



# Emergency Operations Plan

April 13, 2011

**January 1, 2013**

This document contains an overview of the University of Utah's plan for emergency operations. It details emergency response policies, describes response organizations, and assigns tasks.

Approval and Promulgation

Policy Group

1.   
\_\_\_\_\_  
President Date: 1/10/13
2.   
\_\_\_\_\_  
Senior Vice President, for Health Sciences Date: 1/10/13
3.   
\_\_\_\_\_  
Senior Vice President, for Academic Affairs (Interim) Date: 4/10/13
4.   
\_\_\_\_\_  
Vice President, for Administrative Services Date: 1/10/13

  
\_\_\_\_\_  
Managing Director for Emergency Management Date: 10 Jan 2013

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The following appendices and annexes are part of the emergency operations plan but are not widely distributed because they include confidential or security-related information.

### Appendices

- STAT Notification List
- ALERT instructions
- Supplemental Directory

### ESF Annexes

- |                     |                            |
|---------------------|----------------------------|
| 1. Transportation   | 9. Search and Rescue       |
| 2. Communications   | 10. Hazardous Materials    |
| 3. Public Works     | 11. Animal Care            |
| 4. Fire Fighting    | 12. Energy Management      |
| 5. Planning         | 13. Public Safety/Security |
| 6. Mass Care        | 14. Long Term Recovery     |
| 7. Resource Support | 15. Public Information     |
| 8. Medical          |                            |

### Support Annexes

- EOC Set Up and Operating Instructions
- Responder Safety

### Incident Annexes

- Campus Evacuation
- Pandemic

Record of Updates

## PURPOSE

The purpose of the University of Utah **Emergency Operations Plan (EOP)** is to establish policies, procedures, and an organizational structure for response to emergencies occurring on campus. The Plan incorporates operating procedures from the Incident Command System (ICS), the National Response Framework (NFR) and the National Incident Management System (NIMS) for handling emergencies that disrupt normal campus operations such as, but not limited to: fires, floods, storms, earthquakes, hazardous materials incidents, acts of violence, terrorist threats and other potential disasters.

## SCOPE

This Emergency Operations Plan is a campus level plan that guides the response of University of Utah personnel and resources during an emergency. It is the official Emergency Operations Plan for the University of Utah and supersedes previous plans and precludes employee actions not in concert with the intent of this plan, or the emergency organization created by it. Nothing in this plan shall be construed in a manner that limits the use of good judgment and common sense in matters not foreseen or covered by the plan or any appendices and annexes hereto. The Plan and organization shall be subordinate to State or Federal plans during a disaster declaration by those authorities.

## SITUATION OVERVIEW

The University of Utah is the state's oldest and largest institution of higher education and is ranked as one of the top public research universities in the nation. The University offers over 100 undergraduate and more than 90 graduate degree programs to over 30,000 students and is one of the state's largest employers.

The University campus includes approximately 300 buildings and 1,534 acres (i.e., Health Sciences, Ft. Douglas, and Research Park) used by 30,000 students, 3,676 faculty, and 14,363 full-time staff (2010)

Residential facilities on the University campus include:

***Housing & Residential Education***, which is home to 2,800 students, primarily single students. Heritage Commons is the name of the facilities located in the Fort Douglas area. These facilities include 10 suite-style residence halls, 10 houses on Officers Circle, 4 apartment buildings for undergraduates, 5 apartment buildings housing undergraduates, graduates, and students with partners/dependents. All of Heritage Commons is furnished and the facilities are rented by the bed, except for a small number of apartment rentals for students/partners and their dependents located Shoreline Ridge. Heritage Commons is home to 23 Living Learning communities in partnership with academic and student affairs departments and offices. . Downtown Commons consists of two apartment buildings, one located at 349 1<sup>st</sup> ave. and the other at 43 South, 400 East. They are cinderblock structures housing a total of 86 people. The Marriott Honors Community is located next to the Huntsman Center. This building houses 309 students in furnished apartments. The first floor includes classroom space, faculty and staff offices, as well as a small market.

***University Student Apartments***, which offers 1,115 apartments for students, faculty and staff. One-, two- and three-bedroom unfurnished units are available in West Village, East Village, and Medical Plaza Towers. Students receive first priority for these units, which feature playgrounds, laundry rooms, cultural activities, green space, garden plots, and shuttle service to main campus. A full-time accredited child-care facility and Head Start program are on the premises. Two- and three-bedroom homes are available in Fort Douglas, some units are furnished. Faculty receives first priority for these homes.

