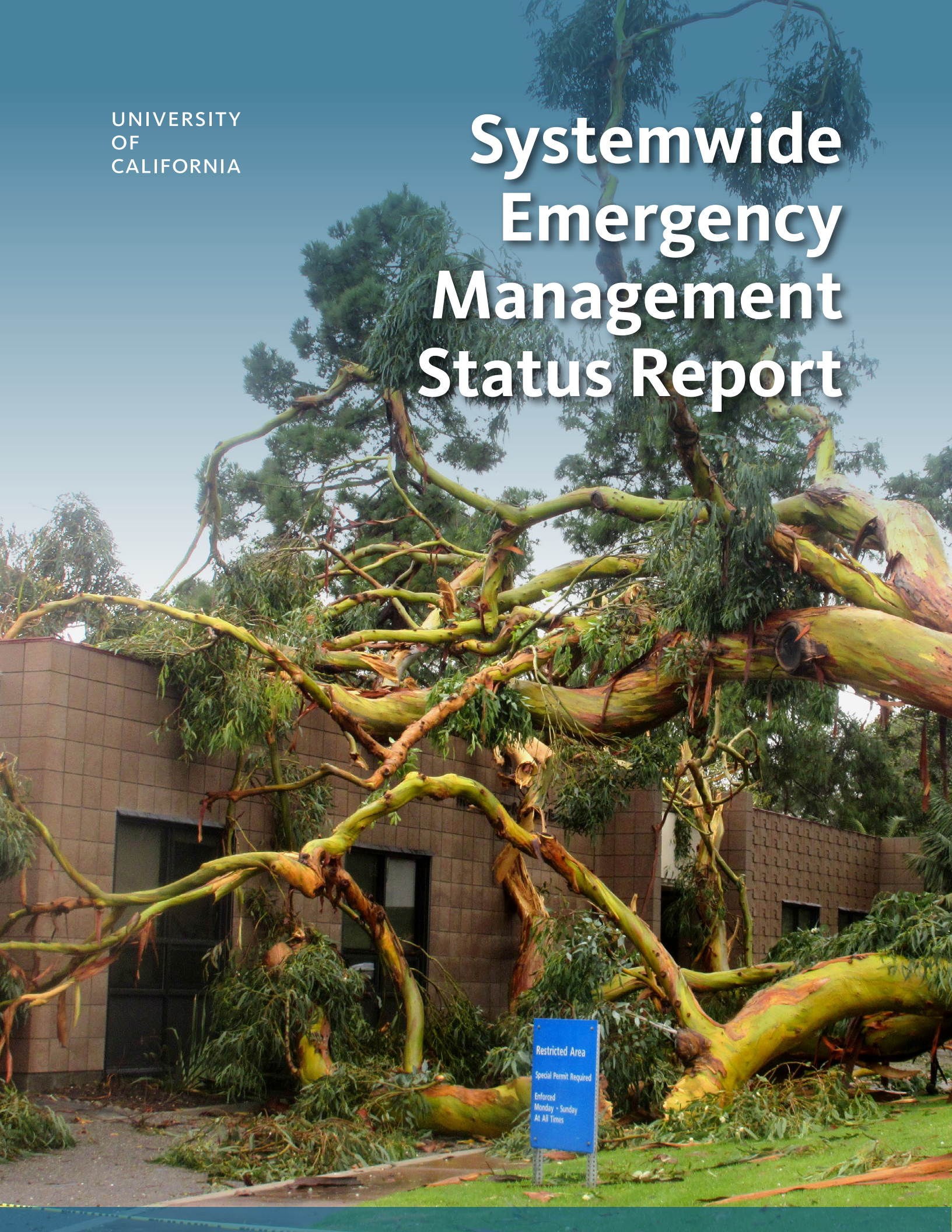


UNIVERSITY
OF
CALIFORNIA

Systemwide Emergency Management Status Report



Restricted Area
Special Permit Required
Enforced
Monday - Sunday
At All Times

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I. Introduction

This FY 2017-18 annual report is based on programmatic self-assessments completed by each of the ten campuses, and includes program executive summaries for all locations including UC Health medical centers, Lawrence Berkeley National Lab, UCOP and Agriculture & Natural Resources Division (ANR). Campus program self-assessments are benchmarked against the *National Standard on Disaster/Emergency Management and Business Continuity/Continuity of Operations Programs* (National Fire Protection Association [NFPA] Standard 1600 - 2016 edition). This collaboratively developed standard has been universally endorsed by the American National Standards Institute (ANSI), the 9/11 Commission, US Congress, and the federal Department of Homeland Security. The NFPA National Standard represents a “total program approach” to the challenge of integrating disaster and emergency management with business continuity planning. The University remains one of only a few major higher education systems nationwide that has voluntarily adopted this stringent standard.

In conjunction with the National Standard, UCOP Risk Services (OPRS) in collaboration with the UC Emergency Management Council (EMC), adapted ‘The Joint Commission’ (formerly JCAHO) healthcare accreditation quantitative ‘scoring framework’ methodology to evaluate program performance. The Joint Commission is a recognized international leader in standardized performance measurement, and the active participation and advice of our medical center colleagues led us to adopt this approach. In order to effectively adapt this performance measurement system, the Emergency Management Council developed a NFPA 1600 Standard benchmarking guide that defines specific measurable performance criteria for what constitutes varying degrees (‘partial, substantial, or complete’) of conformance with each of the Standard’s seventy-three (73) programmatic criteria. This comprehensive benchmarking guide was revised by the Emergency Management Council corresponding to the 2016 triennial update of the NFPA Standard and is included for reference in **Appendix I**.

Adoption of this quantitative methodology has produced a systemwide performance measurement system that is more accurate, credible, objective, and consistent than use of purely subjective qualitative criteria. Quantitative analysis typically proves to be more informative and useful to both senior administration and campus program staff. OPRS strives to collaboratively support long-term demonstrable and measurable continual improvement in our emergency management programs.

The 2016 triennial update of the NFPA Standard primarily focused on continuity planning and enhanced both the Business Impact Analysis (BIA) and the Continuity & Recovery program elements. The BIA is a key continuity planning element that evaluates the potential operational and financial impacts resulting from interruption or disruption of mission-critical campuswide essential functions, processes, infrastructure, systems, and personnel and identifies resources that may be needed to recover from any disruption in order to continue the University’s mission of teaching, research, and patient care. The BIA will be used to develop campuswide continuity and recovery strategies and plans.

II. Summary of Systemwide Conformity with NFPA Emergency Management Standard Criteria

Table 1 summarizes the self-assessments conducted by all ten Campuses. The numerical scores reflecting conformance with each programmatic criterion are defined by the following parameters:

- 0 = Non-Conforming
- 1 = Partially Conforming
- 2 = Substantially Conforming
- 3 = Fully Conforming

This section summarizes the degree of systemwide conformity with each of the NFPA National Standard's nineteen (19) basic program elements based on each campus' self-assessments of the various multiple criteria comprising each corresponding program element. Trends and changes in systemwide conformity since last year are also summarized.

Summary of Systemwide Conformity with NFPA Standard Program Elements

1. *Program Management.*
Nearly all (9/10) of the campuses continue to conform or substantially conform with the six criteria; two (2/10) campuses now report complete conformity with all six criteria, an increase of one (+10%) campus since last year.
2. *Program Coordinator/Manager.*
Nearly all (9/10) of the campuses continue to conform or substantially conform with the single criterion; eight (8/10) campuses remain in complete conformity with the single criterion.
3. *Compliance with Laws/Requirements.*
All (10) of the campuses continue to conform or substantially conform with the two criteria; eight (8/10) campuses remain in complete conformity with both criteria.
4. *Finance and Administration.*
Most (7/10) of the campuses continue to conform or substantially conform with the four criteria; four (4/10) campuses now report complete conformity with all four criteria, an increase of two (+20%) campuses since last year.
5. *Planning and Design Process.*
Nearly all (9/10) of the campuses now conform or substantially conform with the five criteria, an increase of one (+10%) campus since last year; half (5/10) of the campuses remain in complete conformity with all five criteria.
6. *Hazard Vulnerability Assessment.*
Most (8/10) of the campuses conform or substantially conform with the six criteria, a decrease of one (-10%) campus since last year; six (6/10) campuses now report complete conformity with all six criteria, an increase of three (+30%) campuses since last year.
7. *Business Impact Analysis.*
Less than half (2/10) of the campuses conform or substantially conform with the four criteria, a decrease of one (-10%) campus since last year; none of the campuses report complete conformity with all four criteria.

8. *Resource Needs Assessment.*

Most (6/10) of the campuses continue to conform or substantially conform with the five criteria; one (1/10) campus remains in complete conformity with all five criteria.

9. *Incident Prevention and Hazard Mitigation.*

Most (7/10) of the campuses continue to conform or substantially conform with the four criteria; two (2/10) campuses remain in complete conformity with all four criteria.

10. *Crisis Communications and Public Information.*

All (10/10) of the campuses now conform or substantially conform with the two criteria, an increase of one (+10%) campus since last year; eight (8/10) campuses now report complete conformity with both criteria, an increase of two (+20%) campuses since last year.

11. *Warning, Notifications and Communications.*

All (10) of the campuses continue to conform or substantially conform with the three criteria; eight (8/10) campuses remain in complete conformity with all three criteria.

12. *Standard Operating Procedures (SOPs).*

Most (6/10) of the campuses conform or substantially conform with the four criteria, a decrease of two (-20%) campuses since last year; one (1/10) campus remains in complete conformity with all four criteria.

13. *Incident Management.*

Most (8/10) of the campuses now conform or substantially conform with the eight criteria, an increase of one (+10%) campus since last year; one (1/10) campus remains in complete conformity with all eight criteria.

14. *Emergency Operations/Response Plan.*

Nearly all (9/10) of the campuses now conform or substantially conform with the three criteria, an increase of one (+10%) campus since last year; half (5/10) campuses now report complete conformity with all three criteria, an increase of one (+10%) campus since last year.

15. *Business Continuity and Recovery.*

Less than half (3/10) of the campuses conform or substantially conform with the four criteria, a decrease of two (-20%) campuses since last year; none of the campuses report complete conformity with all four criteria.

16. *Employee Assistance and Support.*

Most (7/10) of the campuses continue to conform or substantially conform with the two criteria; half (5/10) of the campuses now completely conform with both criteria, an increase of one (+10%) campus since last year.

17. *Training and Education.*

Most (8/10) of the campuses continue to conform or substantially conform with the four criteria; six (6/10) of the campuses now completely conform with all four criteria, an increase of one (+10%) campus since last year.

18. *Exercises and Tests.*

All (10/10) of All (10/10) of the campuses continue to conform or substantially conform with the two criteria; seven (7/10) of the campuses are now in complete conformity with both criteria, an increase of one (+10%) campus since last year.

19. *Program Maintenance and Improvement.*

Most (8/10) of the campuses continue to conform or substantially conform with the four criteria; six (6/10) campuses remain in complete conformity with all four criteria.

Trends Analysis Summary - Systemwide Conformity with NFPA Standard Criteria

All or nearly all (at least nine of ten) campus locations reportedly conform or substantially conform with the following eight (of nineteen total) NFPA Standard programmatic elements: program management; program coordinator/manager; compliance with University requirements and state/federal laws; planning and design process; crisis communications and public information; warning, notifications, and communications; emergency operations/response plan; as well as exercises and tests. In addition, most (at least seven of ten) campus locations reportedly conform or substantially conform with the following seven NFPA program elements: finance and administration; Hazard Vulnerability Assessment; incident prevention and hazard mitigation; incident management; employee assistance and support; training and education; as well as program maintenance and improvement. Therefore, on a systemwide basis most campus locations conform or substantially conform with fifteen of the nineteen NFPA Standard programmatic elements (79% conformity). This represents a slight decrease in the level of systemwide NFPA conformity from what was reported by all of the campuses last year (84%).

In terms of achieving substantial conformity with the NFPA Standard, the campuses reported incremental improvement overall in the following four program element areas: planning and design process; crisis communications and public information; incident management; and emergency operations/response plan. However, there was also systemwide deterioration reported in overall campus conformity with the following four NFPA program elements: Hazard Vulnerability Assessment; Business Impact Analysis; standard operating procedures; and business continuity and recovery.

In terms of both breadth (the number of campuses) and magnitude (degree of change), the greatest systemwide improvement in achieving conformity with NFPA programmatic criteria was reported over the last year in the following four NFPA Standard program elements: finance and administration; Hazard Vulnerability Assessment; incident management; and crisis communications and public information. In contrast, slight systemwide regression was observed in conformance with the criteria associated with the following two related continuity planning NFPA program elements: business continuity and recovery; and Business Impact Analysis (BIA).

In terms of individual NFPA program criteria, the greatest systemwide improvement was reported in using incident action plans or management by objectives to guide emergency operations (incident management); records management programs to ensure campus records are available to continue essential functions (records management); and maintaining crisis communication or public information capability. In contrast, the greatest systemwide deterioration in terms of conformity with individual NFPA program criteria was reported in developing a recovery plan to provide for campus restoration of services, facilities, and operations (recovery). More detailed information on all of the NFPA Standard program elements and their corresponding conformity metrics criteria can be found in the benchmarking guide contained in Appendix I.

