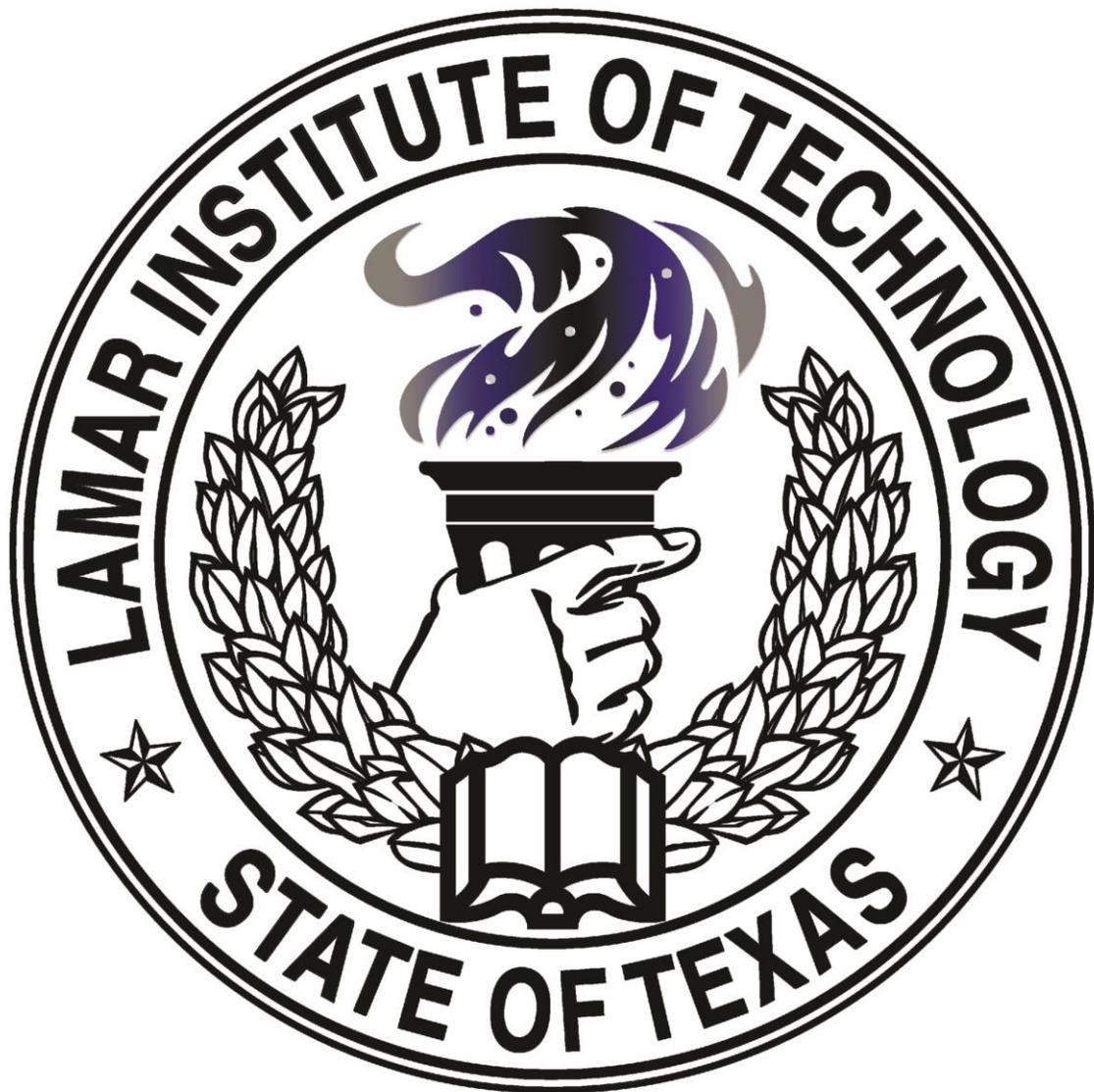


TECHNOLOGY  
SERVICES

## BUSINESS CONTINUITY PLAN



Emergency Preparedness Guide



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## Revision History

Revision Number	Version Date	Description of Changes	Changes Made By:
1.6	7/28/11	Update names, reformat text for table of contents,	Isaac Barbosa,
1.71	7/29/11	New cover page, reformat text	Isaac Barbosa
1.72	11/9/11	New subtitle, remove date from cover page, and generalization of the plan to cover any emergency situation.	Isaac Barbosa
	11/11/11	More generalization to address all situations	Isaac Barbosa
1.75	1/24/12	Reorganize sections, compare to departmental plans.	Isaac Barbosa
1.76	6/24/13	Update staff	Isaac Barbosa
1.77	1/27/14	Update staff	Isaac Barbosa



