

DISASTER AND EMERGENCY PREPAREDNESS

**CALIFORNIA STATE UNIVERSITY,
FRESNO**

**Audit Report 06-39
November 9, 2006**

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ABBREVIATIONS

CSU	California State University
DEP	Disaster and Emergency Preparedness
DRII	Disaster Recovery Institute International
EMT	Emergency Management Team
EO	Executive Order
EOC	Emergency Operations Center(s)
GC	Government Code
OES	(California) Office of Emergency Services
SEMS	Standardized Emergency Management System
SWEPT	Systemwide Emergency Preparedness Taskforce

EXECUTIVE SUMMARY

As a result of a systemwide risk assessment conducted by the Office of the University Auditor during the last quarter of 2005, the Board of Trustees, at its January 2006 meeting, directed that *Disaster and Emergency Preparedness* be reviewed. Similar audits of Disaster and Contingency Planning were conducted in 2003.

We visited the California State University, Fresno campus from July 17, 2006, through August 25, 2006, and audited the procedures in effect at that time.

In our opinion, internal administrative and operational controls governing disaster and emergency preparedness were generally effective. However, documentation in support of emergency training for new hires and for the emergency management team and testing of existing business continuity plans needed improvement.

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.

EMERGENCY MANAGEMENT PLAN [6]

At the time of our review, the campus had not developed a complete and adequate roster of resources necessary for emergencies.

COMMUNICATIONS AND TRAINING [6]

The campus was unable to provide sufficient documentation to support overview emergency management plan training for new hires. In addition, specialized emergency training for the emergency management team was not adequately documented.

TESTING AND DRILLS [8]

The campus was unable to provide sufficient evidence that it had tested its business continuity plan.

INTRODUCTION

BACKGROUND

The National Safety Council (www.nsc.org) has provided guidance showing that disasters and emergencies are inevitable. These events include personal injuries, fires, explosions, chemical spills, toxic gas releases, natural disasters such as earthquakes, tornadoes, floods, and epidemics, and man-made disasters such as terrorist activities and riots. Anticipating emergencies and planning for an appropriate response can greatly lessen the extent of injuries and health concerns. Emergency preparedness can also limit damage to property, equipment, and materials. Experience tells us that when disasters and emergencies occur, the emergency response based on emergency preparedness and crisis training programs, will significantly affect the extent of damages and injuries sustained. The president of each of the 23 California State University (CSU) campuses has been delegated the responsibility for the implementation and maintenance of an emergency management system program.

There is no single definition of what constitutes a disaster. A disaster can develop quickly, hitting full-force, with little or no warning. Other times, a disaster can loom on the horizon for weeks until it becomes large enough to be a threat. Government Code (GC) §8680.3 defines disaster to mean:

A fire, flood, storm, tidal wave, earthquake, terrorism, epidemic, or other similar public calamity that the governor determines presents a threat to public safety.

In California Code of Regulations, Title 19, §2402, Standardized Emergency Management System (SEMS) Regulations, emergency is defined to mean:

A condition of disaster or of extreme peril to the safety of persons and property caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy shortage, plant or animal infestations or disease, the governor's warning of an earthquake or volcanic prediction, or an earthquake or other conditions, other than conditions resulting from a labor controversy.

Executive Order 921, *California State University Emergency Management Program*, dated November 21, 2004, requires maintenance of an emergency management system on each campus that will be activated when a hazardous condition or natural disaster reaches or has the potential for reaching proportions beyond the capacity of routine operations. The campus shall write each emergency plan in accordance with and as described in SEMS regulations developed by the California Office of Emergency Services (OES). Additionally, the campuses shall support the Systemwide Emergency Preparedness Taskforce (SWEPT) assigned oversight responsibility for CSU systemwide emergency management. SWEPT is a multi-discipline committee charged with improving communication between police chiefs, emergency coordinators, risk managers, and environmental health and occupational safety directors. It proposes and establishes mechanisms/systems for coordinating a response to emergencies; and studies and proposes solutions to systemwide issues such as emergency communications, mutual assistance protocols, and training. Further, business continuity planning is an integral part of a comprehensive emergency management model, and it is recommended that each campus form a Business Continuity Planning Committee.

