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INTRODUCTION

A departmental Continuity of Operations Plans (COOP) is designed to provide guidance for sustaining departmental essential functions in response to an emergency incident, so that departments can effectively maintain operations through whatever challenges may come. The departmental COOP includes procedures for addressing three types of disruptions to operations that could result in a loss of services:

- Loss of a facility, or portion of a facility;
- Loss of personnel / reduction in workforce; and
- Equipment or utilities failure.

Any actions taken immediately before or during an incident should follow guidance from the department’s Emergency Action Plan. The COOP is intended to minimize the impact on departmental functionality during recovery operations.

This guide is intended for use in developing or strengthening your department’s COOP. Keep in mind that incidents may occur at any time, and while you are unable to control when or where they happen, you can manage or limit the impact to your department’s Essential Functions by maintaining an effective COOP. Involving stakeholders from your department is key to the development of a comprehensive COOP that is focused on restoring department Essential Functions. Departmental engagement in the planning, training, and exercising of the COOP can lead to an effective and efficient recovery.

Virginia Tech Emergency Management (VTEM) has worked to improve user experience within the Emergency Planning Portal. See Appendix A for step-by-step instructions on how COOP Coordinators can create, revise, and submit their departmental COOP through the online Departmental Emergency Planning dashboard. Per university policy 5615 and 1005, departments are to maintain a current and functioning COOP. Review and revisions, if necessary, to each department’s plan are required, at a minimum, on an annual basis. This should be completed no later than March 15th of each year.

VTEM can provide assistance with developing or revising a departmental COOP. If you have questions at any time or would like to speak with an Emergency Planner, contact VTEM at 540-231-4873 or email at oem@vt.edu for further assistance.
PLANNING CONSIDERATIONS

The three most important planning considerations are: loss of your facility, or part of your facility; a significant decrease in available staffing; or the loss of utilities, equipment, and records (including important files, documents, and records necessary to maintain your business operations). These types of loss can directly, and significantly, impact the department’s ability to carry on its mission. The purpose of the COOP is to identify and support key processes or Essential Functions and define the roles of key personnel involved with incident-recovery and restoration of departmental operations.

Research is an integral component of the mission of Virginia Tech, and it is important to consider departmental research within the context of Essential Functions. Research is often reliant on specialized utilities, core support facilities, hazardous materials, and technically skilled personnel. Incidents impacting any of these elements poses risk of disruptions to on-going research, and protracted incidents may lead to irreparable damages to equipment, infrastructure, unique collections of samples and specimens, and loss of intellectual property. See “Essential Functions” (page 13) for additional guidance on the development of Essential Functions, and considerations for teaching, research, and business operations.

COMPONENTS OF THE COOP

The COOP document consists of two main parts, the Narrative and the Essential Functions. The COOP Narrative provides general information about your department and describes the concept of operations as well as implementation procedures. The Narrative section also identifies departmental leadership and other key personnel involved in activation and implementation, as well as how to communicate with the department and access vital departmental information and systems in the event of an incident. Should the incident require relocation to another facility or initiation of remote operations, the COOP Narrative also describes alternate facilities and requirements identified by your department.

A key part of continuity planning is identifying the functions that define your operations. These are called Essential Functions. Essential functions are the services, programs, or activities that are necessary to on-going business of your department; stopping these functions for an extended period of time would cause an unacceptable disruption to your operations and possibly other departments or units as well. Your Essential Functions will serve as your guide for how to resume operations following a disaster or major disruption. They help answer the question “What is the minimum level of service or activity necessary for my department to remain operational?” By identifying and prioritizing your essential functions, you can determine which personnel, facilities, equipment, and materials are absolutely necessary to keep your department functioning following an incident.

Management of the COOP documentation (Narrative and Essential Functions) occurs within the Emergency Planning Portal. For more information on the planning portal and for training opportunities, see Appendix A, or contact Virginia Tech Emergency Management (oem@vt.edu).
COOP NARRATIVE

In the COOP Narrative, you will find summary information typical of emergency planning documents. These sections include a description of the COOP document and its purpose, who is covered by the COOP, and a concept of operations for activating and implementing the COOP procedures.

