OMG! What Happens Now?

"It is the objective of THDA's Business Continuity Plan (BCP) to allow us to continue the services and assistance that we provide uninterrupted to the people of Tennessee."

This was the decisive mission of the Business Continuity Plan (BCP) Steering Committee, formed by Tennessee Housing Development Agency (THDA) with the objective of identifying the vulnerabilities and mitigating the impact of a disaster, should one befall the employees and operations of THDA. As a result, THDA has developed a detailed, comprehensive Business Continuity Plan for its Central Operations in Nashville and each of its nine field offices.

Key Objectives

The key objectives of THDA's Business Continuity Planning are:

- Ensure the safety and well being of all THDA employees and customers
- Identify critical lines of business and supporting functions
- Resume/continue normal processing of THDA vital and critical operations in an acceptable amount of time
- Minimize the duration of a serious disruption to operations and resources
- Facilitate effective coordination of recovery
- Maintain regular and clear communication with THDA employees, customers and the general public

Early in the assessment, the Steering Committee determined that we would take the planning and development process in steps. It was clear from the outset that an organization our size cannot deal with all possibilities at all levels with a single plan. Our initial plan addressed the recovery steps that will be followed in the event of a declared incident at our main office in Nashville. We have since expanded our overall plan to include individual plans for the nine field offices. Our future strategy is to expand our central plan to include procedures should a local or regional incident affect our operations.

Following a myriad of "best practice" recommendations, the Steering Committee went to work to identify possible risk scenarios such as tornadoes, fire, sabotage -- in other words, bad things that happen as a result of a threat. One of the early determinations that resulted from this exercise is that it really doesn't matter what the threat is, what matters is how it affects the employees and operations of the organization. A good plan, as we discovered, deals with the *results* of a disaster, regardless of the cause.

This did not, however, eliminate the need to identify the impact resulting from a disruption. Working with each of the program and support divisions, we identified the various business processes performed at THDA, and the window of time within which each operation must be resumed, and to what degree. Put simply, we identified what we do, how we do it, and who needs what to get it done, and then prioritized the recovery of these processes and their supporting systems.

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Vital and Critical First

We also determined that our plan would focus on the restoration of the "vital" and "critical" business processes, and once these were securely operational, then the plan would address the less essential operations by degree. One interesting factor that surfaced during this exercise was the extent and complexity of the interdependencies between the program and support division operations. It was clear that one of the keys to a successful recovery operation was a documented understanding of the business process workflow.

Alternate Work Site

One factor that was a major advantage in our planning was THDA's Madison, TN field office, which is located approximately 16 miles from the central operations. This facility houses our Middle Tennessee Rental Assistance operations, and with the addition of a nearby rented storage space for equipment, has been outfitted to absorb the recovery operations of the entire central office, as well as its own (see attached floor plan).

The organization's central office is connected to the Madison site via a 3MB point-to-point MPLS link. This allows for a domain controller installed at Madison to replicate regularly with the domain controllers at the central office so that anyone can log in to the THDA network at any time, from either site. A second VPN connection point has also been established so that remote connectivity to THDA systems is available in the event the VPN connection point at the main location fails or is unavailable for some reason.

Using the virtual infrastructure recently implemented at THDA's central office, we are able to have the entire organization's infrastructure completely functional in a matter of hours should there be a disaster or loss of system functionality. With the recent addition of a second Storage Area Network (SAN), we now have the ability to provide for redundancy of THDA's LAN, the State WAN, and THDA's Exchange e-mail system, including real-time replication of data. This allows our IT department to test system recovery and failover functionality at any time without disruption to THDA's production environment.

Operations Improved

It is important to note that the most critical part of any plan can be the assumptions that guide it. Our plan's success is based on the knowledge that certain physical and perceptible measures and conditions are in place should the BCP plan be activated. The Steering Committee spent a considerable amount of time planning, developing and addressing our assumptions for both our internal operations and expectations, and our alternate work site readiness.

As a result of our planning, we have improved operations in a number of areas:

• We now have an 5,500+ record in-house developed contact database where we maintain not only employee information (including emergency contact and special needs data), but also the names, addresses and emails for all program and support contacts. This database is SQL-based and is controlled by the Active Directory security, to allow on-site and off-site electronic access only to those who have the correct permissions.

