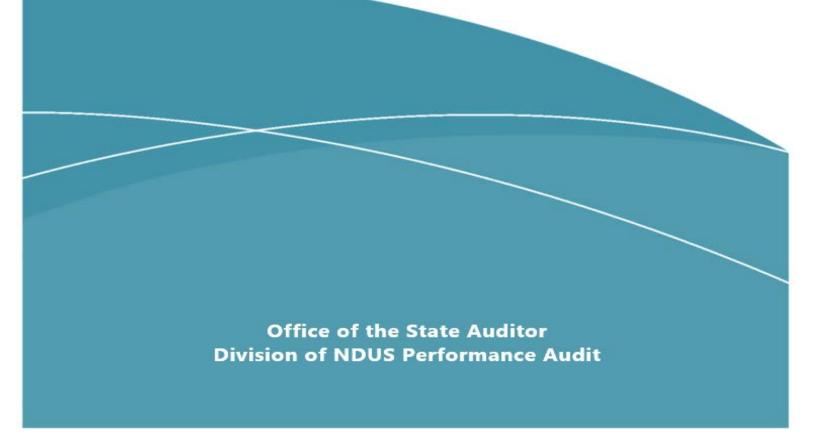
Performance Audit Report

Emergency Preparedness at Bismarck State College

Report No. NP-008-17

March 23, 2018

JOSHUA C. GALLION STATE AUDITOR



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Transmittal Letter

March 23, 2018

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 Bismarck State College.

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 Beverly Hirn. 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 Bismarck State College for the courtesy, cooperation, and assistance they provided to us during this audit.

Respectfully submitted,

/S/

Joshua C. Gallion State Auditor

BSC Emergency Preparedness Report Highlights

Emergency Operations Plan

While Bismarck State College has an emergency operations plan, there are opportunities to improve the design and implementation of the plan consistent with SBHE policy and applicable best practices.

- BSC does not conduct a full-scale risk assessment for identifying potential threats or hazards.
- BSC has not incorporated the elements of a base plan nor established formalized disaster-specific related goals and objectives for each significant identified threat or hazard.
- BSC has not fully documented the existing training requirements for its crisis management team members in its emergency operations plan.
- BSC has not fully documented drills/exercise requirements, other than fire drills, in its emergency operations plan.
- BSC's plan lacks a formal process for periodic review, approval and sign-off on revisions to the plan.

We recommend BSC update its emergency operations plan in accordance with SBHE policy and applicable best practices.

Continuity of Operations Plan

We determined BSC does not have a continuity of operations plan in place in accordance with SBHE policy and applicable best practices.

We recommend BSC develop and implement a continuity of operations plan.

Glossary

Base Plan – Document(s) that provide an overview of the institution's emergency response organization and policies and a general understanding of the institution's approach to emergency response and recovery.

Collaborative Planning Team – a team of representatives from across the IHE who have roles and responsibilities in IHE emergency management before, during, and after an incident.

Continuity of Operations Plan (COOP) – A plan to assure the capability exists to continue essential functions across a wide range of potential disasters or emergencies.

Emergency Operations Plan (EOP) – A comprehensive, integrated plan that addresses emergency preparedness, emergency management, and continuity of operations.

Exercises – A tool to prepare for and practice potential emergency situations in a risk-free environment.

Federal Emergency Management Agency (FEMA) – Federal agency whose stated mission is "helping people before, during, and after disasters."

Goals – Broad, general statements that indicate the desired outcome in response to the threat or hazard identified by planners in the risk assessment.

Institution of Higher Education (IHE) – College or University.

Objectives – Specific, measurable actions that are necessary to achieve the goals. Often, planners will need to identify multiple objectives in support of a single goal.

Risk Assessment – A process that collects information and assigns a value to risks for the purpose of informing priorities, developing or comparing courses of action, and informing decision making.

Training – Teaching that provides knowledge, skills and abilities needed to perform key tasks

Background Information

Introduction

Institutions of higher education, as with any other public or private entity, are at risk of being impacted by a variety of emergencies, including, but not limited to, floods, blizzards, tornadoes, fires, active shooter incidents, and pandemics. These incidents can, and do, result in injury and loss of life, as well as damage to infrastructure and business interruptions.

Emergency Operations Plans

The North Dakota 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." (Fundamentals of Emergency Management chapter 9 AEMRC). In other words, the purpose of an emergency management plan is to save lives, prevent or mitigate injury, and prevent or reduce damage to critical infrastructure. An emergency management 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 IHE Guide states an emergency operations plan is complete if it incorporates all courses of action to be accomplished for all selected threats and hazards; integrates the needs of the whole IHE community; provides a complete picture of what should happen, when, and at whose direction; estimates time for achieving objectives; identifies success criteria and a desired end state; and complies with applicable state and local requirements.