The COOP applies to all employees in all locations of the department. This includes departments spread across geographically very distant locations from the main Virginia Tech campus, such as the Northern Virginia Center (NVC), as well as departments spread out across Blacksburg, such as in the CRC.

1. TITLE PAGE, APPROVALS, INTRODUCTION, PURPOSE

The information you will enter here corresponds to the beginning sections within the narrative text of the COOP. You will need to choose your Senior Reporting Area and identify your COOP Coordinator. In most cases, you should be able to choose “me”, as the COOP Coordinator will be the one revising the document.

In addition, you will choose one or more primary classification(s) for your department (Research, Instruction, Operations, Administrative, or Clinical). Many departments may find themselves spread across more than one of these categories (for example, Research and Instruction). In these cases, you could consider if your primary department focus is undergraduate education (primarily instruction), or graduate education (primarily research). You can also check more than one classification.

If you are unsure of what classification is most appropriate, please contact VTEM (oem@vt.edu, or the “Contact Emergency Management” link on your dashboard) to consult with an Emergency Planner.
If your department is involved with instruction, here you can identify any high priority courses that might be affected should an incident disrupt operations. High priority courses could include core courses broadly required to graduate, or courses that are mandatory but held infrequently during specific semesters. This could also include laboratory or other major core courses (e.g., BIOL 1125) which require in-person instruction and cannot be delivered virtually.

Introduction
The last entry in this section is part of the COOP Narrative introduction section and is where you will enter a description of your department. If your department has a mission statement you could include that here. This is an opportunity to identify the responsibilities of your organizational unit, which also serves to define “normal” operations as baseline for recovery efforts post-incident. When entering the description, keep in mind that in the printed document it will read:

DEPARTMENT NAME is responsible for...

Purpose
This section of the Narrative provides a description of the purpose of the COOP, that is, to provide a management framework as well as establish procedures towards restoring functions essential to the operation of the department following an incident.

2. APPLICABILITY AND SCOPE

The COOP applies to all employees in the department and works in concert with the Virginia Tech primary COOP, which provides information on university-wide planning.
3. CONCEPT OF OPERATIONS

When the COOP should be activated and what the objectives are for implementation are outlined in this section of the narrative. Essentially, the COOP should be activated shortly after an incident that disrupts or has the potential to greatly disrupt the operations of departmental Essential Functions. The COOP should be implemented within the first 12 hours following an incident and be able to provide guidance to sustain operations (normal, reduced, or essential) for up to 30 days. The COOP should enable departments to plan for maintaining Essential Functions during recovery operations.

4. COOP IMPLEMENTATION

Orders of Succession
The implementation of the COOP occurs once the appropriate authority calls for activation. Remember that during a disaster, or even an isolated departmental emergency, leadership may not always be available. Enter the orders of succession (1) for your department. Although you might automatically think of your departmental leadership, consider the need to plan for succession in positions other than the director, department head, or dean. Positions such as facility managers, researchers, administration, or others in operations that serve Essential Functions, should also be considered in your COOP development.

Delegations of Authority
You will also enter the delegations of authority (2) in this section, such as for signatory, financial, administrative, and other leadership decisions, should the person that typically holds that authority be unavailable during an incident. Finally, identify the systems that you would use to contact your employees in the event of an emergency (3). This could include phone, text/SMS, email, or other processes.

![Coop Implementation](image)
**Departmental Employees**

The most integral part to the success and resiliency of Virginia Tech is its people. Employees are essential to the effective continuation of departmental operations under extraordinary circumstances. During continuity planning, it is important to consider all your employees, and whether there are positions that would be disproportionately affected during a disaster. You should also develop plans for a reduction in personnel, and mitigation strategies to continuing operations with minimal staffing.