Table 1: Campus Self-Assessments - NFPA Standard Conformity, December 2018

NFPA Program Element	Berkeley	Davis	Irvine	UCLA	Merced	Riverside	San Diego	UCSF	Santa Barbara	Santa Cruz
Program Management										
Leadership commitment and resources	2	3	3	3	2	3	3	3	3	3
Program review/support committee	3	3	3	2	2	3	3	1	3	3
Executive policy and enabling authority	3	3	3	1	2	3	3	3	3	3
Program scope/goals/perf objectives/metrics	3	3	3	2	2	3	3	3	3	3
Prioritized budget and schedule/milestones	2	3	2	3	2	3	2	3	2	3
Establish program performance objectives	2	3	1	2	1	1	2	3	2	3
Program Coordinator/Manager										
Designated/authorized personnel	3	3	3	2	1	3	3	3	3	3
Compliance with Laws/Requirements										
UC policies/requirements	3	3	3	3	2	3	3	3	3	3
SEMS/NIMS requirements	3	3	3	3	3	3	3	3	3	2
Finance & Administration										
Develop financial/administrative procedures	2	3	3	0	2	0	3	3	3	2
Framework uniquely linked to emergency ops	2	3	3	1	2	1	3	3	3	2
Expedited fiscal decision-making procedures	2	3	3	1	1	1	3	3	3	2
Records management program	2	3	3	2	1	1	3	2	3	2
Planning & Design Process										
Planning process to develop plans/strategies	3	3	3	3	1	1	3	3	2	3
Common plan content requirements	3	3	3	3	1	1	3	3	2	2
Use 'all-hazards' approach and HVA	3	3	3	3	2	3	3	3	3	3
Strategic planning defines vision/mission/goals	3	3	3	3	2	2	3	3	3	3
Crisis management planning addresses issues	3	3	3	1	2	3	3	3	3	3
Hazard Vulnerability Assessment										
Identify/monitor hazards and probabilities	3	3	3	3	2	2	3	3	3	3
Evaluate 'all-hazards' applicable to campus	3	3	3	3	2	3	3	3	3	3
Assess campus vulnerability to all hazards	3	3	3	3	2	2	3	3	3	3
Conduct campus-wide impact analysis	3	3	3	3	2	2	2	3	3	2
Considers impact escalation due to time/external e	3	3	3	3	1	0	3	3	3	2
Evaluate existing prevention/mitigation strategies	3	3	3	3	2	0	3	3	3	2
Business Impact Analysis										
BIA has mission-critical functions/assesses impacts	1	1	3	2	1	2	1	2	2	2
BIA has mission-critical resources as specified	1	1	2	2	1	1	1	1	2	1
BIA has MTD and breadth of disruption impacts	1	1	3	2	1	1	1	1	2	1
BIA has RPO and RTO-RPO gaps as specified	1	1	0	1	1	2	1	1	2	0
Resource Needs Assessment										
Conduct needs assessment based on HVA/BIA	1	1	2	3	1	1	3	2	2	1
Assessment considers multiple factors	1	1	1	2	1	1	3	2	2	1
Establish resource management procedures	3	1	2	2	1	2	3	3	2	1
Identify operational support facilities	3	1	3	2	1	2	3	2	3	1
Establish mutual aid/partnership agreements	3	0	3	1	2	2	3	3	3	1
Incident Prevention & Hazard Mitigation										
Develop/implement prevention strategy	3	3	3	3	1	3	3	3	3	3
Develop/implement mitigation strategy	2	3	2	2	1	2	3	3	2	2
Base strategies on HVA/experience/costs	3	3	3	1	1	1	3	3	2	2
Interim and long-term mitigation actions	3	1	3	1	1	1	3	3	2	2

METRICS KEY: 0 = Non-Conforming 1 = Partially Conforming 2 = Substantially Conforming 3 = Fully Conforming

Table 1: Campus Self-Assessments - NFPA Standard Conformity, December 2018 (continued)

Crisis Communications & Public Information										
Ability to disseminate/respond to information	3	3	3	1	3	2	3	3	3	3
Maintain crisis comm's/public info capability	3	3	3	3	3	3	3	3	3	3
Warning, Notifications & Communications										
Determine warning/notification/comm's needs	3	3	3	3	3	3	3	3	3	3
Systems are reliable/redundant/interoperable	3	3	3	3	2	3	3	3	3	2
Warning/notification/comm's protocol/procedures	3	3	3	3	3	3	3	3	3	3
Standard Operational Procedures (SOPs)										
Implement response/recovery procedures	2	1	3	2	1	1	3	2	3	2
SOPs for EH&S/property/stabilization/continuity	3	1	3	2	2	2	3	3	2	2
Access controls/responder accountability/demob	3	1	2	0	3	3	3	3	3	2
Concurrent response/recovery/continuity	2	3	3	1	1	1	3	3	2	2
Incident Management										
Use ICS to manage response/recovery/continuity	3	3	3	1	3	3	3	3	3	3
Establish primary and alternate EOCs	3	3	3	2	1	3	3	3	3	2
Establish coordination procedures/policies	3	3	3	1	3	2	3	3	3	2
SOPs for damage/resource needs assessments	3	3	2	1	2	2	3	3	2	2
Incident action planning/mgmt by objectives	3	3	3	2	3	3	3	3	3	3
Establish resource management processes	2	3	3	0	3	1	3	3	3	1
Maintain current resource inventories	2	3	3	0	2	1	3	3	2	2
Manage donations/volunteers	3	1	2	1	2	0	3	2	2	2
Emergency Operations/Response Plan										
EOP defines operational responsibilities	3	3	3	3	2	2	3	3	3	2
EOP identifies protective/stabilization actions	3	3	3	1	1	2	3	2	3	2
EOP includes various required elements	3	3	3	3	1	2	3	2	3	2
Business Continuity & Recovery										
Continuity Plan addresses mission-critical processes	1	1	2	2	1	2	2	2	1	1
Continuity Plan has multiple required elements	1	1	2	1	1	1	1	2	2	2
Recovery Plan provides for campus restoration	1	1	3	1	1	1	2	2	3	1
Recovery Plan has multiple required elements	1	1	3	1	1	1	0	2	3	2
Employee Assistance & Support										
Develop flexible comprehensive campus strategy	2	3	3	1	1	1	2	3	3	3
Promote family preparedness education	3	3	3	1	1	1	3	3	3	3
Training & Education										
Implement a competency-based curriculum	3	3	3	3	0	2	3	3	3	2
Identify scope and frequency of training	3	3	3	3	1	2	3	3	3	3
Train designated staff in SEMS/ICS roles	3	1	3	3	2	0	3	3	3	2
Implement campus public education program	3	3	3	3	1	2	3	3	3	3
Exercises & Tests										
Program evaluation through exercises and tests	3	3	3	3	2	2	3	3	3	2
Exercise/test design meets requirements	3	3	3	3	2	2	3	3	3	2
Program Maintenance & Improvement										
Program evaluation uses performance objectives	3	3	3	1	2	2	3	3	3	3
Reviews based on AARs/lessons learned	3	3	3	3	2	3	3	3	3	3
Establish corrective action for deficiencies	3	3	3	2	1	2	3	2	3	3
Continuous improvement process implemented	3	3	3	1	2	2	3	3	3	3

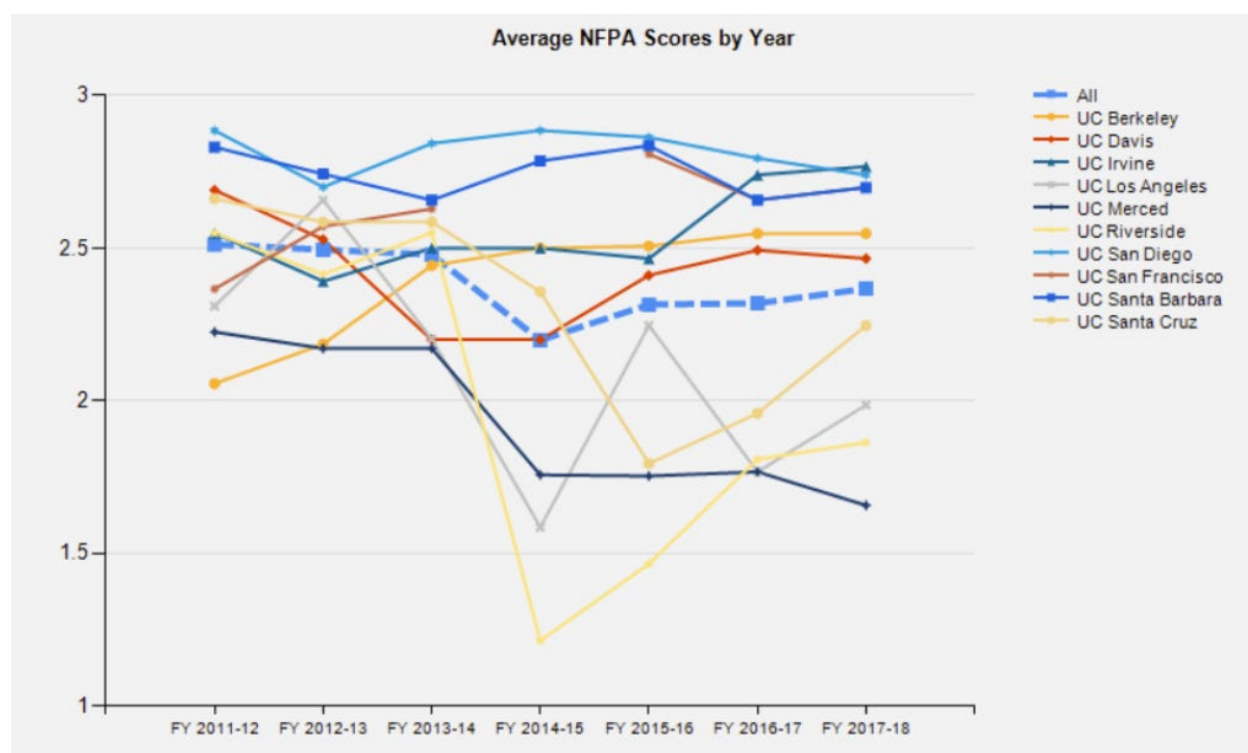
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III. ERMIS Emergency Management Key Performance Indicator (KPI)

As part of its strategic approach to managing risk, the University has created the Enterprise Risk Management Information System (ERMIS), a centralized data warehouse that serves as the data repository for risk and controls related information. ERMIS provides a high level perspective that helps systemwide stakeholders quantify and track pre-defined Key Performance Indicators (KPIs).

An 'Emergency Management' KPI has been developed as part of the Safety Index dashboard reporting tool. This KPI averages all of the NFPA Standard scoring metrics that campuses enter into the online NFPA survey portal to produce a single consolidated "NFPA score" for each campus. In addition to each campus KPI, there is also a University systemwide enterprise average NFPA Standard KPI based on the average metrics scores reported by all campus locations.

As the blue dashed line on the graph below shows, the systemwide (or enterprise) KPI for conformity with all the NFPA Standard programmatic requirements increased slightly over the last year, averaging 2.37 for all campus locations. Since a score greater than (2.0) indicates 'substantial conformity' with the NFPA Standard program elements, overall the entire University system remains in substantial conformity with the NFPA Standard programmatic criteria.



IV. Systemwide Emergency Management Council (EMC)

The University-wide *Emergency Management Council (EMC)* is a unique inter-departmental multi-disciplinary cohort of approximately forty systemwide personnel from Emergency Management, Police, EH&S, Medical Center, Risk Services, Security, and Safety Services departments as well as representatives from the National Laboratories and Agriculture & Natural Resources. The EMC was originally formed by UCOP in 1994 and consisted of campus emergency planners and has since expanded from emergency management personnel to include continuity planning staff as those programs have developed and matured over time. Due to its large size and differentiation, the EMC is subdivided into three focused workgroups: campus emergency managers, medical center emergency managers, and mission continuity planners.

The EMC's objectives are to foster inter-campus collaboration and leverage systemwide resources and knowledge; evaluate and enhance the overall level of University-wide emergency preparedness; identify systemwide issues, threats, and needs related to emergency management; raise the level of awareness and importance of campus emergency preparedness programs; provide a networking forum; review and incorporate 'lessons learned' by various campuses; ensure reliable inter-campus communications and effective systemwide mutual aid coordination and response; identify, discuss, evaluate and adopt/adapt to emerging national trends, initiatives, standards, and practices in the higher education emergency management field; and promote professional development and continuing education of emergency managers and continuity planners.

In FY 2017-18, the EMC continued to achieve its objectives through regular collaboration via monthly conference calls in addition to periodic regional in-person meetings, and work on subcommittee activities. Standing conference call agenda items include debriefs of lessons learned from recent campus incidents and exercises/trainings, as well as discussions and updates related to mass notification systems, Center of Excellence for continuity planning, and UCOP. The three cohorts are coordinated internally and externally by shared liaisons with campus and medical center emergency managers, continuity planners, EH&S Directors, and the Risk Management Leadership Council. Regularly scheduled inter-campus tests of the University's "fail-safe" Mobile Satellite Radio (MSAT) system are coordinated with the monthly conference calls.

The UC Health/Stanford Health Care Emergency Management cohort held regularly scheduled monthly conference calls to share best practices and lessons learned including resource documents and plans, and discuss issues of common concern. Standing agenda topics included regulatory and accreditation (CMS/Joint Commission) experiences and updates; debriefings from Hospital Incident Command System (HICS) activations; training and exercises; plans and policies; planning for systemwide labor actions; business continuity; updates from campus emergency management and UCOP; and new projects/initiatives.

EMC subcommittee common work projects in FY 2017-18 included the Emergency Management Assistance Team (EMAT) mutual aid initiative, Emergency Action Plan UC Ready module development, and model Recovery Plan development. EMC members from UCOP, Irvine, Riverside, San Diego, San Francisco, and Santa Barbara conducted NFPA Standard peer reviews of UC Irvine's Emergency Management program in August 2017, and UC Santa Barbara's program in August 2018. The NFPA peer review report included findings, recommendations, and highlighted campus program best practices to disseminate across the system. EMC members also regularly shared professional development opportunities and announced staff changes occurring at their campuses in order to keep communication and coordination between campuses running smoothly.

In December 2017, UC Santa Barbara operations were impacted for an extended period by the Thomas Fire, triggering the first-ever emergency management mutual aid deployment in the UC system. Emergency managers from five UC campuses provided inter-campus mutual aid during this incident, during which they assisted the UCSB EOC Planning Section with situational awareness, action planning, and documentation; assisted County EOC operations, including debris inspections and County-level planning section; and provided expertise on shelter best practices, volunteer management, and helped document key lessons learned. This event led to the development of the UC Emergency Management Assistance Team (EMAT) concept, which is a system and process through which campuses can request emergency management mutual aid to support events/ incidents that exceed campus capabilities or capacity, or for incidents that extend over multiple operational periods.

In order to better support and guide the continuity planning program, OPRS led a collaborative project to identify Continuity Core Capabilities for both campuses and medical centers. These core capabilities represent the “end state” of a successful continuity planning program and work in conjunction with existing programmatic standards, including the NFPA 1600 (for campuses) and Joint Commission (for medical centers). The Core Capabilities provide a strategic framework and ongoing accountability to guide continuity planning efforts at all UC locations.

In March 2018, UCOP established a new Center of Excellence (CoE) with a focus on UC readiness and resiliency. The CoE is led by UC Berkeley and provides strategic direction, consultation and guidance to three functional areas – Mission Continuity, Emergency Action Planning, and Information Technology Disaster Recovery. The CoE will also support continuity program implementation at all UC locations. The formation of this CoE will continue to strengthen systemwide resiliency and provide ongoing support and mentorship.

Continuity planning efforts continue to become further integrated into emergency management and response efforts. In January 2018, the *UC Ready* continuity planning software tool was put into action during a real-world emergency, the Thomas Fire/Debris Flow incident, which impacted the Santa Barbara campus. Through a collaborative effort between Santa Barbara and UCLA, the reporting functionality of *UC Ready* was used to generate key reports on continuity strategies, essential personnel, and business impacts. Understanding how to mine the information collected via the continuity planning process is of critical importance to response efforts and will help strengthen overall resiliency.

Continuity planning efforts also began to incorporate more opportunities for training and exercises. The Davis Campus hosted a large-scale continuity tabletop exercise that included representation from over 20 campus departments and 120 participants. This scale and scope of exercise is quickly becoming a best practice as it maximizes planning efforts and supports increased involvement and engagement. Other UC locations are exploring similar exercise efforts going forward.