After the initial emergency response, restoration of business (“business continuity”) is of paramount importance. Two sources of industry guidance on standards and terminology are Glossary of Terms from the Disaster Recovery Institute International (DRII), and *Business Continuity: Best Practices* as defined by the Business Continuity Institute. The DRII *Glossary of Terms* describes business continuity as “the ability of an organization to ensure continuity of service and support for its customers and to maintain its viability before, after, and during an event.” In *Best Practices*, a disaster recovery plan is defined as “a plan to resume a specific essential operation, function, or process of an enterprise.”

Business continuity is frequently considered a broader term than emergency preparedness. The goal of emergency preparedness is to address the immediate impacts of the disaster and to respond as needed to bring the emergency to closure. Business continuity is a continuing cycle of preparation that includes the broader perspectives of disaster, response, recovery, mitigation, risk reduction, prevention, and preparedness, as depicted below:



Disaster recovery/emergency preparedness plans are required of state agencies by GC §8607(a), which states:

The OES, in coordination with all interested state agencies with designated response roles in the state emergency plan and interested local emergency management agencies shall jointly establish by regulation a SEMS for use by all emergency response agencies.

SEMS is the system required by GC §8607(a) for managing response to multi-agency and multi-jurisdiction emergencies in California. As a result of the 1991 East Bay Hills fire in Oakland, Senate Bill 1841 was passed and made effective January 1, 1993. The intent of this law is to improve the coordination of state and local emergency response in California, and it implemented SEMS. SEMS

regulations took effect in September 1994. SEMS consists of five organizational levels, which are activated as necessary: field response, local government, operational area, regional, and state. By standardizing key elements of the emergency management system, SEMS is intended to facilitate the flow of information within and between levels of the system and facilitate coordination among all responding agencies. SEMS incorporates the use of five essential Incident Command System functions: command (management), operations, planning/intelligence, logistics, and finance/administration. All CSU campuses are required to formally adopt and implement SEMS.

PURPOSE

Our overall audit objective was to ascertain the effectiveness of existing policies and procedures related to the administration of *Disaster and Emergency Preparedness* (DEP) activity 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 overall audit objective, specific goals included determining whether:

- ▶ Administration of DEP incorporates a defined mission, stated goals and objectives, and clear lines of organizational authority and responsibility; and is adequately funded.
- ▶ Plans and procedures address general and campus specific incidents; include recordkeeping systems for effective planning, administration, and reporting; maximize DEP resources; and are adequately communicated to emergency management personnel.
- ▶ An emergency operations center (EOC) provisioned with sufficient equipment, supplies, and other critical resources exists; and a roster of resources for materials and services that may be needed in an emergency situation is maintained.
- ▶ The emergency management plan is compliant with SEMS, including the use of the modular incident command system organization methodology and incident action plans; inclusive of an effective building marshal program for evacuation; and reviewed/updated at a minimum every year.
- ▶ The emergency management plan has been adequately communicated to the campus community, a roster of emergency management personnel is annually communicated to the chancellor's office, and support is provided to the SWEPT.
- ▶ Emergency management activities are effectively coordinated with appropriate city, county, operational area, state, federal, and private agencies; and include adequate mutual aid and assistance agreements.
- ▶ Specialized and/or general training has been provided to the emergency management team, building marshals, and all employees.

- ▶ Emergency plan testing, drills, and/or evacuations are adequately planned, conducted, and documented; and include periodic testing of mutual aid and assistance agreements.
- ▶ Generators, communications devices, and other equipment and supplies are functional, tested currently, and the related responsibility is appropriately assigned.
- ▶ The campus has a business continuity plan and if that plan is tested.

SCOPE AND METHODOLOGY

The proposed scope of the audit, as presented in Attachment B, Audit Item 2 of the January 31 through February 1, 2006, meeting of the Committee on Audit, stated that DEP includes review of compliance with Trustee policy and systemwide directives, contingency and disaster recovery planning, backup communications, building safety and emergency egress including provisions for individuals with disabilities, the extent of plan testing, and relationships with state and federal emergency management agencies. DEP includes program and facility readiness and resource planning for actions related to natural and man-made disasters and the recovery therefrom.

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 operational and administrative controls are in place and operative. This review emphasized, but was not limited to, compliance with state and federal laws, Board of Trustees policies, and Office of the Chancellor and campus policies, letters, and directives. The audit review focused on procedures in effect from January 2005 through March 2006. In instances wherein it was necessary to review annualized data, fiscal year 2005/06 was the primary period reviewed.