5. **ALERT AND NOTIFICATION**

Identify the systems used by the department to contact employees and communicate pertinent information, for instance regarding COOP activation and implementation. How does your department plan to notify all members of the department post-incident of what actions they should take (e.g., report to alternate location, or employees work from home)?

6. **ALTERNATE FACILITIES**

If an incident occurs that requires the affected department to move to an alternate facility, this section outlines resources and space that would be necessary to house the department and provide enough for operations to continue (normal, reduced, or essential). Physical relocation of the department as well as reconstitution (restoring the department to normal operations), are included in the Implementation Checklist (Annex A).

First, select the buildings that are currently occupied by your department. Next, you can choose some possible alternate facilities for relocation. Your department might already have some locations in mind, and if so, you can list those here.
Department Specific Facility Requirements

Because specific alternate locations may not always be available, you will also want to capture the specific requirements of your department, so that another location can be identified quickly. This section of the template asks a series of questions to consider for alternate facility locations. Consider whether remote operations are possible for some functions, to potentially reduce physical space requirements.

1. What physical resources (such as pre-printed forms, office equipment, computer equipment, and telecommunication devices) are required to perform your essential functions?
2. How much physical space does your department require? (In square feet)
3. Does your unit have any of the listed special requirements?
4. Are there special security requirements for a replacement space?
5. If the building/office is accessible, but there was an extended loss of power, is there essential equipment or material that would be at risk?
6. Do you have any high value/difficult to replace equipment?

One of the more common weather-related emergencies that can affect campus, particularly research operations, are power outages caused by severe thunderstorms or winter storms. If you answer “Yes” to the question 5 above, you will be prompted to enter additional information about equipment that would be severely adversely affected by an extended power outage. This could include ultralow temperature sample storage (-80°C freezers), incubators, blood bank refrigerators, patient care devices, continuously running processing equipment, equipment or instruments that have additional hazards associated with prolonged loss of power, and electronic monitoring systems, among others.
In addition, if you respond “Yes” to question 6 above, you will be prompted to enter additional information about any high-value or difficult to replace equipment in your department.

**Access to Information and Systems**

As you go through your continuity planning process, consider how and where department information and systems are stored and managed. This may include information stored on a departmental or Virginia Tech server, a university hosted web site, non-web-based software installed on individual computers, or information stored on individual computers or email accounts.

Describe how your department accesses and stores this material and consider how you will access it in the event that the primary resource is not available. If you rely on remote access to information during an incident, be sure to confirm whether staff responsible for essential operations have home access to resources like computers, internet and VPN.
In addition, your department might want to consider the following when planning for possible loss of information and systems:

- Are networked computers being backed up on schedule?
- How long can your department perform its essential functions without Division of IT support?
- Would a disaster in your department cause an interruption to any legally required reporting?

**Continuity of Research**

If an Essential Function of your department is research, consider what specialized utilities, core support facilities, hazardous materials, and technically skilled support persons are necessary for operations to continue. Incidents impacting any of these elements poses risk of disruptions to on-going research, and prolonged incidents may eventually lead to irreparable damages to equipment, infrastructure, unique collections of samples and specimens, and loss of intellectual property.

7. **ANNEX A: IMPLEMENTATION PROCEDURES CHECKLIST**

This is provided in the Print View of the document, with the intention it will be used at the time of activation to guide the implementation of the COOP.

8. **ANNEX B: DEPARTMENTAL CONTACT LIST**

The Departmental Contact List should contain at a minimum, the key personnel from the department that would be essential to the implementation of the COOP. Here you will enter the employee names and position or title. You also have the option to identify which positions or employees have the ability to work remotely. This can aid in planning for alternative work and facility options, should the department need to relocate, or if employees cannot come to work.

9. **ANNEX C: ESSENTIAL FUNCTIONS**

This is where you will add your Essential Functions. You might already have Essential Functions listed here, or you might need or want to create a new one. Instructions on how to do both can be found in Appendix A: Veoci Instructional Guide for Continuity of Operations Planning.

