



CSHEMA INNOVATION AWARD APPLICATION

Institution: NC State University

Department: Emergency Management and Mission Continuity (EMMC)

Program Representatives:

Todd Becker, Emergency Manager

Joe Darkoh, Mission Continuity and IT Manager

Kristen Boggs, Emergency Services Manager

Amy Orders, Managing Director

Program endorsement:

Amy Orders, Managing Director EMMC (aborders@ncsu.edu)

David Rainer, Associate Vice Chancellor, Environmental Health and Public Safety

Primary Category

Process Improvement: Reimagining Business Continuity into Emergency Management and Mission Continuity – Comprehensive emergency response, recovery and continuity planning

Secondary Category*

Resource Enhancement: Reimagining Business Continuity into Emergency Management and Mission Continuity – Comprehensive emergency response, recovery and continuity planning

*This program produced substantial resource enhancements, including fiscal and human resource reduction, with increased customer participation, data management and sustainable programming while utilizing existing campus resources and infrastructure.

Project Overview

In 2017, NC State's Business Continuity Department was eliminated and a new department of Emergency Management and Mission Continuity (EMMC) established. The goal of this restructuring was to improve institutional emergency planning and continuity by expanding emergency planning outreach and to fortify university preparedness and response. EMMC oversees risk assessment, plan development, testing and plan auditing.

While the impact of an emergency or disruption is unpredictable, planning for such conditions can largely mitigate the effects to our facilities' operations and allow us to continue our fulfillment of the university's mission. It is crucial NC State respond to a disaster or a major disruption of operations in a manner that ensures vital and essential functions continue with minimum interference. While the University's Emergency Operations Plan acts as the master planning document, comprehensive emergency specific, department-specific plans are necessary to gain organizational detail of critical processes, people, and property to provide for adequate preparation. Further, these plans are required documents for outside disaster management and support agencies -local, state, federal -to demonstrate the university's mitigation efforts ahead of unplanned events.

Business Continuity Plans existed for 120 critical services, departments and academic units. These plans provided for the continuance of critical processes in the event an emergency thwarts facility operations, access to information technology resources or infrastructure, and/or the university experiences a long term power-outage.

In coordination with EMMC, these plans -now referred to as Pack Ready Plans -will expand to include a comprehensive risk assessment of possible impacts to NC State University. Potential risks identified are used to develop unit-specific plans to assist the university fulfill its mission and to define procedures in place that reduce exposure to these vulnerabilities/threats, as well as evaluate their probability of occurrence.

Completed plans are subject to annual review and testing, and require signature by the Department Head/Director, Vice Chancellor, Vice Provost, or Dean via DocuSign. Further, EMMC coordinates plan testing and audit exercises, held bi-annually or more frequently if appropriate. Delinquent plans or exercise schedules are escalated to the Emergency Planning and Mission Continuity Steering Committee for discussion.

Scope of project and Costs

Prior to 2017, the Business Continuity Department used Sungard's LDRPS system (Living Disaster, Recovery Planning Software), at a cost of ~\$15,000 annually. This third party software required additional IT resources, platform support, dedicated IT personnel and user interface development with help desk functionality.

With the development of Pack Plans, NC State EMMC embraced existing campus IT infrastructure at no additional cost. All plans were developed and housed in Google Suite products – Google Docs, Google Sheets, Google Photos, Google Drive and Google Team Drive.

Using existing infrastructure eliminated the need for additional enterprise software and user login/passwords. Access to plans is directly linked to the NC State user's UNITY Login and Password via Shibboleth (Security wrapping).

In a reboot planning cycle, existing LDRPS plans were cross-walked to Pack Plan Chapters in Google Team Drive. The following table guides the crosswalk FROM LDRPS BCP documentation TO PACK Ready Plan chapters.