We focused primarily upon the internal administrative, compliance, and operational controls over the campuswide emergency operations plan and related management activities. Specifically, we reviewed and tested:

- ▶ The emergency management organization.
- ▶ Emergency management and business continuity plans.
- ▶ Emergency management plan guidelines, policies, procedures, and recordkeeping.
- ▶ The building marshal program, emergency action plans, and the campus emergency hotline.
- ▶ The EOC, emergency equipment, and related emergency supplies.
- ▶ Coordination with other agencies and mutual aid and assistance agreements.
- ▶ Funding and budgetary controls for emergency management activities.
- ▶ Communication of the emergency management plan.
- ▶ Training for emergency management activities.
- ▶ Evacuation drills and emergency management and business continuity plan testing.

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

EMERGENCY MANAGEMENT PLAN

The campus had not developed a complete and adequate roster of resources for materials and services needed for use in an emergency.

Executive Order (EO) 921, *California State University Emergency Management Program*, dated November 12, 2004, states that each president shall ensure that the campus develops a roster of campus resources and memoranda of understanding for materials and services that may be needed in an emergency situation, including equipment, emergency power, communications, food, and water, and update at least annually. The “updated as of date” should appear on each roster.

The associate vice president of facilities stated that the campus had its own equipment stock as well as arrangements with vendors (e.g., blanket purchase orders and the procurement card) for many purposes, including potential emergencies. He further stated that the campus was unaware that they needed to specifically annotate these lists with a disaster certification.

Failure to maintain an adequate campus roster of emergency resources increases the risk that delays in locating critical resources could occur during an emergency.

During our fieldwork, the campus developed an adequate roster of campus resources for materials and services that may be needed in an emergency situation, including equipment, emergency power, communications, food, and water. This fully addressed the need for an adequate roster of campus resources.

COMMUNICATIONS AND TRAINING

OVERVIEW TRAINING

Documentation to support overview emergency management plan training for new hires needed improvement.

The campus was unable to provide sufficient documentation to support emergency management plan overview training for new hires, including type of training, dates of training, names of individuals trained, and evidence of a course syllabus or an agenda showing topics covered in the training.

EO 921, *California State University Emergency Management Program*, dated November 12, 2004, states that the campus community is to be trained on the Standardized Emergency Management System (SEMS) compliant plan to include, at a minimum, overview training of every employee within one year of employment. Training attendance records shall be kept for a minimum of seven years.

Government Code §13401 states that each state agency must maintain effective systems of administrative control as an integral part of its management practices.

The director of public safety stated that the new employee orientations have had full agendas, and the campus planned to expand them as necessary to sufficiently cover emergency preparedness.

Failure to ensure emergency management plan overview training for new hires increases the likelihood that emergency response would be inadequate.

Recommendation 1

We recommend that the campus ensure that documentation to support overview emergency management plan training for new hires is developed and maintained on file.

Campus Response

We concur. The topic of emergency preparedness is important to include as part of our orientation for newly hired employees. We will expand our agenda for the next orientation, which is scheduled to occur on January 18, 2007. We will provide a general overview of emergency evacuation and emergency procedures. We will retain a copy of the attendance rosters with our training records.

SPECIALIZED EMERGENCY TRAINING

Documentation to support specialized emergency training for the campus emergency management team (EMT) needed improvement.

Our review of training records disclosed that documentation to support specialized emergency training was not always provided for members of the campus EMT.

EO 921, *California State University Emergency Management Program*, dated November 12, 2004, states that the campus community is to be trained on the SEMS compliant plan to include, at a minimum, specialized training for employees designated as members of the EMT. Training attendance records shall be kept for a minimum of seven years.

The director of public safety stated that the campus had overlooked the additional training requirements and now recognized the importance of completing the training of personnel.

Failure to ensure specialized emergency training for members of the campus EMT increases the likelihood that emergency response would be inadequate.

Recommendation 2

We recommend that the campus ensure that documentation to support specialized emergency training for members of the campus EMT is developed and maintained on file.

Campus Response

We concur. We will retain documentation of the specialized training given to EMT members. The training has been completed. To evidence our implementation, we will send in January 2007 documentation of our policy statement requiring periodic training and the most recent training we accomplished.

TESTING AND DRILLS

Business continuity plans had not been tested.

Although the campus maintained a *Business Continuity Master Plan*, dated June 1, 2006, the campus was unable to provide evidence that the plan had been tested.

EO 921, *California State University Emergency Management Program*, dated November 12, 2004, states that each campus shall develop a business continuity plan. Further, almost all business continuity plans contain certain common elements including testing and auditing the plans to determine the effectiveness of the overall business continuity and incident recovery program. This includes a review and documentation of test results and lessons learned. The review should occur annually, with testing occurring every two years at a minimum.