## **Overview**

In order to insure ongoing operations, the Technology Services division will take the appropriate actions to insure appropriate information technology services are available in the event an emergency situation arises. This Plan is subordinate to, and part of, the LIT Business Continuity Plan which outlines how the institution will operate in an emergency situation.

This document represents a framework to be used by the Technology Services division if an emergency situation has been acknowledged and/or declared due to the threat of a hurricane or any other event that would require that daily operations could not continue as is expected in the normal course of business. Daily operations priority is to prepare the institutional information technology resources for that threat.

### **Institutional Assets**

- Computers, Multimedia, and Peripherals
- Distributed Learning Environment
- LIT Data Center and Applications and Services
- LU Data Center and Applications and Services

The LIT Business Continuity Plan outlines the action plan for this division. These are the procedures for those action plans.

### **Business Continuity Plan Priorities**

The LIT Business Continuity Plan identifies the following as priorities:

- Maintain and coordinate the operation of voice, intranet, data, video and wireless communications services
- Develop policy to provide for the coordination of radio and telephone systems
- Implement proper backup controls and redundancies to maintain critical services
- Properly document all hardware and its configuration; develop a plan for hardware replacement and setup
- Develop adequate information security controls
- Maintain a records management plan that duplicates data on a regular basis and secures this information at a remote location
- As necessary develop and maintain a plan to perform critical applications at a remote site

## **Purpose**

The purpose of this document is to establish the framework necessary for the Information

Technology Division of Lamar Institute of Technology to insure that technical services are maintained appropriately during that event of an emergency, either temporarily or for an extended period of time. These services include institutional IT physical assets located at all facilities and informational assets located on and off campus. The objective is to prepare the campus for any identified situations, provide adequate technical services during and after an emergency situation, and document any damages caused by the emergency situation.

In addition, it is important to insure that there is a clear understanding that the LIT Technology Division consists of individuals and services of LIT, Lamar University, and Texas State – San Marcos.

## **Governance**

This plan is governed by the framework established by the council of presidents of the four Lamar components, the System Office of The Texas State University System, and Texas Administrative Code (TAC 202).

In the event of a declared evacuation due to a hurricane or other emergency situation, executive decisions will be coordinated through the council of presidents. The LIT president will convene the appropriate meetings to determine if components to the LIT Business Continuity should be implemented. Once the decision has been made to implement all or part of the plan, the governance framework defined in that plan will be in effect.

Official announcements will be made through the local media and the LIT official website. The three major areas of governance of the Technology Services department are LIT Technology Services duties and responsibilities, LU IT Division duties and responsibilities, and the TxState San Marcos IT Division duties and responsibilities.

## **Organization**

The Information Technology (IT) organization of the LIT IT division consists of staff from LIT, Lamar University (LU), and Texas State University – San Marcos (TxState); and will consist of administrative staff and technical staff. In the event of an emergency or other situation where executive decisions are required, then the following administrative chain of command will be followed:

### **Chief Information Officer**

#### **Lamar Institute of Technology**

- Isaac Barbosa
- Bonnie Albright
- Paul Szuch

**Lamar University**

- Shellie Richter
- Dale Lack
- Patrick Stewart

**Texas State University – Sam Marcos**

- Mark Hughes
- Mike Krzywonski

**Technical Staff****LIT Staff**

- Isaac Barbosa – Administration
- Sheryll Plaia – Purchasing
- Allen Graham – Help Desk
- Joshua Prudhomme – Networking
- David Block – Website
- Shivinder Singh – ERP Systems
- Aaron Smith – LIT Data Center
- Steve Sims – Blackboard
- Carey Cuccia – AppWorx and other application

**Lamar University Staff**

- Shellie Richter – ERP Systems
- Dale Lack – Banner Application
- Patrick Stewart – Network Infrastructure
- John Genuardi - Help Desk

**Texas State University – San Marcos Staff**

- Mike Krzywonski – TxState Interim Director - Infrastructure Services

It is important to emphasize employee preparation, risk mitigation, and personal safety.

