

Performance Audit Report

Emergency Preparedness at Mayville State University

Report No. NP-003-16a

October 18, 2017

JOSHUA C. GALLION
STATE AUDITOR

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Transmittal Letter

October 18, 2017

State Board of Higher Education
Members of the North Dakota Legislative Assembly

We are pleased to submit this performance audit. The subject matter of this audit included certain aspects of emergency operations at Mayville State University.

We conducted this audit under the authority granted within North Dakota Century Code Section 54-10-30. Included in the report are the audit scope and objectives, findings and recommendations, and management responses.

The in-charge auditor for this audit was Alec Grande, CPA. Craig Hashbarger, CPA, CIA, CFE was the audit manager. Inquiries or comments relating to this audit may be directed to the audit manager by calling (701) 239-7274. We wish to express our appreciation to the staff and management of Mayville State University for the courtesy, cooperation, and assistance they provided to us during this audit.

Respectfully Submitted,

/S/

Joshua C. Gallion
State Auditor

Executive Summary

Introduction

Emergency operations and continuity of operations plans are essential elements of an institution's security policy. The purpose of our audit was to determine the nature and extent of Mayville State University's policies and procedures regarding emergency preparedness. Following is a description of the objective and an overview of the findings.

Objective

- Does Mayville State University have an effective strategy regarding the development and implementation of an emergency operations plan?

We determined Mayville State University does not have an effective strategy regarding the development and implementation of an EOP.

- Mayville State University lacks a collaborative planning team. (pages 7-8)
- Mayville State University lacks a formal emergency operations risk assessment process. (page 9)
- Mayville State University lacks documented goals and objectives regarding emergency operations. (page 10)
- Mayville State University lacks a formalized emergency operations plan. (page 11)
- Mayville State University lacks formal emergency training and plan exercise requirements (pages 11-12)
- Mayville State University lacks a process for periodically reviewing and revising the plan (page 12-13)
- Mayville State University lacks a continuity of operations plan. (pages 13-14)

Background Information

Introduction

Institutions of higher learning, as with any other public or private entity, are at risk of being impacted by a variety of emergencies, ranging from natural disasters such as floods, blizzards and tornadoes, to fires, active shooter incidents, and pandemics. These disasters can, and do, result in injury and loss of life, as well as damage to infrastructure and disruptions in essential functions.

Emergency Operations Plans

The State Board of Higher Education, in recognition of the importance of North Dakota University System's (NDUS) emergency preparedness, adopted Policy 906 (SBHE 906) effective May 16, 2012. SBHE 906 establishes the requirement for all NDUS institutions to "develop and implement comprehensive Emergency Management Plans." SBHE 906 defines an emergency management plan as "a comprehensive, integrated plan that addresses emergency preparedness, emergency management, disaster and emergency response and recovery, mitigation, and continuity of operations."

The Federal Emergency Management Agency (FEMA) states that emergency preparedness "establishes organizational readiness to minimize the adverse impact of these events by means of active responses to protect the health and safety of individuals and the integrity and functioning of physical structures." (AEMRC - Fundamentals of Emergency Management chapter 9). In other words, the purpose of an emergency operations plan is to save lives, prevent or mitigate injury, and prevent or reduce damage to critical infrastructure. An emergency operations plan also facilitates timely recovery and restoration of the institution's functions.

The federal government recognizes the importance of robust emergency operations plans in the nation's colleges and universities. Accordingly, in 2013 the US Department of Education, in cooperation with six federal agencies, developed a Guide for Developing High Quality Emergency Operations Plans for Institutions of Higher Education (IHE Guide). The IHE Guide recognizes that "postsecondary institutions are entrusted to provide a safe and healthy learning environment for students, faculty, and staff who live, work and study on campus."

The term "emergency management plan" is used by SBHE 906, and "emergency operations plan" is used by FEMA and the IHE guide. Both terms can be used interchangeably for purposes of this report, but for the sake of clarity we will use the term "emergency operations plan," or "EOP."

Continuity of Operations Plans

In addition to risks of injury, loss of life, and property damage, emergencies can also cause an interruption of the organization's essential functions. SBHE 906 defines Continuity of Operations as "a plan to assure the capability exists to continue essential agency or institution functions across a wide range of potential disasters or emergencies." In other words, a Continuity of Operations Plan (COOP) is a plan in which the institution identifies its essential functions and identifies the means to carry out those functions if an emergency event occurs.