The director of public safety stated that there was no time to test the master business continuity plan since its completion, but that the campus was expected to test the new plan within the next six months.

Inadequate testing of the campus business continuity plans increases the risk of ineffective preparedness and unavailability of essential aid and services.

Recommendation 3

We recommend that the campus develop and exercise test plans sufficient to ensure the effectiveness of campus business continuity activities, including a review and documentation of test results and lessons learned.

Campus Response

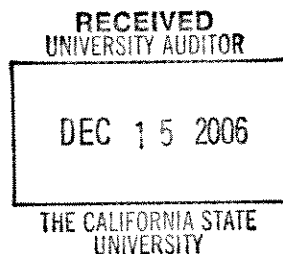
We concur. We believe our recently completed business continuity plan will naturally progress into a testing phase. We endeavor to begin testing the first parts of it by May 2007. We will write and exercise the test plans in accordance with EO 921 to gauge the effectiveness of campus business continuity activities, including a review and documentation of test results and lessons learned.

APPENDIX A: PERSONNEL CONTACTED

<u>Name</u>	<u>Title</u>
John D. Welty	President
Lori Alemano	Administrative Assistant, Police Department
Mark Aydelotte	Associate Vice President, University Communications
Matt Babick	Internal Auditor
Erin Boele	Assistant Director, Housing
Richard Boes	Director, Information Technology Services
Robert Boyd	Associate Vice President, Facilities
Tom Gaffrey	Events Coordinator, Public Safety
David Huerta	Chief of Police, Police Department
Lisa Kao	Environmental Quality Manager, Environmental Health and Safety
Steven Katz	Associate Vice President, Financial Services
Steven Martinez	Director, Environmental Health and Safety
Olivia Mendoza	Project Coordinator, Office of the Vice President for Administration
David Moll	Director, Public Safety
Cynthia Teniente-Matson	Vice President for Administration and Chief Financial Officer
John Waayers	Budget Officer, University Budget Office
Jerilane Willis	Administrative Assistant, Environmental Health and Safety



CALIFORNIA
STATE
UNIVERSITY,
FRESNO



MEMORANDUM

December 12, 2006

TO: Larry Mandel
University Auditor

FROM: John D. Welty *[Signature]*
President

SUBJECT: **Campus Responses to Recommendations in the
Disaster Audit Report #06-39**

We have reviewed the findings and the three recommendations in the subject audit report. Enclosed are our campus responses addressing the recommendations.

We appreciate the thoroughness of your review and I am pleased to see relatively few findings. Please contact us should you have any questions.

Attachment

cc: Mr. Matt Babick
Ms. Cynthia Teniente-Matson
Mr. David Moll

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the President

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CALIFORNIA STATE UNIVERSITY, FRESNO

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COMMUNICATIONS AND TRAINING

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TESTING AND DRILLS

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Campus Response

We concur. We believe our recently completed business continuity plan will naturally progress into a testing phase. We endeavor to begin testing the first parts of it by May 2007. We will write and exercise the test plans in accordance with Executive Order 921 to gauge the effectiveness of campus business continuity activities, including a review and documentation of test results and lessons learned.

THE CALIFORNIA STATE UNIVERSITY
OFFICE OF THE CHANCELLOR



BAKERSFIELD

January 29, 2007

CHANNEL ISLANDS

CHICO

MEMORANDUM

DOMINGUEZ HILLS

EAST BAY

FRESNO

TO: Mr. Larry Mandel
University Auditor

FULLERTON

FROM: Charles B. Reed
Chancellor

HUMBOLDT

LONG BEACH

SUBJECT: Draft Final Audit Report 06-39 on *Disaster and Emergency Preparedness*, California State University, Fresno

LOS ANGELES

MARITIME ACADEMY

In response to your memorandum of January 29, 2007, I accept the response as submitted with the draft final report on *Disaster and Emergency Preparedness*, California State University, Fresno.

MONTEREY BAY

NORTHRIDGE

POMONA

CBR/jt

SACRAMENTO

Enclosure

SAN BERNARDINO

cc: Mr. Matt Babick, Internal Auditor
Dr. John D. Welty, President

SAN DIEGO

SAN FRANCISCO

SAN JOSÉ

SAN LUIS OBISPO

SAN MARCOS

SONOMA

STANISLAUS