## Hazard Analysis Summary

The table below shows hazards and their respective ranking score based on the following criteria: i) frequency – how often the hazard occurs ii) duration – how long the hazard or the impact of the hazard may last, iii) severity – the extent of the hazard impact, iv) intensity – how strong the hazard is felt on campus. Each ranking factor is on a scale of 0-5 (0 being the lowest, 5 being the highest).



Hazard	Ranking Factors				Ranking
	Frequency	Duration	Severity	Intensity	
Catastrophic Earthquake	1	4	4	4	13
Pandemic/Flu	1	4	3	2	10
Utility Failure	4	2	2	2	10
Severe Weather	4	1	2	2	9
Flood (including dam failure)	2	1	2	2	7
Wildfire	3	1	2	1	7
Landslide	2	1	1	2	6
Criminal Violence	2	1	1	1	5

Table 1: Hazard Ranking

### Capability Assessment (First Responders)

The University operates a police, security department and a Public Safety Answering point (PSAP) for routine and emergency police fire and Medical response situations.. The PSAP is also a Salt Lake County e911 answering point. For University emergencies.. University Police Department has a mutual aid agreement with the Salt Lake City Police Department and other county wide agencies. The UUPD also maintains a presence on The Salt lake City EOD team, the “bomb squad.”The University does not operate its own fire or Emergency Medical Service (EMS); consequently, the University relies upon the Salt Lake City Fire Department for fire suppression and EMS services. The University has trained personnel for small scale hazardous material spill response but relies on Salt Lake City Hazardous Materials Response for assistance with complex hazardous materials spill containment.

The University Plant Operations Department has responsibility for campus buildings and grounds, utilities and waste management. Plant Operations operates a 24 hr. trouble desk.

The University of Utah Emergency Operations Plan assigns specific emergency management roles and responsibilities to most departments within Administrative Services, and additional departments within Student Affairs, Health Sciences, Human Resources, Research and University Relations. These assignments are in addition to these units’ regular responsibilities.

Ongoing training and education is critical to ensure individual and community competence.

### ASSUMPTIONS

The following statements reflect certain known facts and reasonable assumptions upon which components of the plan are based.

- A disaster may occur at any time of the day or night, weekend or holiday, with little or no warning.
- The succession of events in a disaster are not entirely predictable, hence, published support and operational plans will serve only as a guide and may require field modification in order to meet the requirements of the event.
- Events may affect residents in the neighborhoods surrounding the University, therefore, City, County and Federal services may be overwhelmed. A delay in off-campus response services may take up to 72 hours or more.
- Events that affect portions of the city, county or the region, and not the University directly may require the involvement of the University.
- An Emergency Operations Center may be activated to coordinate response actions and resources.



- A plan such as this can never address every possible event. It defines a process for resolving most any situation.

## MISSION

It shall be the duty of the University to respond to an emergency in a safe, effective and timely manner. University personnel and equipment will be utilized to accomplish the following priorities:

- Priority I: Protection of Life Safety, including first responders;
- Priority II: Maintenance of Life Safety and Assessment of Damages
- Priority III: Restoration of General Campus Operations

It is anticipated that, as operations progress from Priority I through Priority II and III responses, administrative control of the campus will transition from the ICS/NIMS structure back to the routine University of Utah organizational structure. To the greatest extent possible, regulations regarding the protection of the environment will be complied with during disaster response activities.

## CONCEPT OF OPERATIONS

Ultimate responsibility for establishing the University's priorities and direction lies with the President and the Cabinet. Regarding emergency management this policy-making group works with the Director of Public Safety, the Associate Vice President for Administrative Services for Facilities and the Managing Director for Emergency Management and EHS. This group defines and endorses the emergency management and business continuity program roles and responsibilities found in the *Executive Policy on Emergency Management* (see Appendix), which is reviewed annually and updated as needed.

Strategic direction for coordinating and assisting with the development of an emergency management program is assigned to the University of Utah Emergency Advisory Committee (EAC). This committee establishes objectives for the program consistent with senior management's vision as written in the policy statement. The EAC consists of the operational positions listed above, plus representatives of the various vice-presidential units that would be called upon to provide life safety services in the event of an emergency.

