

Disaster Recovery and Mitigation Plan

Pecos County Appraisal District

**201 S. Main
Fort Stockton, Texas 79735**

Revised January 2017

Plan Objective

Scope

Disaster is defined in Webster's Dictionary as a sudden calamitous event bringing great damage, loss, or destruction. Disaster's though rare, do occur and are hard to anticipate. When an organization's vulnerability is assessed, the need for a contingency plan is apparent. In the event of a disaster or interruption of business continuity, the Pecos County Appraisal District will use this plan as a form of insurance for the organization.

Goal

The primary objective of this plan is to implement an active course of mitigation and disaster recovery action in the event of a disaster or business interruption in the Pecos County Appraisal District. This plan is intended to reduce or alleviate the number of decisions which must be made should such an event occur.

The Pecos County Appraisal District defines a disaster as "an event whose timing is unexpected and whose consequences are seriously destructive". An interruption is defined as a "break in the uniformity or continuity of normal day-to-day functions of the department".

Mitigation planning identifies policies and actions that can be implemented over the long term to reduce risk and future losses. Pecos County Appraisal District's mitigation goal involves a long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage.

Contingency implies recovery, or at the very least the efforts to affect recovery from impaired operations. This plan is a step-by-step guide to rebuild the Pecos County Appraisal District's functions with the ultimate goal of experiencing a minimal amount of downtime.

Pecos County Appraisal District further declares that any event, which causes an interruption of the District's information processing for a period greater than 24 hours, shall be declared a disaster.

This plan will serve as the guide, which the Information Systems department will follow in its response and recovery efforts immediately following the disaster.

Disaster Types

Disaster types are defined into three categories: Natural, Human, and Technical.

Natural Disasters or "acts of nature" include but are not limited to events such as tornadoes, hurricanes, earthquakes, heavy storms, lightning, hail, or other erratic weather.

Human Disasters include but are not limited to acts of sabotage, arson, bombing, theft, water leaks, and plumbing failure, human error, vandalism, loss of key people, fraud, and embezzlement.

Technical Disasters include but are not limited to equipment failure, virus, human error, software failure, power flux, and/or power outages.

Disaster Levels

Level 1 (Severe) – This level represents a total disruption of the building and/or its contents. Work ceases for a period of thirty or more hours. Disruption occurs during working hours and downtime is crucial to the District’s business operation.

Level 2 (Major) – This level represents a partial disruption to the building and/or its contents, occurring during the working or non-working hours of the District. Work ceases for a period of eight to thirty hours. The Disaster affects one or two major functions of the District or has occurred during a vital time of the year for that particular department, section, or area.

Level 3 (Minor) – This level represents a partial disruption or damage to a segment of the District’s computer system. Work ceases for a period of one to eight hours and has occurred during a non-vital time of the year.

Please note that the above levels are indicated as suggestions but are ultimately determined by Chief Appraiser.

District Wide Plan Implementation

In the event of a District wide disaster or severe business interruption at the Pecos County Appraisal District, as defined herein, the Chief Appraiser will determine and assess the type and level of the disaster. The Chief Appraiser will decide on the implementation of the Disaster Recovery Plan.

The Chief Appraiser will provide instruction to staff. These instructions may include directives asking staff to stay home until further notice to reporting to work at an alternate location.

The following procedures should be implemented in the event of an unplanned emergency and evacuation:

- All staff and/or customers should be alerted to the evacuation.
- Staff will evacuate the building as instructed by the evacuation plans.
- Staff will assemble at the designated meeting place and be accounted for.

Authority

Authority over the Disaster Recovery Process rests with the Chief Appraiser. The Chief Appraiser will provide direction to all and maintain a state of readiness by coordinating live and stimulated tests of the disaster recovery plan. The Chief Appraiser is the only member who can activate the Disaster Recovery Plan. In the event of a disaster, the Chief Appraiser will determine and assess the type and level of the disaster and activate the plan.