**Scope**

The scope of this disaster recovery plan for the Technology Services department of Lamar Institute of Technology includes the following:

## **Locations**

Lamar Institute of Technology, Lamar University, Texas State San Marcos, Frank Robinson Center, Fire Training Grounds, and AGC Facility.

## **Equipment**

Desktop computers, laptops, computer peripherals, servers, IP telephones, ERP systems and components located at Lamar University

## **Personnel**

Technology Services staff, Lamar University staff, and Texas State University – San Marcos staff

## **Natural Disasters**

### **General Guidance**

The Institute Business Continuity Plan defines weather monitoring and Institute overall response to weather related threats. Faculty & Staff activities focus on safety issues and, in certain cases, the protection of Institute assets. Faculty & Staff are responsible for securing work area assets and for conducting preliminary damage assessments of work areas.

### **Hurricanes**

- The Institute will be closed before travel conditions become dangerous and will not reopen until the environment is safe. Therefore there are no special on-campus safety guidelines for non-storm personnel and students.
- Faculty and Staff are required to secure their work areas for wind and flooding prior to being released. ( See Campus Closing Checklist)

### **Evacuation Due to Hurricane Warning or Watch**

Upon the issuance of an evacuation directive by Jefferson County Emergency Management, or upon a specific recommendation by them in advance of a general evacuation order, or upon a determination by the University to evacuate, Lamar University will close and arrange to evacuate all students living in dormitories or other university housing. This plan is intended to provide guidance only. In each instance, decisions will be made on the basis of recommendations by Jefferson County Emergency Management and upon evaluations of the situation - severity of the storm, landfall probabilities - by the University.

### **Tropical Storms, Mid-Latitude Storms & Floods**

- The Institute will be closed before travel conditions become dangerous and will not reopen until the environment is safe. Therefore there are no special on-campus safety guidelines for non-storm personnel and students.
- Faculty and Staff are required to secure their work areas for flooding prior to being released. (See Campus Closing Checklist)

## **Winter Storms**

- The Institute will be closed before travel conditions become dangerous and will not reopen until the environment is safe. Therefore there are no special on-campus safety guidelines for non-storm personnel and students.
- Since no building or building content damage is expected, Faculty and Staff are not required to secure their work areas prior to being released.

## **Thunderstorms**

- Observe the following rules if lightning is occurring or is about to commence:
- Power down computers and turn other electrical equipment off (never unplug electrical cords if lightning is occurring).
- Avoid water fixtures, telephone lines, and any electrical conducting materials.
- Stay inside buildings and off campus grounds.
- Campus buildings are designed to withstand significant damage resulting from thunderstorm wind, rain, hail and lightning strikes.

## **Tornadoes**

- If a tornado is spotted or imminent take the following steps immediately:
  - Notification of a pending disaster will be announced (over the address system or by voice) - fire/evacuation alarms are not to be activated.
  - Evacuate all trailers and temporary structures. Proceed immediately to a structurally secure building.
  - Go to the interior area of the building.
  - Do not seek shelter in Gyms, Auditoriums, and other large open areas.
  - Take cover under a sturdy object.
  - Protect your head, neck, and face.
  - Stay away from windows and items that might fall.
- There is not a sufficient warning period to close the Institute or to effectively protect Institute assets. Therefore no special effort should be made to protect Institute assets; all attention should be directed towards life safety procedures.

## **Earthquakes**

- If an earthquake strikes while you are in a building, take cover immediately under a sturdy object covering your head, neck and face. Be prepared to move with the object. To the extent possible, stay away from windows and items that might fall.
- Do not attempt an evacuation during the earthquake. Also be prepared for aftershocks.
- In outdoor areas, stay away from power lines, buildings, and any objects that might fall. In an automobile, pull off the road away from overpasses, bridges, and large structures that might fall.
- There is no warning period therefore all attention should be directed towards life safety procedures.