Operating units within Administrative Services, Student Affairs, Human Resources, Health Sciences, Research, Academic Affairs, and University Relations have as part of their assignments, responsibility for essential support functions during emergency events. Each essential emergency function is assigned to a lead agency with additional campus agencies providing support. A core group from the operating units comprises the campus Emergency Planning Committee responsible for refining and documenting plans. The Planning Committee includes at a minimum, representatives from Police, Fire/Hazardous Materials Response (HazMat), Human Resources, Space Management, Plant Operations, Information Technology and Student Affairs.



Illustration 1: University of Utah Emergency Management Organization

## **AUTHORITY**

This Plan is promulgated under the authority of the President, Senior Vice Presidents, and the Vice Presidents and Officers. The University of Utah Emergency Operations Plan fulfills the University's responsibilities to adhere to the *National Incident Management System (NIMS)*, as prescribed by *Homeland Security Presidential Directive 5 – Management of Domestic Incidents*. NIMS establishes a uniform set of processes and procedures that emergency responders at all levels of government will use to conduct response operations. It also utilizes the Incident Command System to coordinate response activities on a national level.

## **DECLARATION OF EMERGENCY**

A declaration of emergency means that first responder units are responding to an event that has or may impact their day to day campus responsibilities. It signals a potential for the Administration to prepare campus-wide communications. The Situation Triage and Assessment Team has authority to declare a state of emergency on campus when conditions exist on or within the vicinity of the campus as a result of a disaster, a civil disorder (which poses a threat of serious injury to persons or damage to property), or other disruptive event; or extraordinary measures are required immediately to avert, alleviate, or repair damage to university property or to maintain the orderly operation of the campus.

## **DECLARATION OF DISASTER**

A declaration of disaster is an official designation intended to communicate to the University, as well as to state and local officials, that the University's normal functions and operations are interrupted and our resources are unable to meet demands resulting from the event.

Only the President or his designee is authorized to issue a disaster declaration. It must exist in written form and be communicated publically.

## **DELEGATION OF AUTHORITY**

The President delegates authority during his absence from campus, including management of the disaster declaration process. While it may not be necessary to have an actual written authority during a crisis, it is essential that units know who holds the authority to make decisions or sign official documents, and who their alternate is.

## **ACTIVATION OF THE EMERGENCY OPERATIONS PLAN**

The University of Utah emergency operation plans have been designated to operate at four different levels. The level of activation depends on the assessment of the needs by the Director of the lead unit responding to an event or their designee or at the direction of Administration.

### **Levels of Activation**

Limited Activation (NIMS Level 4). A limited activation of the EOP would be in response to a small incident, in the field that would require only the responding staff to mitigate the problem.

Partial Activation (NIMS Level 3). A partial activation of the EOP would be in response to an incident that would require a situation triage and assessment team (STAT) meet or conference call due to involvement of a considerable amount of resources, an extensive amount of contacts with other agencies and organizations, and the potential for the incident to expand rapidly.

Full Activation (NIMS Level 2). A full activation of the EOP would signal that the incident is large scale and requires activation of an Emergency Operations Center (EOC) for centralized decision-making.

Relocation Activation (NIMS Level 1). Activating the EOC from a remote location would signal that the incident is large scale and the campus environment unsafe even for first responders. An alternative operating location will be determined based upon the event.



**The decision to activate the EOC during a Level II incident** can be made by the campus Situation Triage and Assessment Team (STAT) upon notifying the President, (or designee), the Senior Vice Presidents, or the Vice President for Administrative Services.

Any of the positions in Administration may convene the campus Situation Triage and Assessment Team (STAT) to assist in this determination. *Following a declaration of emergency on campus operational responsibility for activation of this and subordinate plans falls to the Chief of Staff for the Campus Emergency Operations Center.*

## EOC Locations



### **V. Randall Turpin University Services Building (VRT-USB)**

Building Number: 0350  
1795 E South Campus Dr.  
Salt Lake City, UT 84112

**[Partial Activations/STAT]**



### **University Guest House (GUEST)**

Building Number: 0801  
110 Fort Douglas Blvd.  
Salt Lake City, UT 84112

**[Full Activations]**

## Activation Procedures

For a Partial or Full Activation of the EOP the following steps apply:

- Notify all Employees assigned a role within the level of activation.
- Notify the Office of the Vice President for Administration of the activation during business hours. Outside of business hours, notification should be made to the Administrator on Call.
- Follow Standard Operating Procedures for the event at hand.