10. **RECORD OF CHANGES**

This last section provides space for you to enter any changes that you made to the COOP. This could be something like “annual update” or “updated contact info” or “added new Essential Function”. Recording what changes were made is a helpful way to keep track of the COOP as a living document.
ESSENTIAL FUNCTIONS

As you are identifying department Essential Functions, consider those services, programs, or activities which may not sustain an interruption greater than 30 days for the department to continue operating at normal status. It is important to remember that while not all Essential Functions may be disrupted as a result of a given incident, consideration and evaluation of each helps guide departmental recovery operations.

Some examples of departmental Essential Functions are:

- Academic Instruction
- Academic Advising
- Basic Utilities (e.g., sewer, water, electricity)
- Budget and Finance Administration
- Facility Operations
- IT Services
- Research (e.g., Operations, Data Collection, Animal Husbandry)

1. ESSENTIAL FUNCTION DETAILS

In this section the department will provide a name (1) and description (2) for the function, and answer a few questions related to each essential function. To begin with, identify whether each function is only active during specific semesters (3) (perhaps if tied to a certain course or a field season of research), or year-round (such as many research, administrative and financial, or operational functions) and select the type (4) of function (Instruction, Research, Operations, Administrative, Clinical). This does not have to match your primary department classification. For example, you may select Research as the primary classification for your department, but a specific Essential Function may be Operational.
Next, consider whether the Essential Function is dependent on other internal university, or external vendor partners’ resources. Answering “Yes” to the dependencies question when filling out the form will bring up a “Dependencies” section to provide more information. Answering “No” means this section will not be included as part of the essential functions form.

The final part of this section asks you to consider the impact an inability to perform the Essential Function would have on the department. You are also asked to describe any interim or alternative processes the department has for the essential function.

2. KEY PERSONNEL
The next section of the Essential Functions form provides space to list key personnel responsible for the Essential Function. You have the ability to pick personnel already in your Departmental Contact List (click the Select Employee button), and/or add additional personnel by selecting “Yes” and entering manually.

3. CROSS-TRAINING
Due to the unpredictable nature of emergencies, those you have identified as responsible for Essential Functions and other key tasks may not always be available during an incident. Cross-training ahead of an incident is highly recommended, and can be key to successfully navigating disruptions, rather than worrying about who will take on certain duties in the middle of an emergency. If no formal cross-training is in place, consider possible positions that could be cross-trained, as well as the location of operational, instructional and supporting documentation your department would need to access. The latter can be entered either in the “Comments” field, or in the “Information Systems – Vital Files, Resources, and Databases” section below.
4. DEPENDENCIES
This section (previously External Vendors) provides departments the opportunity to capture whether an essential function is dependent on other internal university, or external vendor partners’ resources. For example, we expect that most Virginia Tech departments located on the main Blacksburg campus rely on the Power Plant, NI&S (for internet, VPN, e-mail and central servers), Payroll, Procurement, Facilities, and Public Safety. However, the dependencies section provides space to list products and services upon which your department depends, and the other Virginia Tech departments or units that provide them internally. This could include hazardous waste pick-up, animal husbandry services, security services, equipment repair services, fleet services vehicles, or the Bursar’s office.

Departments should also list external dependencies on products and services (such as lab animal delivery, laundry services, or other contracted services) upon which your department depends, provided by external suppliers or providers. Please contact them to determine if they have a continuity of operations plans and whether the University has priority for their services. Establish alternate sources for these services and supplies and determine whether they are listed as University vendors, if necessary.

If you are unsure if you have other internal or external dependencies than those common to much of the university and would like to consult with Virginia Tech Emergency Management, please contact oem@vt.edu, or submit a request through the “Contact Emergency Management” link on your dashboard.
5. INFORMATION SYSTEMS
Information Systems covers both the type of equipment your department will need, as well as the vital files, records and databases that must be accessed in order to perform the Essential Function. Enter the type of equipment (e.g., laptop or desktop computers, phones, printer/scan/fax) as well as the minimum number needed to perform the function. In addition, you can enter the number required to perform that function remotely, as that could increase the need for laptop computers, webcams, and other equipment if virtual operations are anticipated. You will also enter your departmental or division IT contact here, or whoever you would contact for this equipment should you need additional resources.