Responsibilities

The responsibilities of Chief Appraiser are as follows:

- Establish a Command Center
- Contact the Staff
- Activate the Recovery Plan
- Coordinate all recovery efforts

- Survey the damage
- Prepare for relocation at the new recovery site as determined by the Chief Appraiser

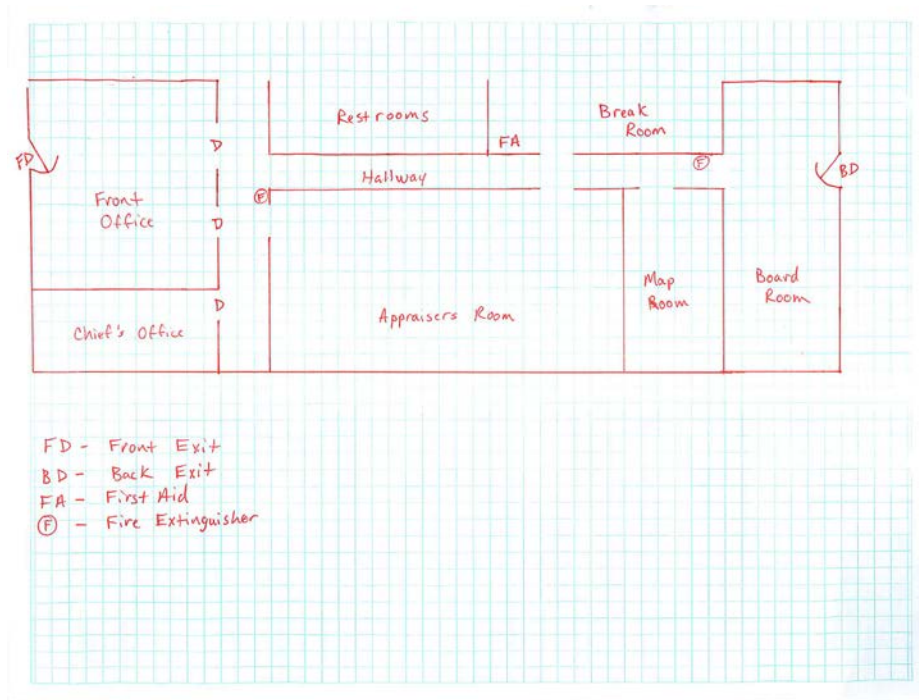
Mitigation Strategy

- Evaluate building components and retrofit options
- Designate safe room for public and staff when evacuation is not an option
- Evaluate existing building evacuation plans and train staff
- Continue to improve ways to safeguard onsite data processing systems from natural disasters, i.e., floods, hurricanes, tornadoes and fires
- Continue to find ways to improve safety of public and staff
- Monitor needs assessment e.g., backup generators, offsite data storage, building security

District Wide Emergency Notification Plan

The Chief Appraiser of the Pecos County Appraisal District will give instructions on whether to report to work in the event of a disaster, contingency, severe weather or other emergency situations. These instructions will be available to everyone by calling 432-336-7587. District personnel are encouraged to use that number for notification.

Disaster Recovery Exit Plan



Meeting Site - Pecos County Appraisal District staff is to gather in the center of Pecos County Appraisal District's parking lot

Fire Extinguisher's – near break room door by electrical breaker

Flashlight - break room

First Aid Kit – break room

Head Count - Will be conducted by Chief Appraiser at meeting site

Department Emergency Contact List

In the event of an emergency, the Chief Appraiser will contact District staff, board members, district attorneys and taxing entities.