In 2009, FEMA, in coordination with its non-federal partners, issued Continuity Guidance Circular 1 (CGC 1), *Continuity Guidance for Non-Federal Entities*. CGC 1 states that “continuity planning facilitates the performance of essential functions during...emergencies or other situations that may disrupt normal operations.”

While a COOP is an important component of an EOP, the mission, goals and objectives of a COOP differ from those of an EOP. The EOP addresses all aspects of Prevention, Protection, Mitigation, Response and Recovery, while a COOP focuses on continuing to carry out essential functions of the entity and maintaining them during and after an incident.

For example, if there were a fire in Mayville State University's Science building, elements covered by the EOP might include detailed evacuation instructions, emergency call information, and other information necessary to prevent and mitigate loss of life, injury and property damage. The COOP, on the other hand, might identify instruction of students as an essential function ordinarily performed in the Science building. It might also identify alternate locations in which classes may continue to be held until either the building is restored to working condition, or more permanent alternate facilities can be located.

Objectives, Scope and Methodology

Purpose and Authority

This performance audit of Mayville State University's (MaSU) emergency operations plan has been conducted by the Office of the State Auditor pursuant to authority within North Dakota Century Code ("NDCC") Chapter 54-10.

Performance audits are defined as engagements that provide assurance or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria, such as specific requirements, measures, or defined business practices. Performance audits provide objective analysis so management and those charged with governance and oversight can use the information to improve performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability. The purpose of this report is to provide analysis, findings and recommendations with respect to the audit objectives.

Objective of the Audit

The objective of our audit was to answer the following question:

- Does Mayville State University have an effective strategy regarding the development and implementation of an emergency operations plan?

Audit Scope

We conducted this performance audit in accordance with *Generally Accepted Government Auditing Standards*. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We primarily used two sources of criteria for developing our findings and conclusions.

SBHE 906, effective May 16, 2012 was implemented with the intention of "meeting federal and state emergency preparedness requirements." SBHE Policy 906 identifies several requirements for all NDUS institutions with respect to the development and implementation emergency operations plans, including specific elements required to be included in each plan.

The IHE Guide, developed in 2013 in cooperation with various federal agencies, is a source of "good practices and matters to consider for planning and implementation purposes." It is not considered to be a source of laws or regulations; rather, it is a source of overarching principles, best practices and implementation guidance to enable institutions of higher learning to develop and implement effective emergency operations plans.

The subject matter for this objective consisted primarily of the Mayville State University emergency preparedness policies and procedures in place as of October 2016.

Relevant Laws, Policies, Contracts and Agreements

The most significant applicable policy relating to emergency preparedness is SBHE Policy 906.

SBHE Policy 906.1 states “The Chancellor and each institution president are responsible for ensuring that the NDUS Office and each institution develop and implement comprehensive Emergency Management Plan, including emergency preparedness and continuity of operations, in order to meet federal and state requirements and NDUS and institution needs.”

While federal law is not specifically tested in the scope of this audit, the IHE Guide incorporates several federal laws in its guidance. The most significant of these is the *Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act* (better known as the Clery Act). The Clery Act includes institutional notification responsibilities, focusing on emergency notification and timely warning requirements. It also includes requirements for reporting crime statistics and security-related policies, as well as performing a minimum number of tests of the institution’s “emergency response and evacuation procedures.”

Audit Results

Statement of Objective and Conclusion

The objective of our audit was to answer the following question:

- Does Mayville State University have an effective strategy regarding the development and implementation of an emergency operations plan?

We determined MaSU does not have an effective strategy regarding the development and implementation of an EOP.

Audit Methodologies

To accomplish our objective, we conducted inquiries of members of management responsible and/or knowledgeable about emergency operations and security at MaSU. We also reviewed documented emergency operations policies and procedures, and meeting minutes of the president's cabinet, where applicable.

Findings, Recommendations, and Responses

Collaborative planning team

The IHE Guide recommends the formation of a “collaborative planning team” for developing and implementing the EOP. The IHE Guide recommends the team include representatives from throughout the institution of higher education (IHE), as well as student and faculty representatives as applicable. This helps to ensure the interests of all significant stakeholders are represented. The IHE Guide also suggests the planning team should include first responders, local emergency managers or others who “have roles and responsibilities in IHE emergency management before, during, and after an incident.”

