Disasters Happen. Get Ready, Stay Ready!

Presented by:

Michael A. Corn
Chief Privacy and Security Officer; University Chief Information Security Officer

David A. Ibrahim, PhD
Director of Preparedness and Response; Clinical Assistant Professor (School of Public Health)

Jerry L. Lockwood
Assistant Director of Facility and Space Planning

Integrated Academic Continuity Planning
Learning Objectives

Readiness Precedes Action

Continuity Planning 101
Fundamentals of academic continuity planning

Integrated Continuity Planning at University of Illinois
Cultivating a new culture of integrative preparedness planning

Path to UI Ready

Questions and Discussion
University of Illinois

2012-2013

Operating budget: $5.42 billion
FTE: 22,900
Buildings: >800
Replacement Cost: $8.9 billion
Student enrollment: 77,443

Chicago: 27,875 students
Springfield: 5,048 students
Urbana-Champaign: 44,520 students
This is NOT the time to ask...“What do we do now?”
“What’s all the ruckus?”
“What’s all the ruckus?”
Modest Goal

We want to be able to do tomorrow what we were doing yesterday – no matter what happens today.

Paul Dimond – UC Berkley
“Foresight may well deny what hindsight must accept”

Put in place NOW the things that will enable us to:

- continue serving our constituents
- perform our fundamental mission
- preserve our reputation/image
- maintain accreditation
- reduce our operational risk
- and minimize the duration of a serious disruption following a major adverse event.
Strategic Importance

Immediate Effects

• Possible loss of life
• Asset damage & loss
• Disruption of academic courses
• Legal/contractual penalties
• Operational productivity

Far Reaching Effects

• Funding/Grants/Revenue
• Lost research (existing and future)
• Reputation & profitability
• Damage to the brand or University image
• Psychological trauma
• Reduced value of assets
Case for Integrated Continuity Planning

- Support institutional risk reduction
- Support of campus interdependencies
- Enhance situational awareness
- Improve decision making
- Improve information sharing
  - Expand reach and access for communications efforts
- Provide the foundation for intra-campus and regional campus collaboration; and
- Support training and practice exercises
Gap is Widening

Current level to academic continuity risk management

Increasing Continuity Gap

Threats

Vulnerabilities

Technology-based (Network outage)

Geopolitical

Terrorism

Weather

Health pandemics
**Disaster Recovery**

Technology Driven Response (Voice & Data Impact)
- Network Failure
- Physical Loss of Systems
- Sabotage
- Virus
- Data Confidentiality Compromised
- Etc.

**Emergency Response**

Event Driven Response (Site Impact)
- Contamination
- Bomb-threat
- Fire
- Earthquake
- Wind
- Etc.

**Continuity Planning**

Time Driven Response (Business, Image, $$ Impact)
- Infrastructure Disruptions
- Business Unit Disruptions
- Administrative Unit Disruptions
- Academic Unit Disruptions
- Supply Chain Disruptions
- Etc.

Depending on event, you can have integration of all plans.
A New Proactive View

The old paradigm was Experience and React
Things happen, We react
The institution is impacted

The new way of thinking Anticipate and Adjust
Things still happen, but their effect is mitigate
Linear Approach vs. Decentralized Model

Business Continuity Planning
Well researched and broadly practiced concept in business enterprises.

Academic Continuity Planning
Extends this concept to the education system
- Teaching, Research, Public Service, etc.
Focus is on integrating Resources, Processes, and Information into the operational design of higher education.
Continuity Planning
Why, When, What, Who, and How?

Best Practice Guidelines and Mandates

- Campus Security Enhancement Acts
- U.S. Department of Education Sector Specific Plan
- Disaster Mitigation Act & Stafford Act
- Federal Continuity Directive 1 & 2
- FEMA Continuity Guidance Circular on Continuity Guidance for Non-Federal Entities
- Homeland Security Presidential Directives
- National Incident Management System
- National Fire Protection Association 1600
- International Organization for Standardization (22301, 27001/2)
- National Institute of Standards and Technology (800-34)
Continuity Planning
Why, When, What, Who, and How?

Before...
Continuity Planning
Why, When, What, Who, and How?

Objectives
Plan for...
Expected & Unexpected Events

Goal
Mitigate Impact
Preserve Acceptable Level of Operations

Scope
Restoration
Recovery
Resumption
Continuity Planning
Why, When, What, Who, and How?