V. Individual Program Executive Summaries

The following Emergency Management program executive summaries describe the overall status of all University Campus and UC Health medical center programs as well as the Lawrence Berkeley National Lab, Office of the President (UCOP) and Agriculture & Natural Resources (ANR) Division programs. Each University location was requested to include information on significant programmatic progress, accomplishments, and developments over the last year; identification of program elements needing improvement; and major programmatic development goals or corrective actions planned for the coming year.

Berkeley

In 2017-18, UC Berkeley was the site of several high-profile protest events, including 'Free Speech Week' in September 2017. For each event, the Office of Emergency Management (OEM) played a significant role in response activities. OEM created a reporting format that allowed for in-depth media intelligence gathering and monitoring to keep UCPD and other partners informed, aware, and knowledgeable. As OEM refined this approach, we were also redefining the use of social media monitoring before, during and after an event. Lessons learned were applied to each successive event and UC Berkeley has been able to share these lessons with colleges and universities across the country as others are faced with the potential for similar incidents.

OEM also facilitated a full scale exercise, *Golden Alliance*, on the Berkeley campus. The exercise included the participation of approximately 400 employees and volunteers and evaluated campus response to a major earthquake on the Hayward Fault. Executing this full scale exercise required extensive teamwork, collaborative planning, and coordination across multiple campus units.

Berkeley was the first campus to roll out the new Emergency Action Plan (EAP) template in *UC Ready*, UC's mission continuity planning software tool. As part of this effort, OEM developed and delivered classroom training to end-users and developed an end-user guidance document for EAPs. This initiative resulted in more than 80% of campus buildings having completed or in-progress EAPs.

OEM continues to lead mission continuity planning efforts on campus. This year, UC Berkeley's continuity plan template was identified as a best practice University-wide and was fully incorporated into *UC Ready*. As a collaborative project between OEM and Information, Services and Technology (IST), the campus launched a continuity planning initiative targeting Tier 1 departments. These are departments with an IT application or system with the shortest recovery time objective (RTO). This initiative launched successfully to nearly twenty campus departments and helped move campus continuity planning efforts forward.

Lawrence Berkeley National Laboratory

The Emergency Management Program for Lawrence Berkeley National Laboratory (LBNL) is based on requirements in Department of Energy (DOE) Order 151.1D. The program is based on a Threats and Hazards Identification and Risk Assessment (THIRA) as well as an All-Hazards Survey that outlined the potential hazards, emergency event types, and potential consequences for the Laboratory. This foundational document provides guidelines for the necessary resources and response capabilities to effectively mitigate, respond to, and recover from emergencies.

Additional analysis for technological emergencies or potential hazardous material release scenarios as a result of laboratory operations are identified and analyzed in Emergency Planning Hazards Assessments (EPHAs). EPHAs

outline the potential consequences from a hazardous materials release resulting in the dispersal of chemicals exceeding quantities of concern. This analysis also generates an Emergency Planning Zone (EPZ), which is the geographical area that has the potential for impacts from a hazardous materials release. These documents provide pre-determined protective actions and allow Emergency Management to quickly implement response protocols that might involve hazardous operations/materials.

The LBNL Emergency Management Program had an active year in 2017-18. There were numerous activations of the Emergency Operations Center due to strikes, protests, power outages, and brush fires. In addition to these real events, the Laboratory conducted ninety-one building evacuation drills, over a dozen drills for the disaster assistance teams, and a rapid mass evacuation/shelter-in-place drill for Laboratory personnel. The Lab also participated in the annual *Great ShakeOut* earthquake drill, which consisted of an all-inclusive approach including 'drop-cover-hold on' followed by evacuation to assembly areas.

In addition to drills for protective actions, all Laboratory employees are trained on how to report emergencies, what the potential hazards and emergencies are for the Laboratory, and their expected protective actions (shelter-in-place, evacuate, lockdown). This training is offered online through PSD-0135, General Emergency Management Training, and is augmented with in person classroom training.

In addition to contracts with the UC Police Department and Alameda County Fire Department for emergency response, LBNL relies on volunteer employees for the various positions on the Emergency Response Organization (ERO). The ERO is a formalized structure with responsibility for mitigating, responding to, and recovering from emergencies. The Emergency Management Team and Emergency Oversight Team are responsible for coordinating operations in the Emergency Operations Center (EOC). The Lab also has Building Emergency Teams (BETs) for coordination and implementation of protective actions/measures, Community Emergency Response Team (CERT) members for light search and rescue, basic fire suppression, and patient assessment/transport. The Medical Emergency Response Team (MERT) has qualified Emergency Medical Technicians and lastly, the Damage Assessment Team (DAT) is responsible for assessing buildings after any type of damage is sustained to declare them as habitable or not.

Critical infrastructure for the Continuity Program Plan was updated. This plan is based on DOE Order 150.1A and approved by the Laboratory Director. The Continuity Program for the Laboratory is primarily focused on protection of special nuclear materials versus comprehensive business continuity sustainment. Continuity is represented before, during, and after emergencies on the ERO through the Mission Support Officer (MSO) position.

In terms of emergency equipment and facilities, LBNL has established zone disaster containers containing basic life safety and emergency medical supplies; these are strategically placed throughout the Lab site. The containers also include sanitation and survival equipment and can support a makeshift EOC or Incident Command Post (ICP) if necessary. Rescue boxes with search and rescue equipment are also strategically placed throughout the Lab for use by CERT members. Emergency medical equipment located in buildings throughout the site include Automated External Defibrillator (AED) devices and 'Stop the Bleed' bleeding control kits.

Davis

The UC Davis Emergency Management and Mission Continuity (EM&MC) Program continues to improve overall campus community preparedness and response capabilities and strives to develop a robust and comprehensive emergency management and mission continuity program.

UC Davis had many accomplishments in 2017-18. EM&MC completed its annual update of the campus Emergency Operations Plan. We also increased our emphasis on administrative unit business impact analysis as a critical component of institutional resilience to support campuswide recovery planning. Another important step was increased use of the Virtual EOC/SharePoint site to share information across the UC Davis enterprise, as was rebuilding the Emergency Management website to expand on student, faculty and staff preparedness at home and in the workplace. Emergency preparedness efforts continued at two remote off-campus locations – Bodega Bay Marine Lab and Lake Tahoe Research Center. Campus mass notification communications capabilities were expanded to cover both these sites and safety awareness fairs were held on site that focused on increasing community, research, lab, and field safety.

In 2018, EM&MC made additional progress in training and exercises. All campus executive leadership participated in multiple emergency management training including event management protocols, crisis communication coordination, and response. More specifically, DHS/FEMA delivered ‘Executive All-Hazards Preparedness’ training and conducted tabletop exercises that offered senior leadership opportunities to address issues associated with a cybersecurity attack with cascading impacts affecting campus infrastructure. EM&MC reached out to students through orientations to educate them on emergency preparedness. Students were offered water bottles, key chains, and first aid kits as part of the effort to encourage increased awareness for the *Crisis Manager* and *Guardian Personal Safety* mobile applications as part of the annual Resource Fair on the Davis campus. Students were also engaged during campus participation in National Preparedness Month and the *Great ShakeOut* earthquake drill, which included encouraging students to visit the emergency management website and familiarize themselves with how to receive emergency mass notifications.

EM&MC provided ongoing technical support to Sacramento campus partners to ensure emergency management plans are linked and to support a comprehensive program that seeks to leverage all UC Davis resources in support of disaster/emergency response and recovery across the entire UC Davis enterprise. EM&MC also created and trained a team of CERT volunteers to engage with members of the campus community to promote emergency preparedness resources on campus. The CERT team participated in the statewide CERT activities in Sacramento, handing out preparedness materials to community members.

In the area of mission continuity, EM&MC completed an overall update of the mission continuity plan template. These improvements enhance the operational viability of the plans and provide a streamlined approach to outlining essential functions, recovery strategies, and communication of resource requirements. Enhancements to the *UC Ready* software platform were developed. UCD staff initiated the process with *UC Ready* administrators to enhance current capabilities to better fit plan development and life cycle. EM&MC delivered a tabletop/seminar for 107 attendees from thirty-five different units across campus. The tabletop seminar focused on evaluating the current status of unit operational plans related to overall recovery objectives following loss of facilities, reduction in staff, or loss of IT network.

Further, the business impact analysis portion of mission continuity plan development was finalized for all Tier 1 groups. EM&MC staff presented training on mission continuity program parameters, enhanced plan template, and plan life cycle to members of Tier 1 groups as well as to the leadership of the School of Medicine and the School of Veterinary Medicine. Lastly, EM&MC engaged with partners in Information Technology to share the results of the business impact analysis related to critical application maximum tolerable downtimes.

Davis Health System

The UC Davis Health Emergency Management (EM) Program is overseen by its Emergency Preparedness Committee and continues to excel through continuous improvement and achievements throughout the year. UC Davis Health EM successfully complied with and completed all Emergency Management Joint Commission and Centers for Medicare & Medicaid standards. UC Davis Health continued to participate in the Federal Hospital Preparedness Program and received grant funding administered through Sacramento County.

During 2017-18, UC Davis Health activated its Emergency Operations Plan for multiple days in response to a planned water shut down and for three days during a systemwide labor action. In the last year, UC Davis Health conducted a full scale exercise for each building during the Sacramento County Statewide Medical and Health Exercise, three tabletop exercises, and three functional drills. Additionally, UC Davis Health participated in the Sacramento County tabletop exercise. Exercise scenarios included a radiological accident, community terrorism incident, mass casualty trauma incident, flooding, and a labor action. The full scale exercises were designed and evaluated in compliance with Homeland Security Exercise and Evaluation Program (HSEEP) requirements. UC Davis Health identifies and tracks completion of improvement actions identified in all disaster exercises and responses to actual emergencies through the Emergency Management Committee.

UC Davis Health achieved its 2017-18 goals to update the Emergency Management and Emergency Operations Plans. However, the medical center was not able to update all of the nineteen annexes to the EOP. The plan and its annexes are being unified and restructured into a Continuity of Operations Plan to address this issue. UCDHS has achieved a 95% business impact analysis completion rate using the *UC Ready* continuity planning tool.

Goals for next year include maintaining or exceeding compliance with regulations, improving incident command center capabilities, launching a new training and education program, developing a unified Continuity of Operations Plan, assessing and updating equipment and inventory needs, and facilitating partnerships with critical stakeholders.

Irvine

In 2017-18, UC Irvine continued to enhance its Emergency Management and mission continuity programs. Accomplishments during the year included increased faculty outreach and classroom preparedness initiatives; training and exercises; completion of the Power Outage Annex; continued implementation of *UC Ready* for continuity planning and Phase II of the Business Impact Analysis; development of a Research Resilience Committee; and continued implementation of key initiatives outlined in the 2014-2018 Emergency Management Strategic Plan.

UCI once again participated in the *Great ShakeOut* earthquake drill in October 2017. An all-campus email message was sent out a week prior to the event in order to inform the campus community about earthquake preparedness and to encourage participation on the day of the *ShakeOut*. On October 19, 2017 at 10:19 AM, a campuswide *ZotALERT* was issued asking people to “drop, cover, and hold on” to practice earthquake safety. A follow up, “all-clear/thank you for participating” message was sent a few minutes later. This *ZotALERT* also served as the first test of the new classroom alert beacons, which were installed in seven of the largest lecture halls on campus. Additional classroom beacons are scheduled for installation in 2018-19.

Section-specific training for EOC staff was held in February 2018. In June 2018, a functional exercise was held with the campus EOC, Environmental Health & Safety, Facilities Management, Housing, Office of Information

Technology, and Student Affairs Department Operations Centers (DOCs). The 'Mayday' scenario focused on a multi-day power outage and was designed to test the response and recovery activities identified in the recently developed Power Outage Annex.

Additional training and exercise opportunities held throughout the year included multiple tabletop exercises with the EOC and Chancellor's Executive Policy Group (CEPG) as well as building walkthroughs and pre-incident assessments with the Rapid Building Assessment Team (RBAT).

During the Student Parent Orientation Program (SPOP) in July and August 2017, the Emergency Management Division was once again provided the opportunity to speak with all 5,000 incoming freshman about emergency preparedness on campus. The EM Division has been invited back to participate in the 2018 SPOP sessions. Additionally, the EM Division was asked to present at the New Faculty Orientation in September 2017.

In November 2017, UCI Emergency Management staff assisted the UCI Police Department in the development and facilitation of a full scale active shooter exercise. This one-day exercise simulated a multi-disciplinary multi-jurisdictional response to an active shooter on campus with the overarching goal of assessing the plans, policies, and procedures of UCIPD and other participating law enforcement agencies. More than 100 CSAR and Irvine CERT members volunteered to play the "victims" and were professionally moulded to create lifelike wound simulations that added realism to the response effort.

Due to increasing concerns about the resiliency of research units in academic institutions, UCI's Emergency Management and Campus Security Advisory Committee (EMAC) approved the creation of the EMAC Research Resilience Subcommittee. This group supports and advances the emergency response and mission continuity functions as it relates to research on campus, in accordance with the NFPA 1600 Emergency Management standard. As such, this group has been tasked with developing research resiliency strategies, best practices, and a mission continuity for research planning template to be shared with research units at UCI.

During this reporting period, the Research Resilience Subcommittee convened twice (first meeting held in November 2017), during which the group's membership and charter were established, and initial objectives were outlined. A key project that emerged during this period was the acquisition of four ultra-low temperature (ULT) freezers to establish UCI's emergency "freezer-farm" to be used by research units should their equipment fail. This project's main goal is to build resiliency for this type of specialized equipment in order to prevent the loss of valuable research specimens.

Since the completion of the Business Impact Analysis (BIA) in November 2016, which identified 82 Department Essential Functions (DEFs) performed by 37 high-priority departments, and the transition to Phase II (i.e. Base Plan Development) in Spring 2017, UCI's mission continuity program has continued to make progress with its enhanced approach during this reporting period.

Phase II of the enhanced approach focuses on the development of the 37 department-level plans for those departments that have primary responsibility for the continued delivery of the Department Essential Functions (DEFs) identified within the Campus Continuity Framework. This phase is both crucial and time consuming as it requires all stakeholders within a department to conduct a business process analysis as it relates to the people, resources, IT applications/systems, leadership, space and dependencies that are required to deliver a service or function. To date, twelve of the thirty-seven departments have begun development of their continuity plans, which account for 36 of the 82 DEFs that are imperative to the University's mission. Furthermore, ten of the

abovementioned DEFs representing six high-priority departments have already submitted preliminary Phase II data for review, and one has completed its Base Continuity Plan (i.e. Phase II).

It is important to note that the Mission Continuity Program position was vacant for nearly five months (September 2017 – February 2018), and with the onboarding of the new manager, the Mission Continuity Program is back on track to meet its goals. During this reporting period, the new Continuity Program Manager has re-engaged with high-priority department stakeholders to complete outstanding forms and documents used to capture Phase II data, and started conversations with Office of Information Technology (OIT) leadership to conduct a BIA for their business areas.