In the event of EOC Activation, full security measures will be implemented on a 24-hour basis. The only persons allowed into the facility will be staff assigned to and trained to function in the EOC, communications staff, and individuals specifically invited to the EOC through the Chief of Staff.

## ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

### First Responder Assignments

The University of Utah depends upon the following campus departments to provide first response capability. University first responders use the Incident Command System (ICS) for field operations.

Department	First Responder Assignments
U Public Safety: Police, Dispatch and Security	Law enforcement Building Security Criminal Investigations Traffic Control Explosive Ordinance Disposal (EOD)
Environmental Health and Safety	Hazardous Materials Incident Response Public Health investigation Injury Investigation Fire suppression coordination
Radiological Health	Radioisotope Spill/Release Response
Plant Operations	Utility Management Buildings and Grounds
University Relations	Public Information

Table 2:  
First Responder Assignments

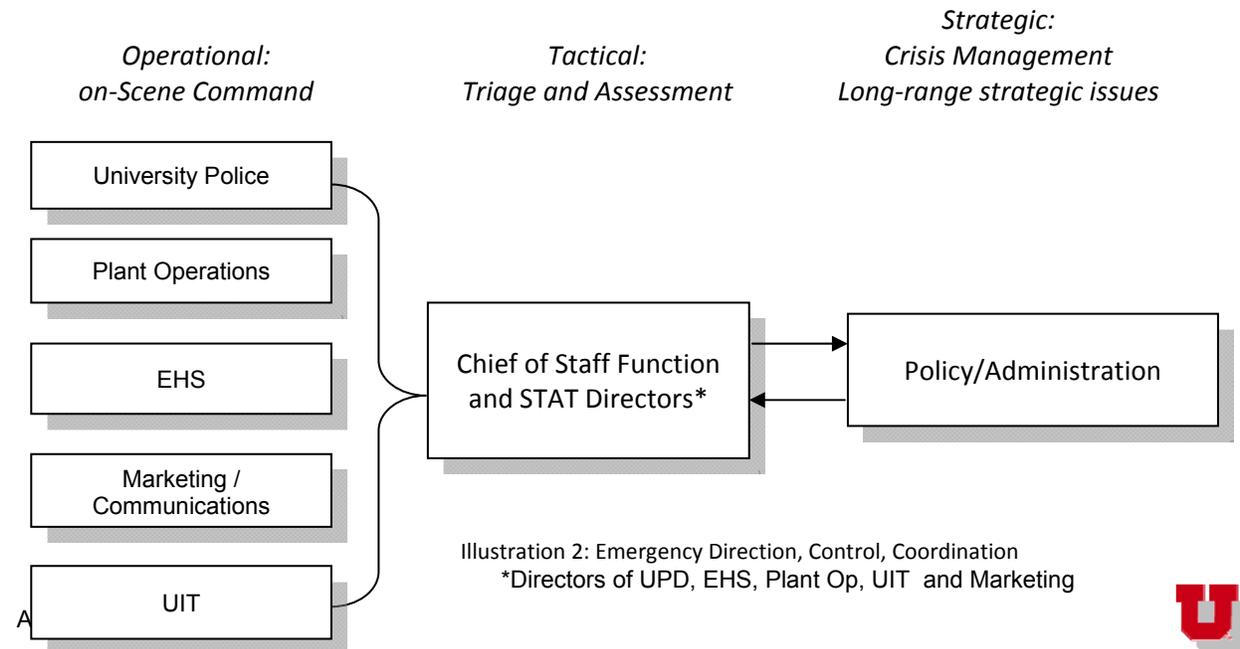
### ESF Assignments

The University of Utah’s EOP follows the Emergency Support Function (ESF) plan structure, consistent with the State of Utah, Salt Lake County and Salt Lake City. While this Basic Plan provides an overview of the campus emergency management system, **the ESF Annexes** identify the University’s ESF Coordinator and the primary and support agencies for each ESF. Each ESF Annex describes expected mission execution for each emergency phase and identifies tasks assigned to members of the ESF.