- Univ. Risk Mgmt.
- CIO
- Library
- Constituent
- UI Ready!
- Relations
- Service
- Steering Committee
- Mgmt. & Planning Teams
- Delivery

University of Illinois
- Urbana-Champaign
- Springfield
- Chicago

Cultivating Integration – University of Illinois
Continuity Planning
Why, When, What, Who, and How?

- **STRATEGIC PLANNING**
  - Assess
  - Functional-Level Recovery on Campus
  - Top Down Approach
  - Measure & Improve
  - Bottom Up Approach

- **Understand Campus-Level Recovery Priorities**
  - Analyze Action Items (countermeasures)
  - Implement Mitigation Programs

- **CRITICALITY SCREENING**
  - High Priority
  - Departmental Level Self Assessments

Ongoing effort to:
- Learn
- Evaluate
- Refine
- Evolve
...the process

*President / Vice Presidents*  *Chancellor*  *Provost*

*Vice Chancellors*  *Deans*
Continuity Planning
Why, When, What, Who, and How?

Initiate the Planning Process

Identify Functional Requirements

Design & Develop Recovery Strategies

Implement the Plan

Test, Train, & Exercise

Distribute, Maintain, & Update the Plan

ACADEMIC CONTINUITY PLANNING
Continuity Planning
Why, When, What, Who, and How?

PHASE 1: Administrative Units
- 78 plans
- 216 Table Top Exercise (TTX) participants

PHASE 2: Academic Units
- 106 plans
- 226 TTX participants

PHASE 3: Campus Plan
- Campus Continuity of Operations (COOP) plan
- 4 plans
- 57 TTX participants

PHASE 4: Regional Campuses
- 75 plans
- 46 TTX participants

PHASE 5: Hospital System
Our Integrated DNA

Experience
Continuous Improvement
Resilience Integration
Metrics & Measures
Emergency & Crisis Planning
Solutions Action Items
Supporting Processes

Optimization
Operations Criteria
UI Ready
Readiness Resources
Operations Support

Availability
Governance
Critical Systems
Interdependencies
Security
Information
Technology
Faculty and Staff
Equipment
Facilities & Infrastructure
PATH TO UI READY
Key Tenets

**Designed as an ongoing process (not simply a project):**

Best practices should be designed into all processes and systems.

**Information is the cornerstone of readiness/preparedness and response:**

- Intelligence for real-time decision-making
- Supports automation of recovery response
- Foundation for metrics & analytics
- Information sharing across multiple units and campuses
Path to University of Illinois Ready

A common continuity tool creates opportunities for dialog

Dialog creates opportunities for knowledge transfer

Knowledge transfer creates opportunities for program alignment and support
Lessons Learned

Agreed to emulate methodology & approach
  Policy and framework

Agreed to use standardized continuity planning vocabulary

Agreed to use common criteria for criticality classification
  Tolerance for downtime and data loss

Agreed to share technical expertise
  e.g., shibboleth integration

Agreed to monthly meetings and mailing lists

Agreed to share system representation
  UIC as functional rep, Urbana as board member
Additional Challenges

Embed these responses into our University system model

- Within services, systems, personnel, information, processes, etc.
- Understanding of threats & risks endangering our system
- Collaborative preparedness & response
- Self-healing to disruption where possible
- Loss of life and property damage is prevented or minimized
Web-Based System ("Turbo-Tax" for continuity planning)

Adopted by all three campuses of the University of Illinois

Step by step guide to create a Continuity Plans that identifies:

- Critical Functions
- Information and Strategies
- Action Items

Open Source Enterprise Software

- Functional Buttons
- Pull-Down Menus
- Free-Form Entry Options
- Hosted Application

Offered by Kuali Foundation

- Not-For-Profit University Consortium

University of Illinois is a founding partner

Seat/Vote on Project Board
Kuali Ready is a new breed of service delivered “Above the Campus”

- Software-as-a-Service
- Delivered by hosting institutions to subscribing institutions through the Kuali Foundation
- Making it “consortium source”
How does Kuali Ready make continuity planning work for higher education?

- Focus on the needs of higher education
- Focus on actions, not plans
- Focus on usability
Kuali Planning & Analysis

Standardized methodology enabling data consistency

200+ expertly designed questions built into 7 interfaces

Intelligent branching logic allows users to answer only the questions that are relevant to their operations

Reporting flexibility provides standard and customized reports
Mike Corn
Phone: (217) 265-0588
Email: mcorn@illinois.edu

David Ibrahim
Phone: (312) 355-1737
Email: dibrah1@uic.edu

Jerry Lockwood
Phone: (312) 413-3611
Email: jerryl@uic.edu
Thank You!

Questions?

Integrated Academic Continuity Planning