In an effort to further engage faculty, multiple offerings of the Classroom Emergency Preparedness training was offered to faculty, lecturers, and teaching assistants during UCI welcome week and the beginning of fall quarter. Additional trainings were scheduled with individual schools in Spring 2018. UCI continues to utilize several social media sites including an emergency management blog, Facebook, Twitter, Instagram, and Nixle to share both campus and personal preparedness information.

Finally, in August 2017 representatives from UCSB, UCSD, UCSF, and UCOP completed a NFPA Standard-based peer review of UC Irvine's Emergency Management program. The review panel concluded that the UCI program fully conformed with 45 (or 62%) of the individual NFPA program elements and substantially conformed with 20 (or 27%) of the program elements. Seven elements were partially conforming and there was one program element that was non-conforming. The panel also identified four best practices to be shared University-wide: hosting FEMA emergency management training courses on campus; completion of the campuswide BIA; development of the Campus Recovery Plan; and facilitation of annual preparedness training for campus departments and building response teams.

UCI continues to implement the initiatives outlined in the 2014-2018 EM Strategic Plan. Key activities for 2017-18 included completion of the Power Outage annex and the Recovery annex; participation in the NFPA 1600 peer review process; and enhancing the stockpile of emergency water and care and shelter supplies. Activities in the coming year will continue to focus on further development of the campus Medical Emergency Response Team (MERT), rolling out Phase II of the *Alertus* classroom beacon project, and developing the 2019-2024 Emergency Management Strategic Plan.

Irvine Health System

In 2017-18, UCI Health conducted emergency response exercises to meet The Joint Commission requirements as well as additional tabletop exercises to address internal objectives related to patient surge and wildfire events. By the end of 2018, UCI Health will have participated in a countywide wildfire exercise involving a surge of patients, the *Great ShakeOut* earthquake drill, and the Statewide Medical and Health Exercise testing our ability to respond to an emerging infectious disease – identified as one of the organization's top hazards. In addition to these exercises, numerous projects are underway including a complete revision of the hospital pandemic and surge plans to ensure the organization is better prepared for future events.

In November 2017, the UCI Health began a complete revision of its Emergency Operations Plan to address new and revised requirements from the Centers for Medicare & Medicaid Services (CMS) and The Joint Commission. UCI Health's new plan addresses our newly expanded ambulatory footprint and includes annexes for our Transplant Division and Emergency Department.

In the coming year, UCI Health will continue to focus on developing our emergency management and continuity program by creating staff resources for personal preparedness activities; revising the pandemic and emerging infectious disease plan with our epidemiological and infection prevention departments; revising our surge plan to address newly identified alternate treatment locations; and partnering with local first responder agencies and nearby hospitals for new planning initiatives.

Los Angeles

UCLA made significant progress in program improvements in 2017-18 and also exercised its response capabilities. The UCLA Office of Emergency Management (OEM) conducted training for the Campus Emergency Operations Group to bring the Management, Operations, Plans and Logistics Sections up to a Type II standard as defined by the California Office of Emergency Services (Cal OES). This training culminated in a full scale earthquake exercise conducted in June 2018.

UCLA responded to the Skirball Fire in December 2017 by activating the Emergency Operations Center for three days. This incident was also the first long-term use of the *Bruins Safe Online* website. This website, suggested by the Safety Task Force, proved invaluable as a source of official information for the campus community. Additionally, UCLA has completed work on a computer-based training program for active shooter training. This program is intended to supplement the current in-person training offered by OEM and UCPD.

Los Angeles Health System

Last year, UCLA Health continued participation in the Federal Hospital Preparedness Program (HPP) at both UCLA Health locations, receiving grant funding administered through Los Angeles County. UCLA Health continued to provide leadership in the field of hospital emergency management with membership on the California Hospital Association Emergency Management Advisory Committee and the Los Angeles County Healthcare Coalition. As a Disaster Resource Center and designated Trauma Surge facility, Ronald Reagan UCLA Medical Center remained a regional resource for disaster planning, response and recovery efforts among the hospitals, clinics, and other partners on the west end of Los Angeles County. Over the last year, further expansion to other health care sectors has occurred through increased collaboration with long term care facilities, ambulatory surgery centers, and dialysis centers.

UCLA Health Emergency Management continued its focus on Communications, Resources and Assets, Safety and Security, Management of Staff, Utilities, and Management of Patients through the work of dedicated subcommittee members under the oversight of the Emergency Management Executive Steering Committee. Some of the many accomplishments include continued rollout of the UCLA Health & David Geffen School of Medicine Emergency Notification System to increase mass notification capabilities to more than 7,000 staff and faculty; development of a new unit-based active shooter training model; development of critical utility system outage notification templates within the Desktop Alert system; and further development of the Emergency Department Incident Response Plan for mass casualty incidents.

UCLA Health remains a leader in Emerging Infectious Disease (EID) planning efforts, working closely with LA County Public Health and Emergency Medical Services Agency to maintain and improve capabilities as a designated infectious disease receiving facility in Los Angeles County. The Emerging Infectious Disease Preparedness Program underwent a reorganization this past year and picked up an additional full-time staff member. The team has conducted numerous simulation-based trainings and a full scale Ebola Exercise. Ronald

Reagan UCLA Medical Center continued participation in the Federal Hospital Preparedness Program, receiving grant funding as an Ebola Treatment Center (ETC).

Actual events and incident responses over the last year included a three-day command center activation for the December 2017 Wildfires, which included activation of the Family Care Unit to support staff childcare needs; standby support for the 2018 Los Angeles Marathon; planning and operational support for a significant labor action; and several activations for planned and unplanned internal infrastructure incidents including information system and telecommunications outages, and utility disruptions.

Disaster exercises over the last year included multiple disaster paging drills, and IT downtime drills; hosting the 2018 Disaster Symposium focused on mass shooting events with guest speakers from Las Vegas to share their experiences with the Route 91 Harvest Festival incident; and facilitating a regional decontamination exercise with hospital partners in the region. UCLA Health also continued the quarterly mass casualty activation and setup drill series with the Emergency Departments at both hospitals. In addition, UCLA Health participated in the 2017 Statewide Medical and Health Exercise, and in the UCLA campus full scale Earthquake Exercise in June 2018.

Goals for the coming year include continued participation in the Federal HPP grant program; continued focus on department-level disaster planning and rollout of *UC Ready* for continuity planning; as well as a continued focus on staff outreach, education and training across UCLA Health. Additionally, UCLA Health Emergency Management is increasing preparedness outreach to the large network of affiliated ambulatory practices.

Merced

UC Merced's Emergency Management Program continues to work toward creating a culture of preparedness focused on prevention, protection, mitigation, response, and recovery. We do this by providing training opportunities that teach personal, workplace, and classroom safety strategies.

In October 2017, UC Merced's executive leadership participated in a tabletop exercise. The discussion centered on a simulated range of scenarios designed to reinforce their roles and responsibilities during a campus emergency and/or significant event. In March 2018, UC Merced's external relations team held a 'Crisis Communications' tabletop exercise in partnership with campus police. The scenario evolved into the challenges a campus communications team may face when confronted with a large group of demonstrators gaining support and opposition as they march through campus. The scenario included local media interviewing students and high profile political figures marching with students.

In April 2018, additional emergency radio communications equipment was installed to enhance and expand the coverage and capability of the existing radio communication system. This project put the campus in a more strategic position to better serve its community.

In July 2017, UCM Emergency Management, UCM Risk Services and City of Merced Fire partnered to host an impromptu emergency evacuation exercise for an off-campus building. The goal of the exercise was to identify the strength and challenges of the building evacuation plan and increase the level of safety, security, and overall employee confidence during an actual event requiring an evacuation. The exercise was well received by staff. The UC Merced Police Department continues to coordinate with area first responders and the construction management team to meet monthly to perform construction site walks. This effort is to help everyone continually gauge, understand, and plan for emergency situations on the site.

UC Merced continues to work on acquiring emergency evacuation chairs for high-rise buildings. The goal of this project is to provide these lifesaving mobility devices at all of the multi-story buildings on campus. In September 2017, UC Merced Police Department completed its AED installation project. This effort was aimed at getting AEDs installed strategically throughout campus to improve campus safety.

UC Merced will be recruiting and hiring a full-time Emergency Manager in the next few months. This will help bring more focus to the topic of emergency preparedness, help to consolidate campus efforts around the topic, and increase UC Merced's collaboration with all of its local and regional partners. This new unit and position will report to the Chief of Police but will remain a separate unit of the Police Department. We are excited the campus will finally have a dedicated full-time staff member for this very critical area and we look forward to the coming growth of the Emergency Management program.

Riverside

At the start of 2017-18, under the direction of the Executive Director of UCR's Enterprise Risk Management (ERM) division, the Office of Emergency Management (OEM) continued to support the Riverside campus and the University system through continuous improvement and significant achievements throughout the year. With the continued support of the Executive Management Policy Group (EMPG) and a focus on increasing visibility and confidence of the campus community, the Emergency Management and Mission Continuity program made substantial strides in planning, training, and support of strategic initiatives.

This year OEM worked closely with Information Technology Services, the UCR Police Department, and the Center of Excellence Training Department on developing the *Alertus* Emergency Notification System. The system includes an array of speakers located at the top of UCR's bell tower along with computer pop-ups and video monitor alerts that notify the campus community of an emergency and provide immediate directions on how to respond. The *Alertus* system is tested the first Friday of every month just after noon so the campus becomes familiar with UCR emergency protocols.

Drills, training, and exercises remain a priority for the campus exemplified by hosting seven FEMA trainings on campus this year. Additional training continued for the EMPG, Emergency Operations personnel, BSL-3 lab, First Aid/AED classes, evacuation of state-funded buildings on campus, fire extinguisher training, smoking corridor training for all Resident Advisors and Resident Directors on campus, the *Great ShakeOut*, and in-person and online training for our Building Supervisor for Emergency Conditions (BSEC) and Building Emergency Staff (BES) program. We held a functional exercise for the Riverside County Hazardous Operations Group which included 120+ first responders exercising a medical and decontamination response in the BSL-3 lab along with a radiological release. Several disaster trainings were also completed with critical departments along with staff certification from FEMA's Center of Disaster Preparedness to teach Environmental Health Training in Emergency Management to assist environmental health professionals and other emergency response personnel address the environmental health impacts of emergencies and disasters.

With a couple miles of utility tunnels beneath the campus we focused on the development of a Tunnel Emergency Action Plan and Steam Plant Shutdown program including response plans, facility services and contractor training, tailgate reviews and entry protocols for this yearly hazardous operation. In addition, we implemented new radio system training for our building safety personnel and overhauled our building safety program based on recommendations and participant suggestions.

For several large events on campus, Emergency Management developed Incident Action Plans and staffed the Incident Command Posts for Bonfire, Block Party, Graduation, and Spring Splash festival/concert events with attendances of up to 15,000 people each. Additionally, in response to mid-size events on campus and conferences hosting several thousand people, Emergency Management developed response plans for these special events including Convocation, Winter SOULstice, Homecoming, academic lectures, and athletic events to name a few.

This year also marked the emergence of new campus partnerships both internally and externally. We presented and trained new Academic Department Chairs, assisted in hosting several Safety Fairs on campus, collaborated with Capital Planning on development of a mobility hub - our public-private partnership of the North District, and with Riverside Unified School District on a STEM High School. We partnered with the City of Riverside where UCR was granted a seat at the City EOC and with Riverside Community Hospital where serving on their Emergency Preparedness Committee is another highlight of our newly formed relationships.

In addition to coordinating emergency response and recovery efforts for various incidents on the UCR campus, UC Riverside EM staff notably responded in support of UCSB to its EOC during the Thomas Fire resulting in the development of best practices for hosting a Red Cross shelter on UC Campuses. This provided the foundation to evaluate our EOC and begin the procurement process of a new web-based EOC product for incident action planning.

With the recent hiring of a Mission Continuity Planner, our goals for next year are focused on continuity planning and developing a campus Business Impact Analysis; establishing an Emergency and Continuity Strategic Plan; developing a comprehensive multi-year training and exercise plan; updating outdated emergency plans; constructing a new website; implementing the WEB-IAP program; continuing to develop our community partnerships; trainings and exercises focused on preparedness; and solidifying the campus BSEC and BES program.

San Diego

UC San Diego's emergency management efforts for the 2017-18 fiscal year were focused on maintaining and enhancing existing programs. The biggest change was the addition of Business Continuity to the Emergency Management Division. This resulted in the rebranding of the new Division of Emergency Management & Business Continuity (EM&BC). In addition, a new vendor for the *Triton Alert* mass notification system (MNS) is being implemented; EOC staff training has continued; AED/CPR and CERT training was provided; and existing education programs were maintained to assist UC San Diego to be prepared to prevent, respond and recover from all types of incidents.

Our project team selected Everbridge to be the new provider for Triton Alert. A large amount of staff time was dedicated to both the operational and data management requirements to onboard the new MNS. Our IT staff developed a records management system to update the contact database on a daily basis. EM&BC staff developed contact groups, trained system users, and tested to the system to optimize performance. The new system has performed well in tests and experience has taught us that it will take time to get the new system working at peak performance for our campus. Once we are confident the system is working optimally, additional features will be added to enhance the contact experience.

Throughout the year, EOC tabletop exercises and seminars were conducted to ensure familiarity among Executive Policy Group (EPG) and EOC staff. EOC staff training has been increased to a bi-monthly schedule. These EOC tabletop exercises included an event that devolved into violence on the UC San Diego campus. These exercises

had defined, pre-established program goals, and included utilizing the elements of SEMS/NIMS, Incident Command System (ICS), and were concluded with post-exercise debriefings.

EM&BC makes an effort to reach out to as many members of our community as possible. These events include student, faculty and staff presentations and student and parent orientation events. These discussions include information on the activities conducted by the Division including emergency preparedness activities and *Triton Alert*. EM&BC will continue to take a multimedia approach to presenting emergency information to members of our community.

EM&BC currently maintains 154 AEDs located on campus and at various off-site locations. The UC San Diego AED program is one of the largest in San Diego County. We provided annual CPR/AED training on the UC San Diego campus, Scripps Institution of Oceanography, and to departments upon request. AED training and maintenance makes our campus safer for a community member who suffers a cardiac event.

The Campus Emergency Response Team (CERT) continued their efforts to recruit and train new personnel, maintaining one of the largest CERT programs (now 450) in San Diego County. In order to maintain CERT skills, we have expanded CERT training to include biannual refresher training and bi-monthly drills. Our trained volunteers are supported by more than 150 AEDs and thirteen emergency containers located throughout campus. Our volunteers are Emergency Management's force-multiplier in the event that we need trained personnel with little advance notice.