**Appendices** provide relevant information not already addressed in the Basic Plan, such as a list of additional terms and definitions, guidelines for EOP revisions and forms used for managing most emergencies. **Support Annexes** describe the framework through which the campus departments and agencies coordinate and execute common emergency management strategies. Lastly, **Incident Annexes** describe the unique policies, situation, concept of operation and responsibilities for particular hazards or incident types.

### DIRECTION, CONTROL AND COORDINATION

First responding units work with other campus departments for assistance with logistics/resources and intelligence. Event information is provided to and policy interpretation requested from Administration through a Chief of Staff function assigned to Associate Vice Presidents within Administrative Services.



## DISASTER INTELLIGENCE (INFORMATION COLLECTION)

It is expected that the following information be collected by first responders; it is required and common to all emergencies:

Nature of incident: fire, bomb threat/device, gas leak, etc.

Location

University operations impacted (immediately and potentially)

Injuries reported

University assets damaged

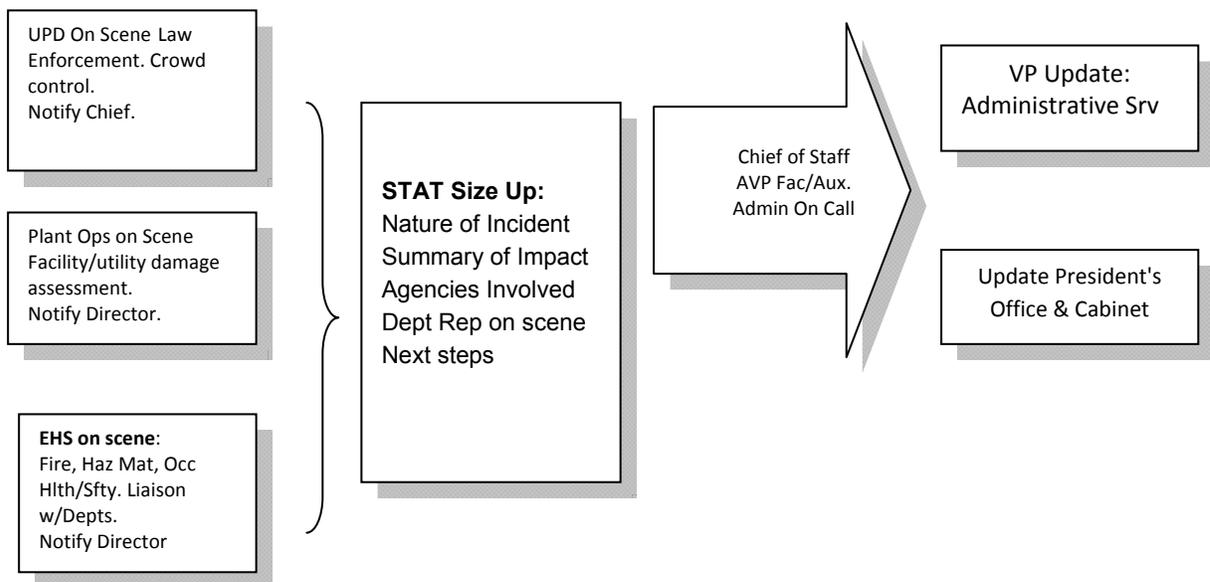
Resources on scene (campus, community)

Estimated time for stabilization, repairs, and return to normal (if possible)

First responders provide information to on scene incident command and/or to the Directors of their departments (STAT Team Members) or their designees, via radio or phone (cell or landline).

STAT Team members are expected to communicate with Administration through the Chief of Staff when available. When an individual functioning as the Chief of Staff is not available, STAT Team members are expected to communicate directly with the Vice President for Administrative Services (or designee).

Illustration 3: Disaster Intelligence Flow



## COMMUNICATIONS

During day-to-day, emergency and disaster events, the following response organization-to-response organization liaison assignments are in place.

Department	Liaison Assignments
University Public Safety	Law Enforcement Agencies FBI
EHS	Salt Lake City Fire Unified Fire SLC Hazardous Materials Health Departments
Plant Operations	All Utility Providers UDOT
University Relations	Media Outlets

NOTE: University Communications staff will serve as primary coordinators of public information in a major emergency, assisting the University administration in gathering and disseminating key information.

Key priorities will be:

1. Communicating accurate information to the public, which will help prevent the spread of rumors; and
2. Providing timely status reports and announcements to the University community.