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

Institutions of higher learning 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, cyber-attacks, and pandemics ("continuity events"). In addition to risking lives, injury and/or property damage, these disasters can, and do, result in disruptions in teaching, research, public service and other business operations. According to FEMA's *Building a Disaster-Resistant University*, continuity events can harm institutions of higher learning by resulting in "faculty and student departures, decreases in research funding, and increases in insurance premiums."

In recognition of the risk posed by disruptions in organizations' essential functions, FEMA provides guidance for development and implementation of continuity of operations plans (COOPs). A COOP provides a framework to enable an organization to continue essential functions if an event at the organization or in the region threatens operations or requires the relocation of select personnel and functions. In 2009, FEMA, to provide guidance to non-federal entities in developing COOPs, issued Continuity Guidance Circular 1, *Continuity Guidance for Non-Federal Entities* (CGC 1).

CGC 1 outlines ten elements deemed necessary for an "effective continuity capability." Some of these ten elements include: identification of an organizations essential functions; continuity facilities; continuity communications; tests, training, and exercises (TT&E) and others. Identification of essential functions is the base of a continuity capability. CGC 1 states, "the primary goal of continuity is the continuation of essential functions."

While a COOP is an important component of an EOP, the mission, goals and objectives of a COOP may not necessarily be the same as 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. Moreover, not all emergencies will result in a continuity event, and not all continuity events are a result of an emergency.

Objectives, Scope and Methodology

Purpose and Authority

This performance audit of BSC's 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.

Objectives of the Audit

The objectives of our audit were to answer the following questions:

- To what extent is BSC's emergency operations plan designed and implemented in accordance with SBHE policy and applicable best practices?
- To what extent is BSC's continuity of operations plan designed and implemented in accordance with applicable best practices?

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 of 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 BSC's emergency preparedness policies and procedures in place as of August 31, 2017.

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 - Objective 1: Emergency Operations Plan

Statement of Objective and Conclusion

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

• To what extent is BSC's emergency operations plan designed and implemented in accordance with SBHE policy and applicable best practices?

We determined that while Bismarck State College has an emergency operations plan, there are opportunities to improve the design and implementation of the plan consistent with SBHE policy and applicable best practices.

Audit Methodologies

To accomplish our objective, we conducted inquiries of members of management responsible and/or knowledgeable about emergency operations and security at BSC. We also reviewed documented emergency operations policies and procedures, and meeting minutes of the crisis management team and loss control committee, if available.

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 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."

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."

BSC has a planning team which consists primarily of members of the Crisis Management Team and is led by Duane Johnson (Campus Safety and Security Manager). The planning team consists of a cross-section of various stakeholders of the college. The roles and responsibilities of the collaborative planning team are identified and assigned in the emergency operations plan.

Risk Assessment

Upon assembly of the collaborative planning team, SBHE policies and the IHE Guide recommend a formalized risk assessment of potential emergency events. This facilitates an appropriately tailored emergency operation 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."

BSC has not completed a formal documented risk assessment which identifies critical hazards/incidents which could impact the college and does not have a formal risk assessment process to identify and evaluate potential emergency events.

Recommendation 1-1

We recommend Bismarck State College implement a formal risk assessment process to periodically identify and evaluate potential threats and hazards. Furthermore, we recommend Bismarck State College incorporate the identified threats and hazards identified in the formal risk assessment into its EOP.

BSC Response:

Agree. BSC has identified potential threats and risks and the procedures for dealing with such threats on an informal basis in our Crisis Management Team documents. As these documents evolves into our EOP plan we will formalize our process and incorporate the existing information. As stated in Policy 906.8 all work in this area is subject to funding and staffing constraints especially considering past budget cuts and the potential for further funding reductions.

Develop Emergency Operations Plan- Base Plan

While there are numerous potential forms an EOP could take, both SBHE 906 and the IHE Guide specifically identify a "traditional" plan format, which includes a basic/base plan accompanied by functional and hazard-specific annexes.

SBHE 906 recommends institution EOPs include "A Base Plan that provides an overview of the institution's emergency response organization and policies, and a general understanding of the institution's approach to emergency response and recovery for all involved departments and offices".

The IHE Guide states that "The Basic Plan section of the higher ed EOP provides an overview of the IHE's approach to operations before, during, and after an emergency. This section addresses the overarching activities the IHE undertakes regardless of the function, threat, or hazard. The content in this section provides a solid foundation for the IHE's operations."

Based on our testing BSC has not incorporated the elements of a base plan into its emergency operations plan.

Recommendation 1-2

We recommend Bismarck State College develop and include a comprehensive base plan in its emergency operations plan as recommended by the IHE Guide and SBHE 906.

