toward the implementation of a BC program, it had not completed all of the program requirements. Specifically:

- Not all business continuity plans (BCP) and risk assessments had gone through the process of being updated from the previous pandemic influenza BCP. Of the six business units that the campus identified as providing essential functions, two had not begun their revisions, and the remaining four had incomplete BCPs.

- No formal testing procedure had been established to ensure that some parts of the BCP were tested annually and that all parts were tested every seven years.

- Test results and lessons learned had not been documented, approved, and signed off by the head of the business unit and the campus BC coordinator, or the business continuity planning committee (BCPC).

- No formal training program had been established to ensure that initial and ongoing training was provided to individuals responsible for developing and implementing the BCPs.

Executive Order (EO) 1014, *California State University Business Continuity Program*, dated October 8, 2007, states that 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. Each business unit will also conduct a business impact analysis and risk assessment. 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 the vulnerabilities/threats. Business units shall test some part of their BCP once a year, with all parts tested every seven years. At the completion of each test or review, full documentation of test results and lessons learned shall be completed in the form of a corrective action plan or after-action report. Such reports shall be approved/signed off by the head of the business unit and the campus BC coordinator, or the BCPC. Furthermore, EO 1014 states that initial training on conducting BC planning shall be provided to all individuals responsible for developing and implementing plans. Additional and/or repeat training shall be provided as determined necessary by the BC coordinator or the BCPC following the review of written plans and plan testing.

The assistant vice president of fiscal services stated that the California State University, Bakersfield original pandemic influenza BCP is in the process of revision. This revision involves broadening the scope of the plan from a concentration on a pandemic issue to a more comprehensive document intended to provide guidance in either a pandemic or an infrastructure emergency.
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. Complete all BCPs and risk assessments.

b. Establish a formal testing procedure to ensure that some parts of the BCP are tested once a year and all parts are tested every seven years.

c. Ensure that test results and lessons learned are consistently documented, approved, and signed by the head of the business unit and the campus BC coordinator, or the BCPC.

d. Provide a documented BC training program for individuals responsible for implementing BCPs.

**Campus Response**

We concur.

a. The campus will complete the remaining BCPs and risk assessments by December 31, 2011.

b. A formal testing procedure will be developed to ensure that parts of the BCP are tested once a year and all parts are tested every seven years. This will be completed by December 31, 2011.

c. It will be written into the plan, which will be signed by the campus president, that all test results and lessons learned will be signed and approved by the vice president, business and administrative services, and the appropriate department head(s) representing the affected plan(s) and will be added to the affected plan(s) by December 31, 2011.

d. The campus will provide a documented BC training program for individuals responsible for implementing BCPs. This will be completed by December 31, 2011.

**BUSINESS CONTINUITY PLANNING**

**BUSINESS CONTINUITY PLAN ORGANIZATION**

Essential units and their subunits were not clearly defined in the BC program, and not all BCPs reflected the same organizational structure.

We found that the campuswide BCP listed six principal areas essential for the continuation of the university’s mission: the cabinet, public safety, business and administrative services (BAS), university advancement, student affairs, and academic affairs. These principal areas were further
divided into subunits. However, some of the subunits listed in the individual units’ BCPs differed from those listed in the campuswide BCP.

EO 1014, California State University Business Continuity Program, dated October 8, 2007, states that 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.

The assistant vice president of fiscal services stated that the new program coordinator was revising the campuswide BCP and reviewing the overall structure of the principal units. He further stated that the campuswide BCP contained elements of both the new revised plan and the old plan, causing it to appear disjointed.

A poorly defined BCP organizational structure may hinder the identification of essential campus functions and could delay recovery from a catastrophe or disaster.

**Recommendation 2**

We recommend that the campus clearly define its essential units and their subunits and ensure that all individual BCPs reflect the same organizational structure.

**Campus Response**

We concur. The campus will clearly define our essential units and subunits and adopt a standard format to ensure the risk analysis is consistent for all units. This will be completed by December 31, 2011.

**BUSINESS CONTINUITY PLAN CONTENT**

BCPs did not contain all required plan elements.

We reviewed the individual BCPs for the essential units and noted that the following required elements were either not documented or not fully developed:

- A list of alternate operating facilities, including provisions to sustain operations for a period of up to 30 days (or other time frame as determined by the campus).

- Approval and sign-off by the head of the business unit and the BC coordinator, or the BCPC.

- An annual administrative review by the university.

EO 1014 states, in part, that each business unit that is determined by the university to provide essential functions shall develop a BCP. Recommended elements for developing the plan include, but are not limited to:
Observations, Recommendations, and Campus Responses

- Availability of alternate operating facilities, including provisions to sustain operations for a period of up to 30 days (or other time frame as determined by the campus).

- Approval and sign-off by the head of the business unit and the BC coordinator, or the BCPC.

- An annual administrative review by the university.

The assistant vice president of fiscal services stated that the campus was reluctant to list specific alternate locations because there was no way to determine which structures would be affected during an emergency. He added that the other missing elements were not included due to oversight.

Failure to include all recommended elements in the BCPs increases the risk that essential campus functions would be unable to effectively and quickly recover from a catastrophe or disaster.

Recommendation 3

We recommend that the campus document or fully develop the following elements in each BCP:

a. A list of possible alternate operating facilities, including provisions to sustain operations for a period of up to 30 days.

b. Approval and sign-off by the head of the business unit and the BC coordinator, or the BCPC.

c. An annual administrative review by the university.