<u>Employee</u>	<u>Title</u>	<u>Name of Contact</u>	<u>Phone Numbers</u>
Elma Holguin	Admin. Asst.		432-360-9644
Melba Salmon	Appraiser		432-290-6084
Reba Carreon	Appraiser		432-290-4599

Board of Directors

<u>Board Member</u>	<u>Tax Unit</u>	<u>Position Held</u>	<u>Phone Numbers</u>
Joe Shuster	County	Chairman	432-336-2792
Darren Hodges	FSISD	Vice Chair	432-290-2403
Monique Bowles	BVISD	Secretary	432-940-4066

Attorneys

<u>Law Firm</u>	<u>Phone Number</u>
Hargrove & Evans, LLP.	512-225-7864

Taxing Entities

<u>Contact Name</u>	<u>Tax Unit</u>	<u>Phone Numbers</u>
Joe Shuster, County Judge	Pecos County	432-336-2792
Ralph Traynham	Fort Stockton ISD	432-336-4000
Kevin Allen	Iraan-Sheffield ISD	432-639-2512

Mark Dominguez	Buena Vista ISD	432-536-2336
Frank Rodriguez	City of Fort Stockton	432-336-8525
Teresa Callahan	Iraan Hospital Dist.	432-639-2575
Ty Edwards	Middle Pecos Groundwater Dist	432-336-0698
Joe Shuster	Midland College	432-336-2792

Information Technology/Data Processing

Disaster Recovery Overview

In the event of a disaster or business interruption in the District's CAMA and data processing systems the Chief Appraiser along with the District's software vendor will determine and access the type and level of the disaster and will direct that the disaster recovery plan be implemented.

In the event of a disaster during office hours, the District's software vendor will begin recovery procedures. Staff will be assigned projects, many of which parallel the recovery process.

The software vendor will be tasked with the project of recovering the District's appraisal data. The flat files will be made into the necessary media, (i.e. microfiche, CD's, etc). The Chief Appraiser will be responsible for retrieving any files that are to be stored on and off-site.

Data Processing Vendor			
Name	Contact Person	Address	Telephone
Pritchard & Abbott, Inc.	Kevin McBurnett	4900 Overton Commons Ct Fort Worth, TX	800-880-7861

Application Profile

Application Name	Critical? Yes/No	Manufacturer
P&A PAPC Software	Yes	Pritchard & Abbott, Inc.

Inventory profile				
Manufacturer	Description	Model	Serial Number	# of Units
DELL	Server	PowerEdge T30	FLYSQ51	1
UPS	Battery Tape Backup	PowerVault 114T	9NYN641	1

HP	Deskjet Laser Printer		00209C64E590	8
Buffalo	Store Station	N/A	N/A	1
3COM	16 Port Gig Switch	3C16471	N/A	1
Fujitsu	Scan Snap Scanner	Fi-5110ex2	n/a	2
3COM	T1 Router	3016	00209C64E590	1
DELL	Workstations	Optiplex GX520	N/A	6

Server backup procedures

- Dell PowerEdge T310 Server
 - Daily, tapes are changed at 8:00am
 - Daily, backups are started at 11:00pm
 - On Friday at 11:00pm a complete backup of the system is done.
 - Latest backup media is stored off-site at the Fort Stockton ISD school administration fireproof vault located at 101 W. Division, Fort Stockton, Texas.
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- Personal Computer
 - It is recommended that all personal computers be backed up by Pecos County Appraisal District personnel. Copies of the personal computer files can be uploaded to the server. It is then saved with the normal system save procedure. This provides for a more secure backup of personal computer-related systems where a local area disaster could wipe out important personal computer systems.

Disaster Action Checklist

1. Plan Initiation
 - a. Chief Appraiser makes determination
 - b. Contact and set up disaster recovery team
 - c. Determine degree of disaster
 - d. Implement proper application recovery plan dependent on extent of disaster
 - e. Monitor progress
 - f. Contact all necessary personnel--both user and data processing
 - g. Contact vendors--both hardware and software
 - h. Notify users of the disruption of service
2. Follow-Up Checklist
 - a. List teams and tasks of each
 - b. Obtain emergency cash and set up transportation to and from backup site, if necessary
 - c. Set up living quarters, if necessary
 - d. List all personnel and their telephone numbers
 - e. Establish user participation plan
 - f. Set up the delivery and the receipt of mail
 - g. Establish emergency office supplies
 - h. Rent or purchase equipment, as needed
 - i. Determine applications to be run and in what sequence
 - j. Identify number of workstations needed