	FROM	TO
CH. 1 Mitigation and Preparedness Plan	Section 1: Plan Overview - Strategies Used	Pre Incident Strategies
CH. 2 Evacuation and Shelter In Place	See files added by Jon	Build a single PDF
CH. 3 Communications	Section 6: NCSU Employee Call List	See PACK Employee Emergency Call List
	Section 10: NCSU Critical Telephone Numbers	Critical Telephone Numbers
	Section 8: NCSU Department Dependencies	Critical Campus Stakeholders (University Departments)
	Section 11: NCSU Critical Vendor Information	Critical Vendor Information
CH. 4 Emergency Action and Relocation	NCSU Cover Page - Order of Succession	Order of Succession
	Section 1: Plan Overview - Activation Procedure and Activation Criteria	Plan Activation
	Section 4 - Continuity Planning Teams	Departmental Management Team
	Section 9: NCSU Primary and Alternate Worksites	Primary and Alternate Worksites
	Section 9a: Alternate Worksite Recovery Planning Resources	Alternate Worksite Resource Needs
CH. 5 Mission Continuity	Section 7: Critical Functions and Workaround Procedures	Critical Services and Workaround Procedures
CH. 6 Training	NA	Fire Drills, Shelter in Place, Plan Audits and Tabletop exercises

Observable and quantifiable changes in behavior

Beginning a planning discussion with the risk assessment exercise explained the diversity of emergency situations that can impact campus operations. Identifying specific risks inherent to people, services, buildings and infrastructure personalized the planning process for participants.

This risk assessment outlines potential emergencies that may be encountered by an individual campus unit and should be addressed when developing criteria for planning for specific events. Review each of the criteria and evaluate the criteria as the incident was to impact your area of responsibility. The calculated scores will help identify which events have the greatest impact and require more planning to prepare for the incident.

Due to the ease of access and master repository of document approach, plans are easily revised and used in meetings for discussions. The documents are secured but accessible virtually via Google Drive and Google Docs, via link access on the EMMC webpage.

Stakeholder participation in plan development and review has been highly engaged. Removing past software, which was deemed non-customer friendly, has jumpstarted conversations on planning. A snapshot of participation:

2017 in Review

Activity	Completed	Status
PACK Planning Effort		
Risk Assessments	57	Updates completed
Plan Audits	53	Updates completed
Plan Reorganization	9	Ongoing updates
Plans Ready for Signature	18	
PACK Plans		
Plans for Critical Units	36	Updates completed
Plans for Non-Critical Units	28	Ongoing updates
Plans for IT Units	16	Ongoing updates
Plans for Colleges (Identified)	29	Ongoing updates
New Plans added	10	
Exercises		
PACK Planning Tabletop exercises	8	Ongoing
Operation Zephyr/ESF Tabletop	1	October 2017
Executive Officers Tabletop	1	March 2017
EMI Virtual Tabletop (FEMA Supported)	1	November 2017
Full Scale Drill - Active Shooter (Police)	1	Spring 2017

Improving service delivery method in response to a campus need

This new Pack Plan effort was rolled out in three phases, giving participants time to work on each phases' deliverables. These phases span year one and year two of the planning cycle, with year two focusing on plan audits and exercises.

Phase One

Risk Assessment exercise and immediate document review for unplanned events, that includes personnel call tree, leadership succession planning, shelter in place and evacuation.

- Risk Assessment review in person with first meeting. Include whole cohort to first meeting.

- Homework – communication tree revision, leadership succession planning; shelter in place information, postings and updates
- One month to review and update, with reminder at one month until quarterly review cycles are established.
- Date consideration for end of year tabletops (one hour, hosted in your department)
- 30 day follow-up meeting with cohort (from first meeting)

Phase two

Risk assessment cross-walk to former continuity plans (pulling the data), then meeting with stakeholders to complete open items; provide planning and prompting questions to formulate planning information - 6 month revisit for compilation of information review from existing plan content shifted into new template.

Phase three

Tabletops and community meetings to educate and develop specific planning; scenarios for departments to discuss with staff and hone existing planning information.

Flexibility of the program to be adapted at other institutions

Pack Plans do not require enterprise software to develop and house; Google Suite tools and access to Google Team Drive is necessary. All documents are mobile friendly and accessible online at all times. Security of the information is inherent to the security provided by IT infrastructure.

The overall program is predicated on best practices of emergency management, emergency preparedness, emergency planning and response, business continuity, and risk management. Staying abreast of these industry best practices will inform newer options for emergency management and mission continuity programming.

Organization and presentation of material for evaluation

For the purposes of viewing Pack Planning templates, documents and guidance documents, each of the following is linked via Google Drive. This emulates the ease and convenience of plan accessibility by stakeholders.

Pack Plan Templates:

[Chapter 1](#)

[Chapter 2](#)

[Chapter 3](#)

[Chapter 4](#)

[Chapter 5](#)

[Chapter 6](#)

[Plan Appendix – Emergency Information](#)

[Risk Assessment Template](#)

[Emergency Call List Template](#)