The Business Continuity Manager (BCM) continued to coordinate with Risk Management and insurers to manage the reimbursement component of the water main break incident at the Logistics warehouse in April 2017. From that incident, the BCM presented business continuity lessons learned at the National Association of Educational Procurement conference as well as UC's annual EM&BC conference. When Logistics returned back to normal operations in September 2017, the BCM resumed developing business continuity plans with critical departments. Advancement Services, Birch Aquarium, and Enrollment Management were among those departments completed. Due to the complexity of the IT department, the BCM and IT's Risk & Compliance Officer met on a weekly basis since December 2017 to develop IT's business continuity plan with over 25+ essential functions identified. The plan is still in progress as the Risk & Compliance Officer started a new position and IT has yet to hire a replacement.

The coming year will provide EM&BC with opportunities to continue our efforts to prepare the UC San Diego community for any incident that may impact our campus. New technologies including MNS will be evaluated and implemented. Training and exercises will continue to build upon the foundation that has been established. Opportunities will be explored to reach out to more members of our community with the emergency preparedness message.

San Diego Health System

UC San Diego Health's (UCSDH) comprehensive Emergency Management (EM) program comprises plan and policy development, education, drills and exercises. The program also incorporates resource acquisition and tracking, fulfillment of federal grant deliverables, and a broad community interface with multiple partnerships.

During 2017-18, UCSDH EM maintained its focus on essential areas as defined by regulatory and accreditation agencies. These areas include communications, resources and assets, safety and security, utilities, patient management, and management of staff through the Emergency Management Committee and supporting

workgroups. Initiatives this year included the successful opening of the Koman Outpatient Pavilion, which is an outpatient clinical facility on UCSDH's La Jolla campus. The facility includes eight surgery suites, basic and advanced imaging, physical therapy and pain management plus infusion and apheresis services. The four-floor 156,000 sf facility opened in March 2018. In addition, Emergency Management continued its partnership with physicians from Trauma Services to promote the 'Stop the Bleed' campaign, with efforts focused on training faculty, staff, volunteers and community members to intervene with lifesaving measures in a severe bleeding emergency before professional help arrives. Emergency Management staff also took the initiative to install bleeding control response kits in public-facing areas of our facilities ensure access to life-saving resources.

UCSDH EM continues to foster collaborative partnerships with all UC medical centers, the San Diego International Airport Authority, San Diego first responders, San Diego Homeland Security, Military/Civilian Coalition and all other hospitals in San Diego County through participation in the San Diego Healthcare Disaster Coalition. Our collaboration with the Navy Nuclear Propulsion Program will build on tabletop and functional exercises conducted in 2017-18 to conduct a full scale exercise in 2018-19.

UCSDH continued to participate in the Federal Hospital Preparedness Program (HPP) and received grant funding for a broad and comprehensive statement of work including two Burn Surge Plan workshops for administrators and clinical providers and through actively participating in the HPP bi-weekly workgroup as well as active participation and leadership in the San Diego Health Care Disaster Coalition.

Emergency Management and Emergency Department staff, along with multiple local, state and federal partners including National Transportation Safety Board, US Border Patrol, FBI, San Diego Fire Department, local law enforcement, Office of Emergency Services, and local hospitals – participated in the San Diego International Airport triennial *AirEx 2018* full scale exercise.

Of the twenty-five Hospital Incident Command System (HICS) activations during the fiscal year, two were full scale exercises conducted with community partners. Exercises included management of a coordinated terrorist attack on multiple public areas throughout the county, resulting in hundreds of victims and fatalities; a 6.0M earthquake on the Rose Canyon fault resulting in severe building and highway damage along with hundreds of victims; a functional exercise with the Navy Nuclear Propulsion Program and multiple internal partners including Trauma, Security and HSC, to manage a Navy patient with radiation contamination and multi-system trauma; and a functional exercise to conduct a no-notice evacuation drill with community partners, as directed by the HPP grant requirements. Over the course of the year, hundreds of faculty and staff participated in the exercises to evaluate and improve our preparedness, response, and recovery capabilities.

HICS activations due to actual incidents included response to a broken water pipe in Hillcrest impacting the central plant chillers; an explosion at Camp Pendleton Marine Base bringing multiple military burn victims to Hillcrest Regional Burn Center accompanied by military response teams; a natural gas leak in the main gas supply lines in La Jolla; and a work stoppage incident that warranted the first Level 4 activation since the inception of levels for code responses.

EM worked with multiple internal stakeholders as well as external partners to manage two public health events. The first was the 2018 Flu Response which ran from December 2017 through April 2018. The other was a countywide Hepatitis A response, during which we worked with Nursing and the San Diego County Public Health Department to coordinate and perform community outreach.

Goals for the upcoming year include continued training for the 'Stop the Bleed' campaign including installation of additional bleeding control kits in publicly available cabinets; rollout of the Everbridge mass notification system; development of a three-year comprehensive strategic plan for Emergency Management and the Business Continuity Program; collaborative planning with Information Services to conduct a cyberattack tabletop exercise; and design and conduct of a business continuity tabletop exercise with mission-critical departments. EM will continue working with community partners to strengthen the San Diego Healthcare Disaster Coalition as well as maintain education efforts including HICS and evacuation training.

San Francisco

UCSF continues to assess, evaluate, and train for operational readiness across the enterprise. This is done with internal and external teams with a focus on continuous improvement. The Northern California wildfires response in October 2017 greatly affected faculty, staff, and students across the enterprise. Considerations for mitigation and response activities compelled UCSF to review existing plans and make continuous improvements, especially with FEMA reimbursement, mutual aid, and finance and administration. In turn, UCSF was able to assist UCSB with the Thomas Fire several months after the Northern California wildfires. Activation of emergency management mutual aid prompted a systemwide workgroup to examine next steps in UC Emergency Management professional development to make Universitywide responses more robust across the system.

San Francisco Health System

Throughout 2018, UCSF Health Emergency Management (EM) continued to successfully comply with all Joint Commission emergency management requirements in addition to the new Centers for Medicare & Medicaid Services (CMS) emergency preparedness rule. UCSF Health EM also continued to serve as a resource to community partners such as the City & County of San Francisco (CCSF) Department of Public Health, CCSF Department of Emergency Management, Healthcare Coalition Emergency Preparedness Partnership, and the UC Medical Center/Stanford Emergency Management cohort by actively participating in planning, training, and exercise events.

The Hospital Incident Command System (HICS) was activated twice to manage internal emergencies. In May 2018, HICS was activated to effectively maintain business continuity during a 3-day UC-wide strike by the American Federation of State, County and Municipal Employees (AFSCME) Service Unit. Several other union bargaining units went on strike in sympathy with the AFSCME service unit, including the AFSCME Patient Care Technical workers, three UPTe units, and the California Nurses Association. These units represent approximately 10,800 UCSF campus and UCSF Health employees, including clinical staff who are integral to the care and well-being of patients. Full HICS Incident Management Teams were activated across all three primary UCSF Health locations (Parnassus, Mission Bay, Mount Zion) with contingency plans activated for all environments of care to maintain the continuity of operations during all three days of the labor action.

In October 2018, UCSF Health received a notice from the AFSCME Patient Care Technical (PTC) Unit that PCT employees intended to strike for a period of seventy-two hours. AFSCME's Service Employees, UPTe's Health Care Professionals, Research and Support Professionals, and Technical Employees announced they would strike in sympathy for the same dates. The strike occurred on October 23-26. Once again, full HICS Incident Management Teams were activated across all three primary UCSF Health locations with contingency plans activated for all environments of care to maintain the continuity of operations during the entire labor action.

When HICS was not activated, consistent planning, training and exercises continued to empower staff and leadership preparedness. The comprehensive all-hazards Emergency Operations Plan (EOP) and Comprehensive

Exercise Program (CEP) were revised and updated with lessons learned from exercises and emergency activations. Numerous training opportunities were facilitated throughout the year. A series of internal HICS trainings were provided for medical center leadership. UCSF Health EM continued to send staff to the FEMA healthcare emergency management training courses at the Emergency Management Institute/Center for Domestic Preparedness in Anniston, Alabama.

In order to effectively test planning assumptions and resource capabilities for a communicable disease exposure response and surge event, UCSF Health EM participated in the 2018 Statewide Medical and Health Exercise. During this full scale functional exercise, a HICS Incident Management Team participated in the mock activation of the Hospital Command Center to oversee response operations. Volunteers also acted as mock patients to surge the Parnassus Heights Emergency Department during a high census period of time.

Finally, UCSF Health EM expanded its internal engagement with staff and leadership by organizing a new Joint Environment of Care & Emergency Management Committee to oversee all Emergency Management initiatives. In addition to the new EOC/EM Committee, an Emergency Department Disaster Task Force was coordinated to advance preparedness planning for the specific needs within that environment of care. All documentation was posted to the new Emergency Management website.

Santa Barbara

The UC Santa Barbara Emergency Management and Mission Continuity program continues to enjoy strong campus leadership support. The campus Emergency Planning Committee's monthly meetings included tabletop exercises focused on potential events that could affect UCSB. Scenarios included campus evacuation, winter storms, civil disturbance, tsunamis, and FEMA cost recovery reimbursement. As real incidents unfolded in Santa Barbara County the meetings were used as a forum to capture lessons learned.

In July 2017 the 18,430-acre Whittier Fire impacted the power infrastructure that serves the campus as it burned in the foothills of Santa Barbara County and destroyed 16 homes. The campus response would be an EOC tune up for the Thomas Fire. On the night of December 4, 2017 the Thomas Fire started in the foothills of Santa Paula, 53 miles from the UCSB campus. The power infrastructure that serves the campus was again impacted and UCSB had numerous power disruptions during the night which would become common over the next three weeks. On December 5, 2017 the American Red Cross asked UCSB to open its doors and host a community shelter for evacuees of Ventura County including the communities of Ojai and Ventura. The shelter remained open for 18 days as the Thomas Fire later spread into Santa Barbara County and evacuations were needed in Carpinteria, Summerland, Montecito and the City of Santa Barbara.

The UCSB EOC was activated and Policy Group meetings were held to discuss the power disruptions, smoke hazards, and the community shelter operations. UCSB emergency preparedness programs were activated including the Campus Emergency Response Team (CERT), the American Red Cross club, Listos (an emergency response training program taught in Spanish) and the Santa Barbara County VOAD (Voluntary Organizations Active in Disaster). When the Thomas Fire was finally contained on January 12, 2018 it had burned approximately 281,893 acres, destroyed at least 1,063 structures, cost over \$177 million to fight and forced over 104,607 residents to evacuate in both Ventura and Santa Barbara County.

During the extended incident of the Thomas Fire, emergency managers from five UC campuses coordinated to execute the first ever emergency management mutual aid deployment in the UC system. This mutual aid activation demonstrated the "Power of 10" and what can be accomplished by deploying knowledgeable and

trained emergency management personnel to assist a sister campus impacted by an emergency. The group assisted and provided support to the UCSB EOC, assisted in Santa Barbara County EOC operations including debris inspections, provided expertise on shelter best practices and volunteer management, and helped document key lessons learned. On January 9, 2018 heavy rain on the Thomas Fire burn scar caused a debris flow that impacted the city of Montecito. The mudflows caused at least 21 confirmed deaths and two missing persons. The debris flow caused Highway 101 to close for 13 days. While UCSB community members were closed off from campus during the freeway closure, UCSB resourced its continuity planning efforts.

In 2017-18, UCSB's Emergency Management program distinguished itself in several ways. The Campus Safety Health and Environmental Management Association (CSHEMA) awarded the UCSB Emergency Management program the 2017 Innovation Award. In April 2018, UCSB conducted its fourth Annual Department Safety Representative (DSR) Summit in partnership with EH&S and UCPD. Over 160 DSRs participated in the Summit focused on lessons learned from the Thomas Fire and subsequent debris flow. The campus emergency manager also continued to participate in the UC EH&S Professional Workshops.

UCSB continues its leadership role in the community through the 'Aware and Prepare Initiative.' This initiative helps foster countywide programs including CERT, Emergency Public Information Communicators (EPIC), VOAD, and Listos. UCSB recently completed its 49th CERT class since 2010 with nearly 900 people trained over that time. The UCSB CERT program was awarded Honorable Mention in the FEMA 2017 Community Preparedness Awards.

Santa Cruz

For eleven months of 2017-18, UCSC's Office of Emergency Services was limited to two staff positions. This shortage contributed to minimal advancements in NFPA compliance measures. However, both emergency management positions – Emergency Management Director and Business Continuity Planner – are now filled. The transition to new leadership of the program created an opportunity for the Emergency Management program to be strengthened with the development of a more defined vision and the development of strategic plans.

While mostly a maintenance year, 2017-18 provided facilitation of existing programs, with an extended focus on the development of tracking and reporting frameworks to support advancement of key resiliency programs. This year UCSC developed a Resiliency Vision and Strategic Plan, a resiliency benchmark reporting for senior leadership to use in monitoring principal officer engagement and effectiveness, and produced 75 *UC Ready* Annex manuals.

The campus developed emergency procedures for event typing and lockdowns, and risk assessment procedures such as risk mapping and risk rating for department continuity planning. UCSC also implemented a compliant AED program and expanded its community engagement by participating in a wildland fire meeting, a two day CERT training, an earthquake drill, County WebEOC development, and Red Cross sheltering. The campus implemented programs for building emergency coordinators and floor marshals. In 2017-18, training session topics included personal emergency preparedness, building emergency coordinators, and floor marshals and business continuity coordinator roles and responsibilities.

Office of the President

UCOP Risk Services (OPRS) continues to provide strategic guidance, leadership, oversight, technical assistance/information, and systemwide coordination of personnel and resources in support of the University's emergency

management and mission continuity planning programs. OPRS also currently staffs and leads the internal crisis/emergency management function for the UCOP organization. OPRS continues to act as the University's primary liaison to the State Office of Emergency Services, and serves on the OES Statewide Emergency Planning Committee (SWEPC) and State Hazard Mitigation Planning Team. In 2017-18, OPRS staff served as a member of the California Earthquake Early Warning Advisory Board, representing President Napolitano on behalf of the University.

In 2017-18, OPRS responded to twenty-nine (29) significant local, statewide, or international emergencies or incidents that impacted or had the potential to impact UC facilities, operations and/or community members. OPRS maintained situational awareness; coordinated and provided support to various campuses, facilities and stakeholders; and provided UCOP executives with notifications, intelligence, situational awareness and decision-making support. These twenty-nine incidents included seventeen (17) major wildfires threatening UC lands or facilities; three (3) campus-related threat/security or targeted violence incidents; three (3) systemwide labor actions; two (2) major campus protests; two (2) major local public events/disruptions in Oakland; one (1) major winter storm/debris flow event; and one (1) major earthquake affecting a UCOP facility in Mexico City.