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- THDA has replaced its telephone system with a Voice-Over Internet Protocol (VOIP) system for its central and Madison offices which gives us unified voice, data, and mobile communications, and has resulted in lower costs.
- Our work schedule policy now include the options for an alternate work schedule and/or telecommuting, offering close to half of the organization's employees the ability to work from home, with full access to the network and files. Our IT department also maintains a supply of configured "checkout" laptops. This gives us the ability to rotate employees through our alternate work site as needed, while still maintaining an acceptable level of work.
- We no longer receive hard copy faxes at any of our offices. All incoming faxes are received electronically, and are available through the email application. This eliminates the possibility of "missing" documentation should any of our facilities become uninhabitable.
- We have a communications blast resource with two sets of criteria that allows specified individuals the ability to either contact all employees or a select group of support employees at multiple phone numbers. We also maintain a "bridge line" phone number that can manage up to 100 simultaneous incoming calls for up-to-date situation bulletins.
- We have detailed weather-related and off-site evacuation and lock-down plans and a team of safety officers that are trained in CPR and first aid, with annual recertification.
- We maintain a quarterly, bi-annual and annual maintenance and testing schedule for the BCP plan and communications blast, which results in up-to-date workflow and process information. We also maintain a regular schedule to update contact information for both employees and outside contacts.
- We hold a series of awareness sessions each year, at which we either review different sections of our plan or bring in outside resources and speakers to educate the employees on emergency and contingency planning, not only for the workplace, but also the safety of their families and homes. THDA presented its employees with an "emergency supplies" canister as a reminder that preparedness takes planning.

The Steering Committee has also recently formed a subcommittee to address the need for an organizationwide Emergency Preparedness Plan that will specifically address response to on-site workday emergency situations and will focus on the employees' physical safety.

In addition to requiring that all team leaders keep a hard copy of the entire BCP plan offsite and easily accessible, THDA publishes a current full copy of all plans on its intranet. And, as we have repeatedly been approached by other state, housing and non-governmental organizations to share our planning and publication experience, we now publish a non-linked public version of our plan (sans last names and phone numbers) at <u>www.thda.org/bcp.pdf</u>, to which we can refer interested parties. Please visit THDA's website to view our plan. We have also attached for your review a Microsoft PowerPoint presentation that we have used for employee awareness training.

Supporting Documentation: alternate work site floor plan and training slides.





Good morning,

For those who don't know me, my name is Linda Foulks, I am the Technology Projects Coordinator for the IT division on the 10th floor, and I am the primary person responsible for business continuity planning here at THDA, among other things. I also design and publish both of our web pages, and support the Microsoft application software here at the agency. If you have operational questions about your Microsoft application, I'm the one to call. Particularly Word, Excel and Access. Outlook too, but if it has to do with distribution lists, call Scott – or Crystal, I hate distribution lists.



State of the Art; Cutting Edge This plan – Also have essential; necessary; and non-essential We have responsibilities that cannot wait. Why, What and how are we going to fix it?



Threats: tornadoes, fire, lunatics with guns, sabatoge Risks: Bad things that happen as a result of the threat Risk Assessment Controls: Sprinkler System; Security; UPS; generator BIA: Identify what we're doing, how we're doing it, and what it takes to do it.

> Loan processing and underwriting Receive Courier mail Process payment requests Restore applications and data Restore telecommunications

Identify the impact resulting from disruptions; identify interdependencies

RTO: Worse Case Scenario

RPO: Acceptable amount of date lost (in hours)



Assumptions: The plan is based on the knowledge that the assumptions are true.

Alternate work site is not affected Build out is ready Necessary computer equipment is on-site State data center will be accessible

Escalation: 48 hours, possibility of not meeting critical and vital RTOs

Damage assessment: assess the situation and make recommendation to the IM team

Response teams: RTO 1 and 2 activated, communications initiated Who knows if they are on a response team?





THDA BCP Plan

Direct Results

- Ready-to-Operate Hot Site
- Agency-wide Contact List
- Mandatory Incoming Electronic FAX
- Communications Blast Capabilities
- Red Cross- and CPR-Trained Safety Officers
- Comprehensive Evacuation Plans







In the event of a declared disaster at Parkway Towers, you, as an employee, would:

- A. Roll over and go back to sleep.
- B. Jump in your car, race to Parkway Towers, and see what you can do to help.
- c. Stay close to your phone and wait to be contacted with instructions as to how to proceed.

Question 3

If you receive a Communications Blast from a member of Senior Staff, you should:

- A. Immediately call all of your work friends to find out what's REALLY going on.
- B. Ignore it, until you're back on the clock.
- c. Call the bridge line, identify yourself and verify that you received the message.