Identify the methods used to store the department’s data for each Essential Function. This could be on a departmental or college server, file share, jump drives, Banner, databases, etc. There is space to enter the frequency with which this storage is backed up (e.g. hourly, daily, weekly), as well as the location of that back-up (e.g. jump drive, server) and a contact for that data.
6. RESILIENCY ASSESSMENT
University resiliency begins with individual preparedness and departmental readiness. The resiliency assessment is part of each COOP Essential Function and consists of a series of questions designed to gauge how resilient an area is to the consequences of typical hazards that occur in the area. For example, power outages are a consequence of severe weather (hurricanes, tornadoes, ice storms, thunderstorms), and can affect equipment and operations. The information gathered, and reports provided, through these assessments are likely to evolve as we continue to expand our programs and mitigation efforts across campus.

<table>
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<tr>
<th>Resiliency Assessment</th>
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<tr>
<td>The following questions provide an opportunity to gauge the resiliency of departmental essential functions across multiple hazard consequences.</td>
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<th>EF Resiliency Assessment</th>
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<td>Personnel Impact</td>
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<td>Utilities Impact</td>
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<td>Infrastructure Impact</td>
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<td>Environmental Impact</td>
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<td>Economic Impact</td>
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<td>Reputational Impact</td>
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DEPARTMENTAL COOP DISTRIBUTION
There is no requirement that the departmental COOP be shared with the entire department or published for public review. This document should be shared on a restricted basis and be limited only to those involved when activation of the COOP is necessary. Sharing this document outside of those involved with COOP implementation is at the sole discretion of the department itself.

ANNUAL REVISIONS
Governor’s Executive Order 41 (2011) established the requirement for state agencies and institutes of higher education to maintain a Continuity of Operations Plan. The University reaffirms this requirement through policies 5615 and 1005 which require COOP plan update and submission to Virginia Tech Emergency Management annually.

COOP updates are required to be completed annually by March 15. Plans must be updated using the Virginia Tech Emergency Management Planning Portal.

If you require additional assistance with the development or revision of your COOP, please contact Virginia Tech Emergency Management at 540-231-4873 or oem@vt.edu. You can also request assistance using the “Contact Emergency Management link on your COOP Dashboard.
APPENDIX A: VEOCI INSTRUCTIONAL GUIDE

1. INTRODUCTION

VEOCI provides various emergency management and business continuity solutions in an online platform. Used by VTEM for virtual management of incidents, training, and exercises, VEOCI also now houses the system for managing the University’s Continuity of Operations Plans. The system is entirely cloud based and does not utilize any Microsoft Office services unlike the previously used SharePoint Portal.

VEOCI is organized by levels: organizations, groups, and rooms. As COOP Coordinators, you will be under the Organization, “Virginia Tech,” as are all Virginia Tech related functions. Within the organization is the Emergency Planning Portal group, and you belong to a room named “Departmental Emergency Planning.” This is where all COOP related documents are located. A room in VEOCI has several features, but the primary tab related to your COOP is the dashboard. If you serve additional emergency management functions, such as game day logistics, you may belong to more than one group or room. Each room will show up when you login; click the “Join” button on the room you would like to enter.

2. ACCESSING VEOCI

Login to the portal using the following URL: Veoci.com/veoci

You will need to login with the credentials provided to you by VTEM. It may be a good idea to bookmark the URL as well. The link can also be found on the VTEM website (http://emergency.vt.edu/).

The home page displays any “rooms” you may be a part of. Click the join button to enter the COOP Portal.
3. ACCESSING THE DASHBOARD

You will be brought directly to the COOP Dashboard. If you get lost in the system and need to return to the main screen, click the Dashboard icon in the top right-hand corner of the screen.
4. VIEW COOP NARRATIVE

By clicking on the department name, the COOP Narrative will open in the same window. Return to the COOP Dashboard by closing the small window.