As an appointed member of the California Earthquake Early Warning Advisory Board representing President Napolitano, OPRS staff assisted the UC Berkeley Seismology Lab with installing earthquake sensors on UC lands including Natural Reserves, Agriculture and Natural Resources centers, and Forestry research stations across the state. OPRS also coordinated with UCOP Environmental Planning staff on CEQA/NEPA documentation and approvals related to sensor installation. In addition, OPRS provided technical assistance and advice to the Seismology Lab related to telemetry standards, signing a California State University MOU, and various administrative issues. OPRS also attended periodic public meetings of the Advisory Board representing the University.

In terms of training and exercises, OPRS coordinated with UC Davis Emergency Management staff on the planning, logistics, development, and conduct of a joint exercise with UCOP executives related to an international kidnapping and ransom scenario. This unique tabletop exercise was also conducted in coordination with a university consultant specializing in this threat and security area. OPRS also coordinated with UCOP Research Policy and UC Irvine Emergency Management staff on the planning, development, and conduct of a tabletop exercise that tested the Institutional Animal Care and Use Committee's systemwide MOU for laboratory animal care following a catastrophic earthquake scenario. In addition, OPRS also participated in a UC Santa Barbara tabletop exercise vetting the university's building inspector inter-campus mutual aid protocol and procedures. Finally, in conjunction with the *Great ShakeOut* drill, OPRS conducted a functional exercise with UCOP Floor Wardens implementing post-earthquake response procedures at the Franklin headquarters building. OPRS developed and issued this systemwide Emergency Management Status Report to senior University management and other stakeholders. The report is posted on the OPRS website to make it easily available for the public to promote transparency and accountability for emergency preparedness in a major public university system. The report also helps OPRS and the Emergency Management Council to identify common systemwide gaps and deficiencies that can be addressed through collaborative and cooperative workgroup efforts. OPRS also coordinated and collaborated with UC San Diego emergency management staff and the UC Emergency Management Council on the planning, logistics, and conduct of the twenty-third annual systemwide emergency management and continuity planning conference held at UCSD in October 2017.

OPRS coordinated with UCOP Building Services, Security, Communications, senior executives, and the UCPD on planning, preparation, and response to a number of local incidents that had potential to disrupt UCOP operations

including protests targeting UCOP. OPRS maintains UCOP's functional Emergency Operations Center (EOC) and dual-use conference facility that enables UCOP to effectively direct, control, and coordinate major systemwide and UCOP emergency response and recovery efforts and support operations. OPRS has also deployed and manages a systemwide Mobile Satellite Radio (MSAT) system at all locations to support both emergency operations and interoperable communications in the event of conventional telecommunications systems failure. OPRS also maintains *UCOPAlert*, a mass emergency notification system for use in notifying UCOP staff on their personal phones or by personal email outside normal business hours about emergencies or other critical situations that affect the UCOP work environment. In coordination with UCOP Financial Management, OPRS maintains an emergency procurement card purchasing system to enhance UCOP's ability to quickly repair/replace critical infrastructure or purchase whatever supplies and equipment are needed to maintain or restore UCOP operations and facilities. OPRS maintains emergency contact information for UCOP senior executives and also manages the federal Government Emergency Telecommunications Service (GETS) priority calling program for UCOP. UCOP staff also participated in the *Great ShakeOut* statewide earthquake 'duck-cover-hold on' drill for the ninth consecutive year.

OPRS coordinates and manages the UCOP Automated External Defibrillator (AED) program. The AED program was further augmented with additional AED devices and portable oxygen units installed at all major UCOP facilities. The annual staff volunteer training program conducted eleven (11) American Heart Association classes that maintained the number of CPR/AED certified staff at nearly two hundred fifty (250) staff, so nearly one in every eight UCOP staff have been trained. Staff training also included offering certified First Aid classes with priority given to CPR/AED trained staff and floor wardens to create a cadre of emergency first responders. Quarterly CPR/AED refresher skills practice sessions were also offered to all UCOP trained staff, providing staff with an opportunity to maintain their life-saving skills.

Division of Agriculture & Natural Resources

The UC Division of Agriculture & Natural Resources (ANR) is the major land grant arm of the University, and represents the three-way partnership with federal, state and county governments to provide local and statewide research and extension programs that address the critical issues of California.

ANR has two primary types of facilities that are managed differently for emergency planning and response purposes – UC Cooperative Extension (UCCE) offices and Research & Extension Centers (RECs). UCCE offices are located in County-owned and operated facilities. Each County or multi-County partnership is responsible for emergency planning and response within County facilities with ANR serving as a resource for the UC staff. As such, the emergency planning for UCCE offices defers to individual County-specific plans and response activities. RECs are University-owned and operated facilities ranging in size from 100 to 5000+ acres located in nine relatively remote rural locations across the state, with staff/faculty ranging from ten to over one hundred employees. Each REC has an Emergency Preparedness, Emergency Response, and Operational Recovery Plan specific to the research activity, potential hazards, and personnel at the facility. In accordance with these plans, an incident command structure is established that defines roles to manage small-to-moderate emergencies that can be dealt with by internal REC staff. For larger-scale emergency situations, local public safety agencies (police, fire, EMS) would assume incident command and REC staff play a support role to provide site and project-specific information.

During periods of 2017-18, widespread flooding and wildfires threatened much of California. As UC ANR provides services in every county, mitigation efforts were robust and far-reaching. ANR academics work and live in the local communities they serve. Local advisors and specialists were on hand to provide assistance and

resources for those in need. From livestock, agriculture and natural resources recovery, to homeowner assistance and mitigation resources, ANR staff provided guidance and support to their communities during the local disasters.

Several of ANR's UCCE offices had periods of closure due to local disaster impacts. Additionally, the Hopland REC was severely impacted by the River Fire, which burned roughly 2,500 acres of the Center's upper pastures and damaged a domestic water line. The headquarters buildings remained undamaged as CAL FIRE set up its Incident Command Post on site, with 6+ engines, three bulldozers and a water tender. In many regions, ANR staff, families, and program participants experienced mandatory evacuation orders from their homes or communities. Yet in light of these closures, ANR staff, academics, and volunteers continued to further the mission and perseverance of UC. 4-H Program volunteers assisted in the relocation of livestock; academics provided in-person guidance backed by science-based research; all the while ANR staff maintained continuity of services and support.

ANR Risk & Safety Services maintains an emergency management program area on the EH&S website to share information with REC and UCCE locations, as well as our campus partners. ANR Risk & Safety Services continually revises and refines the preparedness plans. Plan revisions have incorporated an 'all-hazards' approach to identifying response measures for various potential incidents. Additionally, ANR has implemented the *UC Ready* program for ensuring continuity of the University's research, teaching, and public service mission following any disaster or extraordinary disruption.

Safety and preparedness plans are exercised and practiced with key role players, including administrative and field personnel. Risk & Safety Services resources are available to all ANR personnel, volunteers, guests, and office locations. Safety Coordinators are appointed to represent each of the 50+ ANR locations and facilitate the flow of environmental, health, and safety information and programs to all ANR locations. UC ANR experts stationed throughout the state can answer questions on a wide range of issues related to the prevention, impacts, aftermath, and generally the science surrounding disasters in California – even when a campus is not nearby.

Appendix I: Self-Assessment Benchmarking Guide for Conformity with NFPA 1600, 2016 Edition

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>Chapter 4. PROGRAM MANAGEMENT.</p> <p>4.1* Leadership and Commitment.</p> <p>4.1.1 Campus leadership shall demonstrate commitment to the program to prevent, mitigate the consequences of, prepare for, respond to, maintain continuity during, and recover from incidents.</p> <p>4.1.2 Leadership commitment shall include the following: (1) Policies, plans, and procedures to develop, implement and maintain the program (2) Resources to support the program (3) Reviews and evaluations to ensure program effectiveness (4) Correction of deficiencies</p> <p>4.1.3 Campus shall adhere to policies, execute plans, and follow procedures developed to support the program.</p>	<p>+ resources to adequately support program and corrective actions pursuant to Section 9.2</p>	<p>Policies, plans, and procedures are in place per 4.1.2(1).</p> <p>Reviews, evaluations, <i>and</i> many corrective actions are in place per 4.1.2(3)(4).</p> <p>Resources are available to maintain and support <i>many</i> program elements, but <i>not</i> all per 4.1.2(2).</p>	<p>Policies, plans, and procedures are in place per 4.1.2(1).</p> <p>Reviews and evaluations in place, but corrective actions are limited per 4.1.2(3)(4).</p> <p>Resources very limited; only able to maintain and support a basic program per 4.1.2(2).</p>
<p>4.3 Program Committee.</p> <p>4.3.1* A program committee shall be established by the campus in accordance with its policy.</p> <p>4.3.2 The program committee shall provide input for, and/or assist in, the coordination of the preparation, development, implementation, evaluation, and maintenance of the program.</p> <p>4.3.3 Committee includes EM coordinator and others with expertise/ knowledge/capabilities</p>	<p>Committee actively provides input and/or assistance with program</p>	<p>An EM program advisory committee exists but does <i>not</i> actively provide input, guidance, and/or assistance (particularly for program priorities and resources).</p>	<p>Some other type of program advisory mechanism exists or a multi-purpose committee.</p> <p>(No dedicated EM program advisory committee).</p>
<p>4.4 Program Administration.</p> <p>4.4.1 (1) Executive policy including vision, mission statement, roles and responsibilities, and enabling authority.</p>	<p>+ vision and mission</p>	<p>Policy sets forth roles and responsibilities <i>and</i> enabling authority.</p>	<p>Policy sets forth roles and responsibilities only. (No enabling authority).</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>4.4.1 (2)* Program scope, goals, performance objectives, and metrics for program evaluation.</p> <p>4.4.1 (7) Change management process</p>	+ change management process	Program goals, performance objectives, <i>and</i> metrics.	Program goals and performance objectives only. (No metrics).
<p>4.4.1 (4) Program budget and schedule, including milestones.</p> <p>4.4.1 (5) Program plans and procedures include anticipated cost, priority, and resources required.</p>	Dedicated EM budget with milestones	Program budget and milestones developed but budget is ad hoc/ not dedicated to EM program	Costs, priorities, and resources required identified per (5). (No EM program budget or schedule per 4.4.1(5).
<p>5.5 Performance Objectives.</p> <p>5.5.1* Campus shall establish performance objectives for the program.</p> <p>5.5.2 Performance objectives shall address the results of the HVA and BIA.</p> <p>5.5.3 Performance objectives shall address both short-term and long-term needs as defined (5.5.4).</p> <p>5.5.4* Campus shall define terms short-term and long-term.</p>	Objectives address <i>both</i> HVA and BIA <i>and</i> address both short-term and long-term needs.	Performance objectives exist for >50% of program elements and requirements. <i>and</i> Performance objectives address results of HVA (but not BIA).	Performance objectives exist for <50% of program elements and requirements
<p>4.2* PROGRAM COORDINATOR/ MANAGER.</p> <p>The program coordinator shall be appointed by the campus and authorized to develop, implement, administer, evaluate, and maintain the program.</p>	FTE = 100% Dedicated EM	FTE with <20% other job responsibilities.	Partial FTE or FTE with >50% other job responsibilities.
<p>4.5 COMPLIANCE WITH LAWS & AUTHORITIES.</p> <p>4.5.1 Program shall comply with SEMS/ NIMS and other regulatory requirements.</p>	Fully complies all regulatory req's	>75% compliance with SEMS/NIMS metrics	>50% compliance SEMS/ NIMS metrics
<p>4.5.1 Program shall comply with UCOP and Campus policies/directives (SS&EM Policy; local campus policies).</p>	Fully complies all UC req's	Complies with SS&EM Policy. >75% compliance with local policies and directives	Complies with SS&EM Policy. >50% compliance with local policies and directives