SBHE Policy includes similar requirements of its institutions. SBHE 906.4 requires EOPs to include “establishment of an institution emergency management task force or committee, chaired by the institution’s chief emergency officer.” SBHE 906.4 also requires the EOP include “a mechanism for coordinating with the local emergency managers and local responders for the jurisdiction in which an institution is located.”

Furthermore, the IHE Guide states that “Each person involved in the development and refinement of the plan should know his or her role and responsibilities in the planning process.” These roles ensure that team objectives are met and members are held accountable. SBHE 906 requires “identification of and assignment of responsibilities to officers and employees in different units and various levels within the institution,” as well as “clear and complete statements of assigned responsibilities.”

Based on our audit procedures, specific safety and security issues are addressed occasionally during MaSU presidential cabinet meetings. The presidential cabinet consists of the university’s president, vice presidents, athletic director, and executive foundation director. However, the cabinet does not include the university’s security director, whom management has designated the “chief emergency officer.” Furthermore, MaSU does not have formal documentation of assigned responsibilities as required by SBHE 906 and the IHE Guide.

As a result, MaSU has not developed or implemented a comprehensive EOP, which may leave the institution vulnerable to increased human injury and/or property damage if an emergency event were to occur.

Recommendation 1-1

We recommend Mayville State University develop a collaborative planning team for the development and implementation of Mayville State University’s emergency operations plan. The team should be chaired by the institution’s “chief emergency officer” and include an appropriate combination of individuals both within and outside the institution as required by SBHE 906 as well as recommended by the IHE Guide. Additionally, we recommend Mayville State University develop clearly defined roles and responsibilities for members of the collaborative planning team.

MaSU Response:

Agree. Mayville State University will develop an internal and external team that will represent the campus for Emergency Preparedness. Roles and responsibilities of team members will be assigned (if not already identified). The team will be developed during fall semester, no later than Nov 1st, 2017.

Proposed Team Members include:

- Business Affairs
 - Vice President
 - Director Facilities (Chief Emergency Officer)
 - Director Physical Plant

- Student Affairs
 - Director Student Life
 - Student Senate Representative

- Academic Affairs
 - Faculty Representative
 - Chief Information Officer
 - Director Headstart/Child Development Programs
 - Director Library Services

- Athletics
 - Athletic Director

- Institutional Effectiveness
 - Executive Director

- Foundation
 - Executive Director Foundation

- External
 - Traill County Sheriff's Office
 - Mayville Fire Department
 - Sanford Medical Center
 - West Traill Ambulance
 - Power Company

Risk Assessment

Upon assembly of the collaborative planning team, SBHE policies and the IHE Guide recommend a formal risk assessment of potential emergency events. This facilitates an appropriately tailored emergency operations plan which allocates each institution's limited resources to the highest risk threats.

SBHE 906.5 states, in part, that "[emergency operations plans] may also include...a threat analysis and risk assessment of potential natural, technological and adversarial hazards which may impact an institution.

According to the IHE Guide, the emergency operations planning team "first needs to understand the threats and hazards faced by the IHE and surrounding community." In order to develop an appropriately tailored emergency operations plan, management should use its internal expertise, as well as that of outside experts as appropriate, to identify a range of potential threats. Upon identifying those potential threats, management should evaluate the risk posed by each threat or hazard. According to the IHE guide, management should consider the probability a threat or hazard may occur, severity of the impact, time to warn students and other stakeholders, and how long the threat may last. Such assessments may take many forms and involve a wide variety of tools and methods.

Because the nature of certain risks may change over time, the IHE Guide states risk assessments should not only occur upon initial development of the plan, but also on an ongoing basis to "inform updates and revisions to the plan."

Based on the results of our testing, MaSU does not currently have a formal risk assessment process.

Recommendation 1-2

We recommend Mayville State University implement a formal risk assessment process to identify and evaluate potential emergency events.

MaSU Response:

Agree. Mayville State University currently has an Emergencies webpage which has contact information, Emergency Policies and Procedures, Emergency Fact Sheet and links to the Emergency Notification System. We will review the already identified risks and add newly identified risks. The risk assessment process will begin after the team is created and we will setup monthly meetings to get all the risks identified. Our goal for identifying all risks will be Dec 15th, 2017.