- k. Check out any off-line equipment needs for each application
- l. Check on forms needed for each application
- m. Check all data being taken to backup site before leaving and leave inventory profile at home location
- n. Set up primary vendors for assistance with problems incurred during emergency
- o. Plan for transportation of any additional items needed at backup site
- p. Check for additional magnetic tapes, if required
- q. Take copies of system and operational documentation and procedural manuals.
- r. Ensure that all personnel involved know their tasks
- s. Notify insurance companies

Recovery start-up procedures for use after a disaster

1. Chief Appraiser of Pecos County Appraisal District determines need to implement recovery plan.
2. Notify software vendor of the need to utilize service and of recovery plan.
 - a. Disaster notification numbers
Pritchard & Abbott 1- 800-880-7861
3. Provide software vendor with an equipment delivery site address (when applicable), a contact, and an alternate contact for coordinating service and telephone numbers at which contacts can be reached 24 hours a day.
4. Contact power and telephone service suppliers and schedule any necessary service connections.

Recovery Timeline

1. Within 24 hours – Establish new location and move in necessary equipment and software.
2. By the end of 48 hours all computers and sites are working and ready
3. By the end of 72 hours all staff is back and in full operation.

Temporary Location

Portable office will be brought in to location if a county building is not available.

Restoring The Entire System

To get the system back to the way it was before the disaster contact the software vendor must coordinate whom to work with in its Hardware and Development departments. Find the following tapes, equipment, and information from the on-site tape vault or the off-site storage location:

- All tapes from the most recent complete backup operation
- Tape list from most recent complete save operation
- Tape list from most recent weekly save operation
- The *Software Installation* book
- The *Backup and Recovery* book
- Telephone directory

- Tool kit

Testing The Disaster Recovery Plan

In successful contingency planning, it is important to test and evaluate the plan regularly. Data processing operations are volatile in nature, resulting in frequent changes to equipment, programs, and documentation. These actions make it critical to consider the plan as a changing document. Use these checklists as you conduct the test and decide what areas need further testing.

Conducting a recovery test

Item	Yes	No	Applicable	Not Applicable	Comments
Select the purpose of the test. What aspects of the plan are being evaluated?					
Describe the objectives of the test. How will you measure successful achievement of the objectives?					
Meet with management and explain the test and objectives. Gain their agreement and support.					
Have management announce the test and the expected completion time.					
Collect test results at the end of the test period.					
Evaluate results. Was recovery successful? Why or why not?					
Determine the implications of the test results. Does successful recovery in a simple case imply successful recovery for all critical jobs in the tolerable outage period?					
Make recommendations for changes. Call for responses by a given date.					
Notify other areas of results. Include users and auditors.					
Change the disaster recovery plan manual as necessary.					

Areas to be tested

Item	Yes	No	Applicable	Not Applicable	Comments
Recovery of individual application systems					

by using files and documentation stored off-site.					
Reloading of system tapes and performing an IPL by using files and documentation stored off-site.					
Ability to process on a different computer.					
Ability of management to determine priority of systems with limited processing.					
Ability to recover and process successfully without key people.					
Ability of the plan to clarify areas of responsibility and the chain of command.					
Effectiveness of security measures and security bypass procedures during the recovery period.					
Ability to accomplish emergency evacuation and basic first-aid responses.					
Ability of users of real-time systems to cope with a temporary loss of on-line information.					
Ability of users to continue day-to-day operations without applications or jobs that are considered noncritical.					
Ability to contact the key people or their designated alternates quickly.					
Ability of data entry personnel to provide the input to critical systems by using alternate sites and different input media.					
Availability of peripheral equipment and processing, such as printers and scanners.					
Availability of support equipment, such as air conditioners and dehumidifiers.					
Availability of support: supplies, transportation, communication.					
Distribution of output produced at the recovery site.					
Availability of important forms and paper stock.					
Ability to adapt plan to lesser disasters.					

Disaster site rebuilding

- Floor plan of data center.
- Determine current hardware needs and possible alternatives.
- Data center square footage, power requirements and security requirements.