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>4.6 FINANCE & ADMINISTRATION.</p> <p>4.6.1 Campus shall develop financial and administrative procedures to support the program before, during, and after an incident.</p> <p>4.6.4 The procedures specified above shall include:</p> <ul style="list-style-type: none"> (1) Responsibilities for program finance authority, including reporting relationships to the program coordinator (2)* Program procurement procedures (3) Payroll (4)* Accounting systems to track/document costs (5) Management of funding from external sources (6) Crisis management procedures that coordinate authorization levels and control measures (7) Documenting financial expenditures incurred as a result of an incident and for compiling claims for future cost recovery (8) Identifying and accessing alternative funding (9) Managing budgeted and specially appropriated \$ 	<p>+ procedures for <i>before</i> an incident. and All (9) procedures are in place.</p>	<p>Both financial <i>and</i> administrative procedures in place to support EM during and after incident. and At least 6/9 procedures listed in 4.6.4 are in place.</p>	<p>Administrative procedures in place (but <i>not</i> financial procedures). and At least 3/9 procedures listed in 4.6.4 are in place.</p>
<p>4.6.2* There shall be a responsive finance and administrative framework that does the following:</p> <ul style="list-style-type: none"> (1) Complies with the campus' program requirements. (2) Is uniquely linked to response, continuity, and recovery operations. (3) Provides for maximum flexibility to expeditiously request, receive, manage, and apply funds in a non-emergency environment and in emergency situations to ensure the timely delivery of assistance. 	<p>Framework uniquely linked EM per (2) and Framework funds both situations per (3)</p>	<p>Framework in place but not uniquely linked to EM operations per (2) and Funding framework in place for both emergency situations and non-emergency conditions per (3)</p>	<p>Framework in place but not uniquely linked to EM operations per (2) or Funding framework does not apply to emergency situations per (3)</p>
<p>4.6.3 Procedures are created and maintained for expediting fiscal decisions in accord with established authorization levels and (financial control measures and fiscal policy).</p>	<p>All financial controls in place.</p>	<p>General authorization levels and <i>some</i> financial controls in place.</p>	<p>General authorization levels in place (but <i>no</i> financial controls)</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>4.7* RECORDS MANAGEMENT.</p> <p>4.7.1 Campus shall develop, implement, and manage a records management program to ensure that records are available to the campus to continue essential functions as identified in BIA</p> <p>4.7.2 Records management program shall include:</p> <ul style="list-style-type: none"> (1) ID of records (hard copy or electronic) vital to continue campus operations (2) Backup of records on a frequency necessary to meet program goals and objectives (3) Validation of the integrity of records backup (4) Implementation of procedures to store, retrieve, and recover records onsite or offsite (5) Protection of records (6) Implementation of a record review process (7) Procedures coordinating records access 	<p>All (7/7) program requirements listed in 4.7.2 are in place.</p>	<p>At least 5/7 of program requirements listed in 4.7.2 are in place.</p>	<p>At least 3/7 of program requirements listed in 4.7.2 are in place.</p>
<p>Chapter 5. PLANNING.</p> <p>5.1 PLANNING & DESIGN PROCESS.</p> <p>5.1.1* The program shall follow a planning process that develops strategies, plans, and required capabilities to execute the program.</p>	<p>+ Capabilities are in place</p>	<p>Plans and strategies are fully developed (but <i>not</i> required capabilities)</p>	<p>Plans are fully developed (but <i>not</i> strategies or capabilities)</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>6.1 Common Plan Requirements.</p> <p>6.1.1* Plans shall address the health and safety of personnel.</p> <p>6.1.2 Plans shall identify and document:</p> <ul style="list-style-type: none"> (1) Assumptions made during the planning process (2) Functional roles and responsibilities of internal and external agencies, organizations, departments, and positions. (3) Lines of authority (4) Process for delegation of authority (5) Lines of succession for the campus (6) Liaisons to external entities (7) Logistics support and resource requirements <p>6.1.4* Campus shall make sections of the plans available to those assigned specific tasks and responsibilities therein and to key stakeholders</p>	<p>ALL (7/7) Plan requirements listed in 6.1.2 are in place</p>	<p>At least 5/7 of Plan requirements listed in 6.1.2 are in place.</p>	<p>At least 3/7 of Plan requirements listed in 6.1.2 are in place.</p>
<p>4.4.2 Program scope shall be determined through an “all-hazards” approach and the risk assessment.</p> <p>4.4.3 Program requirements shall be applicable to preparedness including the planning, implementation, assessment, and maintenance of programs for prevention, mitigation, preparedness, response, continuity, and recovery.</p>	<p>Program scope and requirements cover all areas listed in 4.4.3</p>	<p>Program scope based on <i>both</i> all-hazards approach and HVA.</p>	<p>Program scope based on all- hazards approach.</p>
<p>5.1.2 Strategic planning shall define the campus program vision, mission, and goals.</p>	<p>+ vision included</p>	<p>Strategic planning defines program goals <i>and</i> mission.</p>	<p>Strategic planning defines program goals only</p>
<p>5.1.5 Crisis management planning shall address an event or series of events that severely impacts or has potential to severely impact campus operations, reputation, ability to do business, or relationships with key stakeholders.</p>	<p>Addresses <i>all</i> four elements.</p>	<p>Crisis management planning addresses three issues or elements listed.</p>	<p>Crisis management planning addresses only <i>one or two of (4)</i> issues or elements listed.</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
5.2* RISK ASSESSMENT (HVA). 5.2.1 Campus shall conduct a risk assessment. 5.2.2 Campus shall identify hazards and monitor those hazards and the likelihood and severity of their occurrence over time.	+ campus monitors hazards over time per 5.2.2	Campus has conducted a full risk assessment (HVA) per 5.2.1	Campus has identified hazards and likelihood of occurrence per 5.2.2.
5.2.2.1 Hazards to be evaluated shall include specified list of: (1) Natural hazards (geological, meteorological, and biological) (2) Human-caused events (accidental and intentional) (3) Technologically caused events	+ Human-caused events also evaluated	Natural hazards <i>and</i> technologically-caused events listed in (1) and (3) have been evaluated	All applicable natural hazards have been evaluated
5.2.2.2* The vulnerability of people, property, operations, the environment, the campus, and the supply chain operations shall be identified, evaluated, and monitored.	+ monitored	Vulnerabilities have been identified <i>and</i> evaluated.	Vulnerabilities have been identified (but not evaluated).
5.2.3 Campus shall conduct an analysis of the impacts of the hazards identified in 5.2.2 on: (1) Health and safety of persons in the affected area (2) Health and safety of personnel responding to the incident (3) Security of information (4)* Continuity of operations (5) Continuity of government (6)* Property, facilities, assets, and critical infrastructure (7) Delivery of campus services (8) Supply chain (9) Environment (10)* Economic and financial conditions (11) Legislated, regulatory and contractual obligations (12) Reputation of or confidence in the campus (13) Work and labor arrangements	Analysis of impacts have been conducted on ALL thirteen (13) areas listed in 5.2.3.	Analysis of impacts have been conducted on (7-12) of (13) areas listed in 5.2.3.	Analysis of impacts have been conducted on less than seven of (13) areas listed in 5.2.3.

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>5.2.4 Risk assessment shall include an analysis of the escalation of impacts over time.</p> <p>5.2.5* Analysis shall evaluate the potential effects of regional, national, or international incidents that could have cascading impacts.</p>	+ evaluates effects of cascading incidents	Analysis <i>also</i> identifies incidents that could have cascading impacts per 5.2.5	Analysis conducted on escalation of impacts over time per 5.2.4
<p>5.2.6 Risk Assessment shall evaluate the adequacy of existing prevention and mitigation strategies.</p>	Evaluation is current/ updated	Adequacy of <i>both</i> prevention and mitigation strategies evaluated	Adequacy of prevention strategies evaluated (but <i>not</i> mitigation).
<p>5.3* BUSINESS IMPACT ANALYSIS (BIA).</p> <p>5.3.1 Campus shall conduct a Business Impact Analysis that includes an assessment of how a disruption could affect campus operations, reputation, and market share, ability to do business, or relationships with key stakeholders</p> <p>5.3.1.1* BIA shall identify processes that are required for the campus to perform its mission.</p>	BIA is 100% complete and assesses impacts of all five (5) areas identified in the <i>UC Ready</i> tool.	BIA identifies mission-critical essential functions per 5.3.1.1, and assesses impacts on teaching, research, compliance, finances, and operations, AND is >50% complete	BIA identifies mission-critical essential functions per 5.3.1.1, and assesses impacts on teaching, research, compliance, finances, and operations, AND is <50% complete
<p>5.3.1.2* BIA shall identify resources that enable mission-critical campus processes including personnel, equipment, infrastructure, technology, information, and supply chain.</p> <p>5.3.2* BIA shall evaluate dependencies; single-source and sole-source suppliers; single points of failure; and potential impacts from disruption to mission-critical resources identified in 5.3.1.2.</p>	BIA is 100% complete	BIA identifies mission-critical resources listed in 5.3.1.2 and evaluates all applicable elements listed 5.3.2, AND is >50% complete	BIA identifies mission-critical resources listed in 5.3.1.2 and evaluates all applicable elements listed in 5.3.2, AND is <50% complete
<p>5.3.2.1* BIA shall determine the point in time (recovery time objective or RTO) when the impacts of the disruption become unacceptable to the campus.</p>	BIA is 100% complete; identifies disruption tolerance and breadth of impact	BIA identifies disruption tolerance (MTD) and the breadth of impacts to campus if mission-critical essential functions are disrupted, AND is >50% complete	BIA identifies disruption tolerance (MTD) and the breadth of impacts to campus mission-critical essential functions are disrupted, AND is <50% complete

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>5.3.3* BIA or IT DR shall identify the acceptable amount of data loss for physical and electronic records to identify the recovery point objective (RPO).</p> <p>5.3.4 BIA shall identify gaps between the RTOs and RPOs and demonstrated capabilities.</p>	BIA is 100% complete; RPOs and gaps identified	BIA/IT DR determines the RTO for critical IT apps/databases, identifies gaps between RTO and RPO as described in 5.3.4, and BIA is >50% complete.	BIA/IT DR determines the RTO for critical IT apps/databases, identifies gaps between RTO and RPO as described in 5.3.4, and BIA is <50% complete.
<p>5.4* RESOURCE NEEDS ASSESSMENT.</p> <p>5.4.1* Campus shall conduct a resource needs assessment based on the hazards identified in 5.2 (HVA) and the Business Impact Analysis (5.3).</p>	Based on hazards from <i>both</i> HVA and BIA	Needs assessment based on all HVA hazards but <i>not</i> BIA.	Needs assessment complete but <i>not</i> based on all hazards identified in HVA or BIA.
<p>5.4.2 The resource needs assessment shall include:</p> <p>(1)* Human resources, equipment, training, facilities, funding, expert knowledge, materials, technology, information, intelligence, and the time frames within which they will be needed</p> <p>(2) Quantity, response time, capability, limitations, cost, and liabilities</p>	Needs assessment includes <i>all</i> items listed in (1) and (2)	Needs assessment includes <i>all</i> items listed under (1) and some items listed under (2)	Needs assessment includes most items listed under (1).
5.4.3* Campus shall establish procedures to locate, acquire, store, distribute, maintain, test, and account for services, human resources, equipment, and materials procured or donated to support the program.	Procedures in place for <i>all</i> items listed.	Procedures to manage <i>most</i> of the items listed are in place.	Procedures in place to manage <i>some</i> of the items listed are in place.
5.4.4 Facilities capable of supporting response, continuity, and recovery operations shall be identified.	+ continuity facilities	Facilities capable of supporting response <i>and</i> recovery identified.	Facilities capable of supporting only response identified.
5.4.5* Agreements. The need for mutual aid/assistance or partnership agreements shall be determined; if needed, agreements shall be established and documented.	+ partnership agreements as needed	Mutual aid/assistance agreements established; need for partnership agreements determined.	Mutual aid/assistance agreements established as needed.

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>6.2 PREVENTION. 6.3 MITIGATION.</p> <p>6.2.1* Campus shall develop a strategy to prevent an incident that threatens life, property, operations, information, and the environment (see Annex A.6.2.1 for ten common prevention strategies).</p> <p>6.2.2* Prevention strategy shall be kept current using information collection and intelligence techniques (see Annex A.6.2.2 for eight techniques to consider)</p> <p>6.2.4 Campus shall have a process to monitor the identified hazards and adjust the level of preventive measures to be commensurate with the risk.</p>	+ campus <i>also</i> adjusts preventive measures relative to risk per 6.2.4.	Campus prevention strategy includes more than five of the (10) measures listed in Annex A.6.2.1 and most of the (8) techniques listed in Annex A.6.2.2 <i>and</i> also a process to monitor identified hazards per 6.2.4.	Campus prevention and deterrence strategies include less than five of the (10) measures listed in Annex A.6.2.1 and some of the (8) techniques listed in Annex A.6.2.2.
<p>6.3.1* Campus shall develop and implement a mitigation strategy that includes measures to be taken to limit or control the consequences, extent, or severity of an incident that cannot be prevented (see Annex A.6.3.1 for list of mitigation strategies).</p>	+ strategy <i>also</i> includes funding mechanism	Mitigation strategy includes most of the (13) measures listed in Annex A.6.3.1	Mitigation strategy includes <i>some</i> of the (13) measures listed in Annex A.6.3.1
<p>6.2.3 The prevention strategy shall be based on the results of hazard identification and risk assessment, impact analysis, program constraints, operational experience, and cost benefit analysis.</p> <p>6.3.2* The mitigation strategy shall be based on the results of hazard identification and risk assessment, impact analysis, program constraints, operational experience, and cost benefit analysis.</p>	+ prevention strategy based on the criteria listed in 6.2.3	Mitigation strategy based on most of criteria in 6.3.2 <i>and</i> Some type of prevention strategy also in place.	Mitigation strategy based on <i>some</i> of criteria in 6.3.2 (No prevention strategy in place).
<p>6.3.3 The mitigation strategy shall include interim and long-term actions to reduce vulnerabilities.</p>	+ Long-term actions	Mitigation strategy includes <i>only</i> interim actions	Some type of mitigation strategy is in place.

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6.4 CRISIS COMMUNICATIONS & PUBLIC INFORMATION. 6.4.1* The campus shall develop a plan and procedures to disseminate and respond to requests for information to and from the following audiences before, during, and after an incident: (1) Internal audiences including employees (2) External audiences including the media, access and functional needs populations, and other stakeholders	+ Plan and procedures include functional needs populations	Plan and procedures in place for <i>both</i> external and internal audiences including campus employees.	Plan and procedures in place for external audiences including media (but <i>not</i> internal audiences).
6.4.2* Campus shall establish and maintain a crisis communication or public information capability that includes: (1)* Central contact facility or communications hub (2) Physical or virtual information center (3) System for gathering, monitoring, and disseminating information (4) Procedures for developing and delivering coordinated messages (5) Protocol to clear information for release	All (5) capabilities listed are in place.	Capability includes at least 4/5 of items listed in 6.4.2	Capability includes at least 2/5 items listed in 6.4.2
6.5 WARNING, NOTIFICATIONS & COMMUNICATIONS. 6.5.1* Campus shall determine its warning, notification, and communications needs.	Needs determined for all (3) areas listed	Warning <i>and</i> notification needs determined (but not communications needs)	Warning needs determined (but <i>not</i> notification or communications needs)
6.5.2* Warning, notification, and communications systems shall be reliable, redundant, and interoperable.	C&WNS are <i>also</i> inter-operable.	Both warning <i>and</i> notification systems are reliable and redundant.	Warning systems are reliable and redundant.
6.5.3* Emergency warning, notification, and communications protocols and procedures shall be developed, tested, and used to alert stakeholders potentially at risk from an actual or impending incident. 6.5.4 Procedures shall include issuing warnings through authorized agencies if required by law as well as the use of pre-scripted information bulletins or templates.	+ use of pre-scripted bulletins or templates per 6.5.4	Compliant with 6.5.3 <i>and</i> procedures to issue warnings thru authorized agencies per 6.5.4	Compliant with 6.5.3 but <i>not</i> 6.5.4

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
6.6 OPERATIONAL PROCEDURES (SOPs). 6.6.1 Campus shall develop, coordinate, and implement operational procedures to support the program. 6.6.2 Procedures shall be established and implemented for response to and recovery from the impact of hazards identified in 5.2.2 (HVA).	SOPS in place for response <i>and</i> recovery from <i>all</i> hazards identified in HVA.	SOPs established and implemented for response to all hazards <i>and</i> recovery from <i>major</i> hazards only.	SOPs established and implemented <i>only</i> for response to all hazards (but <i>not</i> recovery)
6.6.3* Procedures shall provide for life safety, property conservation (minimizing damage), incident stabilization, continuity, and protection of the environment under campus jurisdiction.	+ SOPs for continuity.	SOPs in place for life safety, property conservation, <i>and</i> incident stabilization, <i>and</i> protection of environment.	SOPs in place <i>only</i> for life safety and property conservation.
6.6.4 Procedures shall include: (1) Control of access to area affected by incident (2) Identification of personnel engaged in activities at the incident (3) Accounting for personnel engaged in incident activities (4) Mobilization and demobilization of resources	+ mobilization and demobilization of resources (4)	SOPs in place for access control, ID of responders, <i>and</i> personnel accountability (3)	SOPs in place <i>only</i> for access control (1) and ID of responders (2)
6.6.5 Procedures shall allow for concurrent activities of response, continuity, recovery, and mitigation.	+ continuity activities.	SOPs allow concurrent response, recovery, <i>and</i> mitigation activities.	SOPs allow for concurrent response and recovery activities <i>only</i> .
6.7 INCIDENT MANAGEMENT. 6.7.1* Campus shall use [ICS] to direct, control, and coordinate response, continuity, and recovery operations. 6.7.2 [ICS] shall describe specific organizational roles, titles, and responsibilities for each incident management function.	ICS used to manage response, recovery, <i>and</i> continuity operations	Campus uses ICS to manage <i>both</i> response and recovery operations, but <i>not</i> continuity operations.	Campus uses ICS to manage response but <i>not</i> recovery or continuity operations.