Goals and Objectives

The IHE Guide recommends the planning team develop goals and objectives for each significant emergency threat and hazard based on the formal risk assessment. The IHE Guide recommends development of at least three goals for each applicable threat and hazard, indicating the desired outcome before, during, and after the emergency event. The goals should outline “what personnel and other resources are supposed to achieve.”

Each identified goal should include one or more objective(s), which, per the IHE Guide, are “specific, measurable actions that are necessary to achieve the goals.”

The following is an example identified in the IHE Guide of possible goals for an IHE with respect to the threat of fire. These are only examples and are not intended to serve as a substitute for the judgment of the collaborative planning team.:

- Hazard Goal Example 1 (*before*): Prevent a fire from occurring in IHE-governed student housing facilities.
- Hazard Goal Example 2 (*during*): Protect all persons from injury and property from damage by the fire.
- Hazard Goal Example 3 (*after*): Provide necessary medical attention to those in need.

The IHE guide provided the following example objectives related to these goals:

- Objective 1.1 (*before*): Provide fire prevention training to all students and resident advisors who use combustible materials or equipment.
- Objective 2.1 (*during*): Evacuate all persons from the building immediately.
- Objective 3.1 (*after*): Immediately notify fire department and EMS personnel of any fire in a student housing facility.

Based on our testing, management has not yet developed formal goals and objectives with respect to emergency threats or hazards.

Recommendation 1-3

We recommend Mayville State University establish formalized goals and objectives for handling threats and hazards to prepare for emergency situations.

MaSU Response:

Agree. Currently each risk already identified Emergency situation has an explanation of what faculty, students or staff should do in the event of that emergency. These will be reviewed and updated by the team during the process of recommendation #2, so our goal will be Dec 15th, 2017.

Develop Emergency Operations Plan

The IHE Guide states that, upon identification of the EOP goals and objectives, the planning team should “develop courses of action for accomplishing each of the objectives identified.” In other words, the team should identify and document the specific action items necessary to accomplish the previously determined goals and objectives.

SBHE 906 requires emergency operations to include “Procedures for shelter-in-place, evacuations, bomb threats, fires and explosions, chemical spills, tornadoes, floods, winter storms or other natural disasters, etc.” The extent to which these individual threats and hazards, as well as other potential emergencies, are addressed within the EOP should be based upon the planning team’s individual risk assessment.

SBHE 906 also requires roles and responsibilities be identified within the plan, “so that the institution has a system in place that assigns and trains employees within institutional units as necessary to develop unit or building specific responses and helps communicate institution and unit requirements.”

Based on our testing, MaSU does have documented procedures available on its web site for several potential emergencies. However, these are currently stand-alone procedures and not a component of a comprehensive EOP developed in accordance with SBHE policy and the IHE Guide. Furthermore, the documented procedures do not include identification of specified roles and responsibilities necessary to carry out the emergency procedures.

Thus, there is a risk that MaSU may be under-prepared for certain types of high-risk threats and hazards.

Recommendation 1-4

We recommend Mayville State University develop and incorporate its hazard-specific emergency procedures into a comprehensive EOP. We further recommend Mayville State University identify and document applicable roles and responsibilities for personnel necessary to carry out its emergency procedures.

MaSU Response:

Agree. With the assistance of the newly identified planning team, a complete EOP plan will be developed over the 2017-18 fiscal year. We will use the already identified risks and incorporate the newly identified ones, all while including roles and responsibilities of the identified parties for each emergency situation. The goal for a complete EOP will be June 30, 2018.

Implement the Plan

Both SBHE 906 and the IHE Guide provide guidelines for implementing the plan.

SBHE 906.4 requires each EOP to include “Minimum training requirements...and assignment of training responsibilities. It also, requires the EOP to include “minimum exercise requirements and assignment of exercise responsibilities.” The IHE Guide also emphasizes the importance of both training and exercises.

Training, as defined by the IHE Guide, involves the following: 1) Hold at least an annual meeting “to educate all parties on the plan;” 2) Visit evacuation sites; 3) Distribute relevant documents regarding the plan to involved parties; 4) Post key information (such as evacuation routes and shelter-in-place locations) throughout building(s); 5) Familiarize the campus community with the EOP and community partners; and 6) Train campus community members on necessary skills to enable them to carry out the EOP.