## **Risks**

- Flood and Water Damage to offices and labs
- Damage to the LIT data center
- Damage to the LU data center
- Inability to get San Marcos services running
- Ineffective communications infrastructure
- Delayed replacement supplies and equipment

## **Emergency Management**

Initiate the emergency telephone chain procedure to notify all personnel to protect computers etc. with garbage bags, shut down all experiments, and that all personnel not involved in emergency preparations or management should then leave the campus, and not attempt to return or enter any building until the campus has officially been reopened.

All Technology Services staff must communicate through established communications channels with the Director regularly and meet back at the campus once the all clear is given. If one is not called to campus do not come back until the all clear is given. If Technology Services staff does not have internet access, they must check in with the Director of Computer Services every 48 hrs. This only applies to full time staff and designated student assistants.

## **Evacuation Due to Hurricane Warning or Watch**

Upon the issuance of an evacuation directive by Jefferson County Emergency Management, or upon a specific recommendation by them in advance of a general evacuation order, or upon a determination by the University to evacuate, the University will close and arrange to evacuate all students living in dormitories or other university housing. This plan is intended to provide guidance only. In each instance, decisions will be made on the basis of recommendations by Jefferson County Emergency Management, and upon evaluations of the situation - severity of the storm, landfall probabilities - by the University.

Provide for a conference bridge.

## **Priorities**

### **Secure campus**

- Helpdesk staff will survey the campus and take appropriate action
- Data center staff will survey the situation and develop an appropriate plan
- Contact will be made with the LU Director of Computing Infrastructure to verify that plans have been made to secure all LIT servers located in the LU data center.

### **Secure ERP Data**

- Coordinate with LU staff to insure data replication is performing appropriately
- Insure that data in the LIT data center is properly backed up.
- Verify that data is being replicated properly to the TxState SM data center.

### **Secure ERP System**

- LU staff procedures
- LIT staff procedures

### **Establish San Marcos Operations**

- LIT staff procedures
- TxState staff procedures

### **Establish Communications**

- LIT phone system
- Website
- E-mail

### **Maintain DR Operations**

- Establish help desk

## **Procedures**

### **LIT Data Center**

- All actions are to redirect our website to the emergency management website
- The System Support Specialist II will back up the Exagrid to Texas State - San Marcos.
- Verify complete integrity of data with San Marcos.
- Begin powering down the data center once backups are complete.
- Cut over to Message One backup email system.

### **Help Desk**

- Help Desk staff will pick up all computers on first floor levels that are located on the floor.
- Verify that all computers, printers, and multimedia equipment are powered down and secured.

### **ERP System**

- LU technical staff will verify the synchronization of the data with San Marcos data center.
- LIT staff will redirect all DNS to the DR site
- LIT staff will verify that redirect is in place
- LIT staff will verify all designated critical functional staff that has access to VPN client and that client is properly configured.

## **Return Campus to Pre-Disaster State**

### **Administrative Office**

The IT representative on the Incident Response Team will perform an initial assessment and summon the appropriate staff and take the appropriate actions.

Vendor contacts:

Obtained from previous purchase order (hard copy), internet search for vendor information (via search engine or DIR site), and email correspondence from vendor (incoming mail via outlook).

### **Request Purchase Orders**

Via submission to the LIT Finance Office of a fully executed (primary signature: Director of Computer Services; secondary signature: Vice President of Finance and Operations, if unavailable Director of Finance, if unavailable President of LIT) Purchase Requisition (hard copy) through LIT campus mail.

Upon notification that the mandatory evacuation has been lifted by Jefferson County Emergency Management and that the Lamar Institute of Technology President's Office has reopened the campus, and faculty and staff are to return to work.

### **LIT Data Center**

- All actions are to restore our website to the emergency management website
- The System Support Specialist II will restore the Exagrid locally.
- Verify complete integrity of data.
- Begin powering up the data center once backups are restored.
- Restore email system.

### **Help Desk**

- Help Desk staff will restore all computers on first floor levels that are located on the floor.
- Verify that all computers, printers, and multimedia equipment are working.

### **ERP System**

- LU technical staff will verify the synchronization of the data with San Marcos data center.
- LIT staff will restore all DNS
- LIT staff will verify Internet presence and connectivity