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>6.7.1.1* Emergency Operations Centers (EOCs)</p> <p>6.7.1.1.1* Campus shall establish primary and alternate EOCs capable of managing response, continuity, and recovery operations.</p> <p>6.7.1.1.2* EOCs shall be permitted to be physical or virtual.</p> <p>6.7.1.1.3 On activation of an EOC, communications and coordination shall be established between Incident Command and EOC.</p>	Primary and alternate <i>physical</i> EOCs established	Primary physical EOC established <i>and</i> virtual alternate EOC established.	Primary physical EOC has been established but no alternate EOC.
<p>6.7.3* Campus shall establish procedures and policies for coordinating prevention, mitigation, preparedness, response, continuity and recovery activities.</p> <p>6.7.4 Campus shall coordinate the activities specified above with stakeholders.</p>	+ coordinate with stakeholders per 6.7.4	Procedures/policies <i>also</i> in place to coordinate continuity and recovery activities per 6.7.3	Procedures/policies in place to coordinate prevention, mitigation, preparedness, and response activities per 6.7.3.
6.7.5 Procedures shall include a situation analysis that incorporates a damage assessment and a needs assessment to identify resources to support activities.	SOPs include needs assessment	SOPs include situation analysis that incorporates damage assessment.	SOPs include situation analysis but <i>not</i> damage assessment.
6.7.6* Emergency operations/response shall be guided by an Incident Action Plan (IAP) or management by objectives.	IAP updated regularly and includes safety	Large-scale operations uses formal IAP process.	Field operations uses management by objectives established by IC
<p>6.7.7 Resource management shall include the following tasks:</p> <p>(1) Establishing processes for describing, taking inventory of, requesting, and tracking resources</p> <p>(2) Resource typing or categorizing resources by size, capacity, capability, and skill</p> <p>(3) Mobilizing and demobilizing resources in accordance with established [ICS]</p> <p>(4) Conducting contingency planning for resource deficiencies</p>	+ resource typing or categorizing per (2)	Processes established for inventorying, requesting, tracking, mobilizing, and demobilizing resources per (1) and (3). <i>and</i> Contingency planning conducted for resource deficiencies per (4).	Processes established for inventorying, requesting, tracking, mobilizing, and demobilizing resources per (1) and (3)

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
6.7.8 A current inventory of internal and external resources shall be maintained.	Both inventories current	Inventory of internal <i>and</i> external resources but not current.	Inventory of internal resources maintained (but <i>not</i> external).
6.7.9 Donations of human resources, equipment, material, and facilities shall be managed.	+ equipment and facilities	Donations of human resources <i>and</i> materials managed (but <i>not</i> equipment)	Donations of only human resources managed (but <i>not</i> other types of resources)
6.8 EMERGENCY OPERATIONS/ RESPONSE PLAN. 6.8.1* [EOP] shall define responsibilities for carrying out specific actions in an emergency.	+ SOPs to notify/recall key EOC staff	ICS-based EOP and Job aids developed (SOPs, checklists, action lists) to assist roles/ responsibilities.	ICS-based EOP.
6.8.2* [EOP] shall identify actions to be taken to protect people including people with disabilities and other access and functional needs, information, property, operations, the environment, and the campus. 6.8.3* [EOP] shall identify actions for incident stabilization.	+ persons with access and functional needs	EOP <i>also</i> identifies actions to protect information, operations and the environment.	EOP identifies actions to protect people, property, and provide incident stabilization (but <i>not</i> information, operations or the environment).
6.8.4 [EOP] shall include: (1) Protective actions for life safety (per 6.8.2) (2) Warning, notifications, and communication (per Section 6.5) (3) Crisis communication and public information (per Section 6.4) (4) Resource management (per 6.7.7) (5) Donation management (per 6.7.9)	EOP includes all five (5/5) elements listed	EOP includes at least 3/5 of elements listed in 6.8.4	EOP includes at least 2/5 of elements listed in 6.8.4
6.9 CONTINUITY & RECOVERY. 6.9.1 Continuity. 6.9.1.1 Continuity Plan shall include strategies to continue critical and time-sensitive processes and as identified in the BIA.	100% of continuity strategies identified.	Identification of continuity strategies for mission-critical processes and enabling resources (personnel, facilities, equipment, etc.) is >50% complete.	Identification of continuity strategies for mission-critical processes and enabling resources (personnel, facilities, equipment, etc.) is <50% complete.

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<p>6.9.1.2* Continuity Plan shall identify and document the following:</p> <ul style="list-style-type: none"> (1) Stakeholders that need to be notified (2) Processes that must be maintained (3) Roles and responsibilities of the individuals implementing the continuity strategies (4) Procedures for activating the plan, including authority for plan activation (5) Critical and time-sensitive technology, application systems, and information (6) Security of information (7) Alternative work sites (8) Workaround procedures (9) Vital records (10) Contact lists (11) Required personnel (12) Vendors and contractors supporting continuity (13) Resources for continued operations (14) Mutual aid or partnership agreements (15) Activities to return critical and time-sensitive processes to the original state <p>6.9.1.3 Continuity plan shall be designed to meet the RTO and RPO.</p>	Continuity Plans address all (15) elements, meet mission-critical MTDs, and are 100% complete.	Continuity Plans address all elements listed in 6.9.1.2, are designed to meet mission-critical MTDs, and are >50% complete.	Continuity Plans address all elements listed in 6.9.1.2, are designed to meet mission-critical MTDs, and are <50% complete.
<p>6.9.2 Recovery.</p> <p>6.9.2.1 Recovery Plan shall provide for restoration of processes, technology, information, services, resources, facilities, programs, and infrastructure.</p>	Recovery Plan addresses all elements and 100% complete	Recovery Plan addresses restoration of all elements listed in 6.9.2.1 and is >50% complete	Recovery Plan addresses restoration of all elements listed in 6.9.2.1 and is <50% complete

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>6.9.2.2* Recovery Plan shall document following:</p> <ul style="list-style-type: none"> (1) Damage assessment (2) Coordination of the restoration, rebuilding, and replacement of facilities, infrastructure, materials, equipment, tools, vendors, and suppliers (3) Restoration of the supply chain (4) Continuation of communications with stakeholders (5) Recovery of critical and time-sensitive processes, technology, systems, applications, and information (6) Roles and responsibilities of the individuals implementing the recovery strategies (7) Internal and external (vendors and contractors) personnel who can support the implementation of recovery strategies and contractual needs (8) Adequate controls to prevent the corruption or unlawful access to the campus' data during recovery (9) Compliance with regulations that would become applicable during the recovery (10) Maintenance of pre-incident controls 	<p>Recovery Plan documents ALL (10) elements and is 100% complete</p>	<p>Recovery Plan documents all elements listed in 6.9.2.2 and is >50% complete</p>	<p>Recovery Plan documents all elements listed in 6.9.2.2 and is <50% complete</p>
<p>6.10* EMPLOYEE ASSISTANCE & SUPPORT.</p> <p>6.10.1* Campus shall develop a strategy for employee assistance and support that includes:</p> <ul style="list-style-type: none"> (1)* Communications procedures (2)* Contact information, including emergency contact outside anticipated hazard area (3) Accounting for persons affected, displaced, or injured by the incident (4) Temporary, short-term or long-term housing, feeding and care of those displaced by an incident (5) Mental health and physical well-being of individuals affected by the incident (6) Pre-incident and post-incident awareness <p>6.10.2 Strategy shall be flexible for use all incidents</p>	<p>All six (6/6) elements listed in 6.10.1 are in place.</p>	<p>At least 4/6 of elements listed in 6.10.1 are in place.</p>	<p>At least 3/6 of elements listed in 6.10.1 are in place.</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
6.10.3* Campus shall promote family preparedness education and training for employees	All Annex I req's met	Campus implements a preparedness program (per Annex I)	Campus plans a family preparedness program (per Annex I).
Chapter 7. TRAINING & EDUCATION. 7.1* Curriculum. Campus shall develop and implement a competency-based training and education curriculum that supports all employees who have a role in the program (see Annex A.7.1). 7.2 Goal of Curriculum. The goal of the curriculum shall be to create awareness and enhance the knowledge, skills, and abilities required to implement, support and maintain the program.	Includes both skills training as well as education curriculum per Annex A.7.1.	Campus has developed and implemented a <i>performance-based</i> curriculum with specified goals and objectives used to measure and evaluate compliance per Annex A.7.1.	Campus has developed and implemented some type of training and education curriculum.
7.3 Scope and Frequency of Instruction. The scope of the curriculum and frequency of instruction shall be identified. 7.5 Recordkeeping. Records of training and education shall be maintained as specified in Section 4.7.	+ education records per 7.5	Campus <i>also</i> maintains training records per 7.5 (but <i>not</i> education records).	Campus has identified scope of curriculum and frequency of instruction per 7.3 (but <i>no</i> recordkeeping).
7.4 [ICS] Training. Personnel shall be trained in SEMS/ICS and other components of the program to the level of their involvement. 7.6 Regulatory and Program Requirements. The curriculum shall comply with applicable regulatory and program requirements.	Campus has trained >90% of staff requiring training.	Campus has trained at least 75% of personnel who require training.	Campus has trained at least 50% of personnel who require training.
7.7* Public Education. A public education program shall be implemented to communicate: (1) Potential impact of a hazard (2) Preparedness information (3) Info needed to develop a preparedness plan	+ preparedness plan info per (3).	Campus <i>also</i> provides info on campus-specific hazards and impacts per (1) and (2).	Campus-wide preparedness information program per (2).

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>Chapter 8. EXERCISES & TESTS</p> <p>8.1 Program Evaluation. Campus shall evaluate program plans, procedures, training, and capabilities and promote continuous improvement through periodic exercises and tests.</p> <p>8.1.2 Campus shall evaluate the program based on post-incident analyses, lessons learned, and operational performance.</p> <p>8.1.3 Exercises and tests shall be documented.</p> <p>8.2* Exercise and Test Methodology.</p> <p>8.2.1 Exercises shall provide a standardized methodology to practice procedures and interact with other entities (internal and external) in a controlled setting.</p> <p>8.2.2 Exercises shall be designed to assess the maturity of program plans, procedures, and strategies.</p> <p>8.2.3 Tests shall be designed to demonstrate capabilities.</p> <p>8.4* Exercise and Test Evaluation.</p> <p>8.4.1 Exercises shall evaluate program plans, procedures, training, and capabilities to identify opportunities for improvement</p> <p>8.4.2 Tests shall be evaluated as either pass or fail.</p> <p>8.5* Frequency.</p> <p>8.5.1 Exercises and tests shall be conducted on the frequency needed to establish and maintain required capabilities.</p>	<p>Campus evaluates program through <i>annual functional</i> or <i>full-scale</i> exercises, or actual EOC activation in last year with AAR.</p>	<p>Campus evaluates program through periodic <i>functional</i> or <i>full-scale exercises</i>, or actual EOC activation with AAR within last two years.</p>	<p>Campus evaluates program through periodic <i>tabletop</i> exercises, or actual EOC activation with AAR within last three years.</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>8.3* Design of Exercises and Tests</p> <p>8.3.1 Exercises and tests shall be designed to do the following:</p> <ul style="list-style-type: none"> (1) Ensure the safety of people, property, operations, and the environment involved in the exercise or test (2) Evaluate the program (3) Identify planning and procedural deficiencies (4) Test or validate recently changed procedures or plans (5) Clarify roles and responsibilities (6) Obtain participant feedback and recommendations for program improvement (7) Measure improvement compared to performance objectives. (8)* Improve coordination between internal and external teams, organizations, and entities (9) Validate training and education (10) Increase awareness and understanding of hazards and the potential impact of hazards on the campus (11) Identify additional resources and assess the capabilities of existing resources including personnel and equipment needed for effective response and recovery (12) Assess the ability of the team to identify, assess, and manage an incident (13) Practice the deployment of teams and resources to manage an incident (14) Improve individual performance 	<p>Exercise design includes ALL fourteen (14/14) elements listed in 8.3.1.</p>	<p>Exercise design includes (8-13) of the (14) elements listed in 8.3.1.</p>	<p>Exercise design includes at less than eight of the (14) elements listed in 8.3.1.</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
<p>Chapter 9. PROGRAM MAINTENANCE & IMPROVEMENT</p> <p>9.1* Program Reviews. Campus shall maintain and improve program by evaluating its policies, program, procedures, and capabilities using performance objectives.</p> <p>9.1.1* Campus shall improve effectiveness of the program through evaluation of implementation of changes resulting from preventive and corrective action.</p> <p>9.1.2* Evaluations shall be conducted on a regularly scheduled basis, and when the situation changes to challenge the effectiveness of the existing program.</p> <p>9.1.3 The program shall be re-evaluated when a change in any of the following impacts the campus program: (1) Regulations (2) Hazards and potential impacts (3) Resource availability or capability (4) Campus organization (5)*Funding changes (6) Infrastructure including technology environment (7) Economic and geopolitical stability (8) Campus operations (9) Critical suppliers</p>	<p>+ program reevaluation when any of the listed changes impact program per 9.1.3</p>	<p>Campus conducts <i>regularly</i> scheduled program evaluations that also include review of performance objectives and changes resulting from preventive and corrective actions per 9.1.1 and 9.1.2.</p>	<p>Campus conducts periodic program evaluations of policies and evaluation of program implementation per 9.1.1.</p>
<p>9.1.4 Reviews shall include post-incident analyses, reviews of lessons learned, and reviews of program performance.</p> <p>9.1.5 Campus shall maintain records of its reviews and evaluations in accordance with the records management practices developed under Sect 4.7.</p> <p>9.1.6 Documentation, records, and reports shall be provided to management for review and follow-up.</p>	<p>+ documents and reports provided to executive management per 9.1.6.</p>	<p>Campus reviews are conducted based on post-incident analyses, lessons learned, and program performance per 9.1.4. <i>and</i> Records of reviews/evaluations maintained per 9.1.5.</p>	<p>Campus reviews are conducted based on post-incident analyses, lessons learned, and program performance per 9.1.4</p>

NFPA 1600 Program Elements	Conforming	SUBSTANTIALLY Conforming	PARTIALLY Conforming
9.2* Corrective Action. 9.2.1* Campus shall establish a corrective action process. 9.2.2* Campus shall take corrective action on deficiencies identified.	+ Funding long-term solutions or taking interim actions per 9.2.2	Campus has established a corrective action process per 9.2.1 <i>and</i> Campus is implementing some corrective actions per 9.2.2.	Campus has established a corrective action process per 9.2.1 but is <i>not</i> implementing any corrective actions.
9.3 Continuous Improvement. Campus shall effect continuous improvement of the program through the use of program reviews and the corrective action process.	+ Corrective action process	Campus uses program reviews to implement continuous improvement.	Campus has some type of continuous improvement process in place.

**See NFPA 1600 Annex A – Explanatory Material for more detailed info/explanations for this program element.*

Scoring Metrics:

Non-Conforming = 0

Partially Conforming = 1

Substantially Conforming = 2

Fully Conforming = 3

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