Exercising the EOP is separate from training. The IHE Guide defines “exercises” as follows: “Exercises provide opportunities to practice with community partners including first responders and local emergency management as well as to identify gaps and weaknesses in the plan.” In other words, exercising the plan involves practicing the implementation of the plan under various emergency scenarios. Exercises typically include some combination of tabletop exercises, drills, functional exercises, and full-scale exercises.

Based on our testing, MaSU does periodically conduct drills and exercises; however, MaSU does not have formally documented training requirements or exercise requirements as part of its EOP. As a result, individuals with roles and responsibilities for carrying out the plan may not be fully prepared in the event of an actual emergency.

Recommendation 1-5

We recommend Mayville State University develop and incorporate appropriate training requirements and appropriate plan exercise requirements into its comprehensive EOP.

MaSU Response:

Agree. As our risks are identified and the EOP is developed we will address what training requirements are needed and how often we will perform them. The deadline for this is June 30th, 2018.

Maintain the Plan

As with any statement of policy or procedures, the EOP should include a process for reviewing, revising, and maintaining the plan. As the planning team learns new information and insight, or the risk related to certain events increases or decreases, the plan should be modified accordingly.

SBHE 906 includes several requirements related to maintaining, reviewing and updating the EOP. SBHE 906.4 requires each plan to include “a process to review and update the Plan as necessary.” After an actual incident, SBHE 906.4 requires “after action meetings...and development of plans to address identified issues or shortfalls.”

The IHE Guide suggests that each part of the plan should be reviewed and revised at least once every two years. It suggests that an IHE may find it useful to review specific portions of the plan rather than reviewing the entire plan all at once. It also recommends each institution consider reviewing and updating the plan after certain events such as actual emergencies, formal exercises, changes in key personnel, or changes in threats or hazards.

Based on our testing, MaSU does not currently have a formal process for periodically reviewing and revising its emergency procedures.

Recommendation 1-6

We recommend Mayville State University implement policies for periodically reviewing and revising the EOP. The policy for reviewing and revising the EOP should provide for updates arising from actual emergencies, drills or exercises (and subsequent after-action meetings). It also should ensure all parts of the plan are reviewed at least every two years.

MaSU Response:

Agree. The planning team will meet monthly at first to get the process going and once we have a complete EOP we will change our meetings to quarterly to assess all risks that happened over the past 3-month period, update any procedures from what we learned and add any new risks if they have been identified. This timeline is ongoing through the first year of implementation and going forward.

Continuity of Operations Plan (COOP)

In addition to risks of injury, loss of life, and property damage, emergencies can also cause an interruption of the organization's essential functions. Because of this, a Continuity of Operations Plan (COOP) is a vital component of an EOP. SBHE 906 defines Continuity of Operations as "a plan to assure the capability exists to continue essential agency or institution functions across a wide range of potential disasters or emergencies." In other words, a Continuity of Operations Plan is a plan in which the institution identifies its essential functions and identifies the means to carry out those functions if an emergency event occurs.

SBHE 906.1 requires each institution to have a continuity of operations plan as part of its comprehensive EOP. SBHE 906.4 requires institutional EOPs to include "identification of critical infrastructure, key assets and *essential functions*." (emphasis added)

The IHE Guide provides some examples of "essential functions" applicable in a higher education setting. These may include: business services such as payroll or purchasing; facilities maintenance; safety and security; and continuity of instruction. The IHE Guide suggests that the COOP should be designed "so that it can be activated at any time and [the identified essential functions] sustained for up to 30 days."

Guidance Circular 1 (CGC 1) issued by FEMA outlines ten elements of a comprehensive COOP plan. CGC 1's elements include: identification of essential functions; orders of succession; delegations of authority; continuity facilities; continuity communications; essential records management; human resources; test, training and exercise program; devolution of control and direction; and reconstitution operations.

Based on our testing, MaSU currently does not have a COOP in place. As a result, in an emergency or other continuity event, there is an increased risk of extended interruption of some of MaSU's functions, or excess cost and effort needed to maintain such functions.

Recommendation 1-7

We recommend Mayville State University implement a comprehensive continuity of operations plan, incorporating the applicable requirements of SBHE 906 as well as the elements recommended in FEMA's Continuity Guidance Circular 1.

MaSU Response:

Agree. The development process of a Continuity of Operations Plan will encompass various departments across the University and will require coordination and collaboration to ensure the plan is thorough. Mayville State University will develop and incorporate a Continuity of Operations Plan into official Mayville State University policy by June 30th, 2018.