## ALERT AND NOTIFICATION

The University of Utah Campus Alert system is used to reach all students and employees with time-sensitive information during unforeseen events or emergencies using voice, email, text messaging, UBN – electronic bulletin boards and the University homepage ([www.utah.edu](http://www.utah.edu)). During critical situations, U officials can use the system to provide pertinent information and appropriate details.

## PLAN DEVELOPMENT AND MAINTENANCE

The purpose of the University's emergency planning effort is to coordinate enterprise-wide planning related to protection of our greatest resource, our people; as well as our research, teaching and community service responsibilities.

Following are three *basic operating principles* for the planning effort:

- Decisions based on reliable data
- Planning based on stakeholder inclusion
- Commitment to continuous improvement of plan outcomes

The University's EOP Planning Committee is tasked to develop a Basic EOP, which articulates ESF implementation and develop supplemental plans and appendixes [as determined to be necessary] to accomplish plan goals and objectives. The EOP Planning Committee is responsible for reviewing relevant laws, hazard analysis, and mitigation strategies, discuss and develop recommended language for a campus plan (See illustration 1). This EOP follows the standard format contained in the State and Local Assistance Guide, (CPG 101, March 2009) which provides information on FEMA's concept for developing risk-based, all-hazard emergency operations plans. The EOP Planning Committee works with *Content Experts* in its' work.

Content experts are individuals with unique experiences, education, preparation, authority deemed necessary and or useful to the development of an EOP. Content Experts are invited to inform and influence the EOP Planning Committee in its work.



The Managing Director of Emergency Management and Environmental Health and Safety is responsible to ensure all plans and procedures are developed and executed in accordance with local, state and federal plans, regulations and standards relevant to emergency management. Those duties include:

- Developing plans in support of the National Incident Management System (NIMS).
- Working with state and local officials when developing plans.
- Ensure plans are reviewed and approved by the Emergency Advisory Committee, promulgated by University Administration (the President), tested and updated annually, and current and available in the EOC.
- Develop and implement campus drills and exercises. These should be held regularly and with enough frequency to keep the members of the EOC prepared. At a minimum, this should occur annually.

The EOP Planning Committee will meet organize their meetings to ensure all aspects of the plan requiring review are complete by June each year.

## **AUTHORITIES AND REFERENCES**

NFPA 1600 National Preparedness Standard  
Presidential Directive #5 - National Incident Management System/Incident Command System  
NFPA 1 Uniform Fire Code, Chapter 10, "General Fire Safety"  
International Fire Code, Chapter 4, Emergency Planning and Preparedness  
NFPA 101, Life Safety Code  
NFPA 1620, Recommended Practice for Pre-Incident Planning  
NFPA 1651, Standard on Emergency Services Incident Management System  
29 CFR 1910.38 Employee Emergency Plans  
29 CFR 1910.132 Personal Protective Equipment  
29 CFR 1910.134 Respiratory Protection Program  
40 CFR 61 National Emissions Standard for Air Pollutants  
40 CFR 112 Requirement for Preparation and Implementation of SPCC Plans  
40 CFR parts 261 and 262 Resource Conservation and Recovery Act; Standards Applicable to Generators of Hazardous Waste  
40 CFR 130 Water Quality Planning and Management  
40 CFR 300 National Oil and Hazardous Substances Pollution Contingency Plan  
40 CFR 302 Designation, Reportable Quantities, and Notification  
40 CFR 313 Worker Protection  
40 CFR 355 Emergency Planning and Notification  
40 CFR 370 Hazardous Chemical Reporting: Community Right To Know  
40 CFR 372 Toxic Chemical Release Reporting: Community Right To Know  
40 CFR 710 Chemical Substance Inventory Reporting Regulation  
40 CFR 761 Toxic Substances Control Act  
49 CFR 172 Department of Transportation Requirements for Hazardous Substances • EPA



# ***EXECUTIVE POLICY ON EMERGENCY MANAGEMENT***

## *UNIVERSITY OF UTAH*

The mission of the University of Utah is to serve the people of Utah and the world through the discovery, creation and application of knowledge; through the dissemination of knowledge by teaching, publication, artistic presentation and technology transfer; and through community engagement. Consistent with this mission, the University of Utah is committed to protecting the health and safety of our employees, students, and visitors. The University of Utah will protect its properties in accordance with regulatory requirements, and we will strive to minimize property damage and any interruption of functions that would prohibit us from achieving our mission. We will also endeavor to protect the environment that surrounds our properties.