Campus Response

We concur.

a. The campus has identified ample open ground that could be used for tents or temporary buildings. In addition, both gyms and the library may be used to provide alternate operating facilities, as the campus will be Wi-Fi compatible by July 2011. A map will be included in the plan, highlighting the available ground and potential buildings available. The plan will specify that the president/cabinet are responsible to determine what areas will be used at the time based on the type of incident occurring. This will be completed by May 30, 2011.

b. The campus will develop an approval form to be signed off by the head of the business unit and the BC coordinator by December 31, 2011.

c. It will be written into the plan that an annual administrative review of all plans will be completed and documented through the signatures of the vice president, business and administrative services and the department heads of the plans. This will be completed by July 1, 2011.
## APPENDIX A:
PERSONNEL CONTACTED

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Horace Mitchell</td>
<td>President</td>
</tr>
<tr>
<td>Crystal Becks</td>
<td>Director of Housing</td>
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<tr>
<td>Kellie Garcia</td>
<td>Director, Human Resources</td>
</tr>
<tr>
<td>John Hultsman</td>
<td>Vice President of Student Affairs</td>
</tr>
<tr>
<td>Michael Neal</td>
<td>Vice President, Business and Administrative Services</td>
</tr>
<tr>
<td>Clark Sanford</td>
<td>Assistant Vice President, Information Technology</td>
</tr>
<tr>
<td>Juli Smith</td>
<td>Interim Director, Safety &amp; Risk Management</td>
</tr>
<tr>
<td>Doug Wade</td>
<td>Assistant Vice President, Fiscal Services</td>
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February 2, 2011

Mr. Larry Mandel
University Auditor
Office of the Chancellor
California State University
401 Golden Shore 4th Floor
Long Beach, CA 90802-4200

Re: University’s Responses to Recommendations #1, 2 & 3 contained in the Business Continuity Audit Report #10-60.

Dear Mr. Mandel:

Attached are the University’s responses to the recommendations contained in Audit report #10-60.

If you have any further questions, please contact my office at (661) 654-2287.

Sincerely,

Michael A Neal
Vice President for Business and Administrative Services
BUSINESS CONTINUITY

CALIFORNIA STATE UNIVERSITY,
BAKERSFIELD

Audit Report 10-60

PROGRAM ADMINISTRATION

Recommendation 1

We recommend that the campus:

a. Complete all BCPs and risk assessments.

b. Establish a formal testing procedure to ensure that some parts of the BCP are tested once a year and all parts are tested every seven years.

c. Ensure that test results and lessons learned are consistently documented, approved, and signed by the head of the business unit and the campus BC coordinator, or the BCPC.

d. Provide a documented BC training program for individuals responsible for implementing BCPs.

Campus Response

a. We concur. The campus will complete the remaining BCP’s and risk assessments by December 31, 2011.

b. We concur. A formal testing procedure will be developed to ensure that parts of the BCP are tested once a year and all parts are tested every seven years. This will be completed by December 31, 2011.

c. We concur. It will be written into the Plan, which will be signed by the campus President, that all test results and lessons learned will be signed and approved by the VP, Business & Administrative Services and the appropriate Department Head(s) representing the affected plan(s) and will be added to the affected plan(s) by December 31, 2011.

d. We concur. The campus will provide a documented BC training program for individuals responsible for implementing BCP’s. This will be completed by December 31, 2011.
BUSINESS CONTINUITY PLANNING

BUSINESS CONTINUITY PLAN ORGANIZATION

Recommendation 2

We recommend that the campus clearly define its essential units and their subunits and ensure that all individual BCPs reflect the same organizational structure.

Campus Response

We concur. The campus will clearly define our essential units and subunits and adopt a standard format to ensure the risk analysis is consistent for all units. This will be completed by December 31, 2011.

BUSINESS CONTINUITY PLAN CONTENT

Recommendation 3

We recommend that the campus document or fully develop the following elements in each BCP:

a. A list of possible alternate operating facilities, including provisions to sustain operations for a period of up to 30 days.

b. Approval and sign-off by the head of the business unit and the BC coordinator, or the BCPC.

c. An annual administrative review by the university.

Campus Response

a. We concur. The campus has identified ample open ground that could be used for tents or temporary buildings. In addition, both gyms and the library may be used to provide alternate operating facilities, as the campus will be Wi-Fi compatible by July 2011. A map will be included in the Plan, highlighting the available ground and potential buildings available. The Plan will specify that the President/Cabinet are responsible to determine what areas will be used at the time based on the type of incident occurring. This will be completed by May 30, 2011.

b. We concur. The campus will develop an approval form to be signed off by the head of the Business unit and the BC coordinator by December 31, 2011.

c. We concur. It will be written into the Plan that an annual administrative review of all plans will be completed and documented through the signatures of the VP, Business & Administrative Services and the Department Heads of the plans. This will be completed by July 1, 2011.
March 11, 2011

MEMORANDUM

TO: Mr. Larry Mandel
    University Auditor

FROM: Charles B. Reed
      Chancellor

SUBJECT: Draft Final Report 10-60 on Business Continuity,
          California State University, Bakersfield

In response to your memorandum of March 11, 2011, I accept the response as submitted with the draft final report on Business Continuity, California State University, Bakersfield.

CBR/amd