5. VIEW AN ESSENTIAL FUNCTION

By clicking on the department name, the essential function will open in the same window. Return to the COOP Page by closing the small window.

Your Department’s COOP and Essential Functions will appear in the tables on the COOP Dashboard as seen above.

Note: If there are no Essential Functions listed, please see section Creating & Revising Essential Function(s) below to create one.

The COOP Narrative and Essential Functions are maintained by a departmental representative, the COOP Coordinator, who is responsible for reviewing and revising the COOP annually (or as changes require). Updated COOP plans are submitted through the Departmental Emergency Planning Dashboard.
6. REVISING YOUR COOP

To revise your department’s COOP Narrative, open it and click the “Edit” button on the bottom right-hand corner of the small window.

This allows you to open and edit any of the sections by clicking the small up and down arrows next to each. Once you have completed editing all fields, you can minimize that section and edit other categories, or expand multiple sections at the same time for editing. Please note that you do not have to click “Update” after editing each section. Information entered will not be deleted by changing sections. However, you must hit Update before exiting the page or updated data will be lost.
7. ATTACHING ESSENTIAL FUNCTIONS TO YOUR COOP

Click “Essential Functions Form” to view Essential Functions for your department.

Select one essential function at a time to attach to your COOP. To do this, click the row and then hit “Choose.” Repeat this process until every Essential Function that appears has been selected.

The chosen Essential Functions will appear as seen below. Be sure that all Essential Functions for your department are listed. This is necessary for printing your COOP with all Essential Functions attached.
8. SAVING AND SUBMITTING YOUR COOP

Once you are done revising, change the status box at the bottom of the form. If you need to close the window before the plan is complete, select “Currently Making Changes.” Then hit “Update.” Your edits will be saved, and you can come back at your convenience. Please note, the form will default to “Currently Making Changes.”

If you select, “Plan is Complete,” another question will appear. If your plan is to be submitted for the annual update, select “Yes, I am submitting my department’s annual update.” If not, select “No, I only wanted to update some sections.” This option should be used when you make small changes at variable times during the year but do not constitute an annual update.
9. CREATING AN ESSENTIAL FUNCTION

To create a new Essential Function, click on the “Create New Essential Function” button located on the COOP Dashboard.

This will open a blank Essential Function Form. First, select your Department from the list given by clicking “Click to Select People”.

...
In the same section, click the “me” button if you are the COOP Coordinator. If you are not the COOP Coordinator, enter their email.

In the VT Department section, click “Select from List.” A list of VT Departments will appear; choose the appropriate one. You can use the search bar at the top to find it faster.
To save the Essential Function, change the status bar to either “Working” if incomplete or “Completed.” Then, hit “Create.” You may still come back and make changes to the Essential Function regardless of status.

10. REVISING AN ESSENTIAL FUNCTION

To revise an essential function, open it by clicking on the Essential Function Name you want to edit.

Then, click on the “Edit” button in the bottom right-hand corner. This will allow you to edit any of the sections. When you are finished revising, update the status bar and click update (described in Creating an Essential Function Section).

11. DELETING AN ESSENTIAL FUNCTION

To reduce the accidental loss of information, COOP Coordinators cannot delete Essential Functions once they are created. You must use the “Contact Emergency Management” Function located on the COOP Dashboard.
12. PRINTING YOUR COOP NARRATIVE OR ESSENTIAL FUNCTION

From the COOP Dashboard, click on your COOP Narrative or essential function name to view the entry. On the right side, you will see a “Send me a PDF of my COOP” button. Once you click this, you will immediately receive an email with the PDF attached. Print via conventional methods.

Please note – if you update your plan with the status, “Complete,” you will automatically receive an email with the most up to date version of your COOP. The email will come 5 minutes after you update. It is suggested that you download the PDF and print a copy for your records.

13. HOW TO CHANGE COOP COORDINATOR

To request a change to the department COOP Coordinator, please fill out the form located on the COOP Dashboard.