An advisory committee has been organized to oversee the University of Utah's emergency management and business continuity program. The advisory committee is authorized to appoint members and undertake tasks necessary to develop, implement, and keep current the program. Additional staff are directed to support the advisory committee and support the program.

Managers are authorized to take appropriate action to prevent hazards to the health and safety of personnel, University of Utah property, and business operations. Leaders of our emergency response, business continuity, and crisis communications teams are authorized to take immediate action to protect people, property, the environment, and the University of Utah.

All managers are responsible for the implementation of emergency response and business continuity plans within their departments. They should work in conjunction with the Special Assistant to the Vice President for Administrative Services for Emergency Management and the advisory committee to identify hazards and to inform them of changes that require updates to existing plans.

All employees should exercise care to maintain safe conditions and follow prescribed safety rules.

The program and all plans shall be reviewed at least annually and updated as necessary. Training and exercises shall be conducted periodically to ensure that those who have a role in the plan are competent to fulfill that role during an emergency.

Signed by: \_\_\_\_\_

Date: \_\_\_\_\_



## ESF LEAD AGENCY DESIGNATIONS

ESF	Lead Agency	Support Agencies
ESF 1 Transportation	Plant Operations	Motor Pool
ESF 2 Communications	University Information Technology	Dispatch Operations
ESF 3 Public Works	Plant Operations/ Facilities Management	EHS
ESF 4 Fire fighting	EHS Fire	University Police Plant Operations
ESF 5 Planning	EM/EHS	Human Resources Police Plant Ops Student Affairs
ESF 6 Mass Care	Student Affairs	Human Resources Auxiliary Services: USA University Health Care
ESF 7 Resource Support	Procurement	Human Resources
ESF 8 Medical	Student Health Services	University Hospital
ESF 9 Search and Rescue	EHS Fire	University Police Plant Operations
ESF 10 Hazardous Materials	EHS Occupational Health	Radiological Health University Police Facilities Management
ESF 11 Animal Care	Comparative Medicine	EHS
ESF 12 Energy	Plant Operations/ Facilities Management	
ESF 13 Public Safety/Security	Public Safety	EHS Plant Operations
ESF 14 Long Term Recovery	TBD	
ESF 15 External Affairs	University Communications	Hospital Public Relations





WHEREAS, THE UNIVERSITY OF UTAH emergency policies and procedures empower the President to declare a Campus Disaster, when the campus has been affected by the emergency or disaster; and

WHEREAS, the President does hereby find:

Conditions of peril to the safety of persons and property have arisen within the campus caused by:

\_\_\_\_\_, commencing on or about \_\_\_\_\_, on the date of

\_\_\_\_\_, warranting the necessity for, and proclamation of, a **Campus Disaster Declaration**.

NOW, THEREFORE, IT IS HEREBY PROCLAIMED AND ORDERED that said Campus Disaster Declaration shall be in effect for a period not to exceed thirty days. This declaration will be reissued in increments not to exceed thirty days at a time until its termination is proclaimed by the President of the University of Utah.

IT IS FURTHER ORDERED, that a copy of this proclamation be forwarded to the County of Salt Lake, the State of Utah and the Office of the Utah Board of Regents.

\_\_\_\_\_  
Dr. David Pershing, President

\_\_\_\_\_  
Date



## **History**

The University of Utah was founded February 28, 1850 in downtown Salt Lake City. After having been closed for a period due to lack of funding, it reopened at its current location late in the 19th century. The University of Utah (first known as the University of Deseret) began its existence as a “normal” school, with a heavy focus on developing teachers. As time progressed, medical education as well as law, engineering, behavioral sciences and numerous other academic curricula were added to the University. Today, **the U offers over 100 undergraduate and more than 90 graduate degree programs to over 30,000 students.**

**The University of Utah is ranked as one of the top public research universities in the nation.**

## **Geography**

The main campus of the University of Utah is located on the fringe of the western foothills of the Wasatch Mountains. The only aboveground body of water on or near the campus is Red Butte Creek, which separates the Fort Douglas area from Research Park. This stream handles the run-off (rainfall as well as snowmelt) from the watershed associated with Red Butte Canyon.