BSC Response:

Agree. BSC has identified potential threats and procedures for dealing with such threats in Crisis Management Team documents. We have not put together a comprehensive, integrated plan that addresses emergency preparedness, emergency management and continuity of operations. This work will be significant and as stated in Policy 906.8 all work in this area is subject to funding and staffing constraints especially considering past budget cuts and the potential for further funding reductions.

Goals and Objectives

The IHE Guide recommends the planning team develop goals and objectives for each significant emergency threat and hazard based on the formalized 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. Each identified goal should include one or more objective(s) which the IHE Guide define as "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.

BSC has not developed formalized goals and objectives with respect to emergency threats or hazards.

Recommendation 1-3

We recommend Bismarck State College establish formalized disaster-specific related goals and objectives for each significant emergency incident. Each significant incident should have at least three goals and the desired outcome before, during, and after the emergency event.

BSC Response:

Agree. Although BSC has established protocols for handling certain threats and emergencies (as outlined in our Crisis Management Team documents) our work does not include specific goals and objectives for handling emergency incidents. This work will require staff resources and once again Policy 906.8 indicates that funding and staffing constraints may affect our overall plan.

Implement the Emergency Operations Plan

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

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 familiarizing the campus community with the EOP and community partners; and training campus community members on necessary skills to enable them to carry out the EOP.

BSC conducts periodic training on emergency preparedness topics; furthermore, BSC's licensed law enforcement personnel are required to fulfill minimum training requirements specific to their profession. However, the EOP does not have documented minimum training requirements for emergency personnel with roles and responsibilities in developing or carrying out the EOP.

Recommendation 1-4

We recommend that Bismarck State College develop and implement formalized training requirements for emergency response personnel and incorporate them into its EOP in accordance with SBHE 906.

BSC Response:

Agree. BSC has undergone table-top training exercises including severe weather, active shooter, bomb threat and general emergency preparedness. We've also had extensive debriefing on a real-time lockdown incident. More recently BSC participated in the NDUS Cyber-Security training exercise. BSC will continue to develop and implement formalized training requirements for emergency response personnel and incorporate this into its EOP once it's developed again subject to Policy 906.8 funding constraints.

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.

BSC conducts and logs periodic fire drills as required by the Clery Act. Also, BSC was in the process of planning a lock down exercise when it experienced an actual bomb threat; BSC used that real-life incident as an opportunity to assess readiness for such an event and to learn from that experience. However, there are currently no minimum exercise requirements or assignment of exercise responsibilities identified in the EOP.

Recommendation 1-5

We recommend Bismarck State College identify minimum exercise requirements related to conducting and reviewing exercises in the EOP, in accordance with SBHE Policy 906.

BSC Response:

Agree. BSC will identify minimum exercise requirements for our Crisis Management Team and subsequent EOP again subject to Policy 906.8 funding constraints.

Maintain the Plan

As with any statement of policies and 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, not less frequently than every four years."

The IHE Guide suggests the collaborative planning team, in addition to developing the plan, review and maintain the plan. The IHE Guide further suggests each part of the plan should be reviewed and revised at least once every two years. It suggests that a [college] may find it useful to review specific portions of the plan rather than reviewing the entire plan all at once. It also recommends the college 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.

BSC currently does not have a formal review process for the EOP. The plan documents have no approver/reviewer signature or date, nor are changes tracked.

Recommendation 1-6

We recommend Bismarck State College implement formal policies for periodically reviewing and revising the EOP. The policy for reviewing the EOP should provide for updates arising from actual emergencies, drills, and exercises (and subsequent after-action meetings). In addition, we recommend BSC implement a record of changes to the EOP to track changes or updates to the EOP. The record of change should include; a change number, the date of the change, the name of the person who made the change, approver signature, and a summary of the change.

BSC Response:

Agree. The BSC Crisis Management Team meets periodically throughout the year to discuss the current state and next steps for continuous improvement for emergency preparedness. There will be a focus on what's learned from actual emergencies, drills and exercises that have been conducted. BSC will continue to exert effort toward implementing and tracking any changes that result from these efforts subject to Policy 906.8 funding constraints.

Audit Results – Objective 2: Continuity of Operations Plans

Statement of Objective and Conclusions

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

• To what extent is BSC's continuity of operations plan designed in accordance with applicable best practices?

We determined that BSC did not have an effective Continuity of Operations Plan (COOP) developed or implemented.

Audit Methodologies

To accomplish our objective, we inquired with management regarding whether a COOP was implemented at the college.

Finding, Recommendation, and Response

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 important 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 COOP is a plan in which the institution identifies its essential functions and identifies the means to carry out those functions if a continuity 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."

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

Recommendation 2-1

We recommend Bismarck State College implement a comprehensive continuity of operations plan.

BSC Response:

Agree. BSC recently did receive Continuity of Operations Plans from numerous departments across campus. We will need to review, coordinate and collaborate the responses to ensure the plans encompass all essential functions of the college subject to Policy 906.8 funding constraints.

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