*The University Research Park is managed by the University of Utah Research Foundation, an independent non-profit organization affiliated with the University of Utah. Private developers and/or corporations own and control the majority of the buildings on land leased from the University of Utah Research Foundation. For the private developer-owned buildings in the Research Park area, jurisdiction falls under Salt Lake City, along with its applicable building codes (not always consistent with codes followed by the University and the State on their facilities), planning and zoning restrictions, and law enforcement.*

## **Demographics**

The University of Utah is predominantly a commuter campus. The living/learning community at Heritage Commons and the student housing at University Student Apartments provide residential opportunities for approximately 2,300 students. The rest of the student population, plus all of the faculty and staff reside off-campus.

The University of Utah is one of the largest employers in the State of Utah. On average, there are approximately 21,000 faculty and 14,000 staff at this institution on weekdays. During the daytime hours adding the employees, students and visitors, the number of people on campus often exceeds 50,000. In the evenings during the workweek, the total numbers of individuals at the hospitals remain relatively constant, while the academic community shrinks to less than 20% of its daytime load.



## **Hazard History – From the University of Utah Pre-Disaster Mitigation Strategy/Master Plan 2010**

### **Flooding**

#### **Primary Flooding**

The campus of the University of Utah is located in the northeast corner of Salt Lake Valley, on a west-facing slope of the Wasatch Front mountain range. Its topography exhibits a downward slope of approximately 400 feet from the eastern edge of the developed campus to its west perimeter. There are currently no streams or open bodies of water on or uphill from the main campus. Red Butte Creek, a low-volume stream, separates the main campus from Research Park.

Like any university campus, this institution possesses a large number of parking lots, roadways, roofs, and other impervious surface areas. Historically, these have contributed to the infrequent flooding of some homes to the northwest of the campus, causing minor damage. The University has resolved this problem.

#### **Secondary Flooding**

Located on the higher edge of the campus are several potable water reservoirs with a total capacity of three million gallons. These are owned and operated by the University of Utah. Salt Lake City's Department of Public Utilities owns and controls an 18" water line that parallels that eastern edge of the campus, and supplies most of the University's water needs as well as that of its neighbors.

Questar owns an easement for a large volume natural gas distribution line through this area. Adjacent to the gas lines Chevron operates two large diameter crude oil supply lines feeding the refineries north of Salt Lake City. Both of these lines operate under considerable pressure and special conditions, and are closely monitored by the two entities.

#### **Dam Failure**

Directly east of the University of Utah, Red Butte Creek flows through a small reservoir. The Red Butte reservoir itself is located approximately 0.5 mile away from and 400 ft. above the main campus. The dam is an earthen dam constructed about 1930.

By 2000, the associated infrastructure had fallen into disrepair. In 2003, Red Butte Dam was listed on the state's hazardous list. The National Defense Authorization Act of 2000 had already authorized spending to improve the dam and reservoir so that they would meet applicable state standards. The dam has been reconstructed.

#### **Wildfire**

The vegetation in the foothills east of the campus has suffered several wildfires that posed a potential threat to facilities on campus. There is no record of an event affecting the University until 2011, when a grass fire started on July 3, came within 100 feet of the newly constructed Utah Museum of Natural History. Hillside fire suppression systems installed with that project prevented structural/property losses. In 2012, the University requested and received additional State improvements funding to continue the hillside suppression system north of the Museum. Phase II [of a projected IV] will begin installation in spring of 2013.



### Severe Winter Storms, Hailstorms and Winds

The location of the University of Utah brings occasionally heavy snowstorms. There has been some damage reported through roof leaks, power outages, and reports of other secondary effects due to snow loading, with no associated injuries or loss of life.

### Severe Seismic Events

The University of Utah is known to be located both over and close to fault lines. The potential for losses in terms of human life, assets, as well as economic losses is well recognized. There is no record of any significant losses in the University's history.

### Landslides

There is potential for landslides on the eastern margin of campus as the foothills rise steeply. The campus has never suffered significant losses from a landslide.

### Pandemics

Like much of the community surrounding the University, different forms of influenza have affected individuals and activities on campus. To date there has not been a case where the campus operations have been closed or individuals placed in quarantine or isolation because of such an event.

### Tornado

The Salt Lake Valley has experienced occasional, but very rare, tornados. The University suffered no loss or impact of any type because of these events.

