APPENDIX A:

CONTINUITY

OF

OPERATIONS

PLAN

January 2023

Virginia Polytechnic Institute and State University
Virginia Tech Emergency Management
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TABLE OF CONTENTS

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 management planning portal. A Veoci Instructional Guide is included at the beginning of this document with step-by-step instructions on how COOP Coordinators can create, revise, and submit their departmental COOP through the online Departmental Emergency Planning portal. 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 assist 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 17) 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 Departmental Emergency Planning Room of Veoci. For more information on the Veoci platform and for training opportunities, contact Virginia Tech Emergency Management (oem@vt.edu).
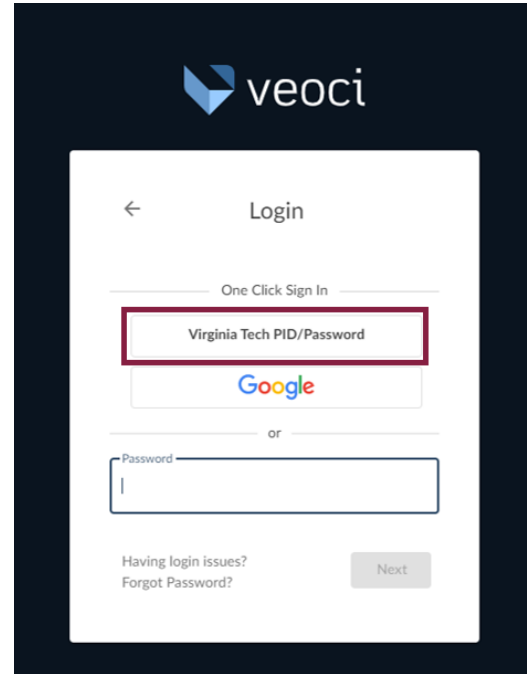
ACCESSING THE EMERGENCY PLANNING PORTAL

COOP Coordinators can access the Emergency Planning Portal using the following URL: https://veoci.com/veoci.

To access the planning portal using your Virginia Tech PID and password, click on the Virginia Tech PID/Password button and enter your PID/Password.
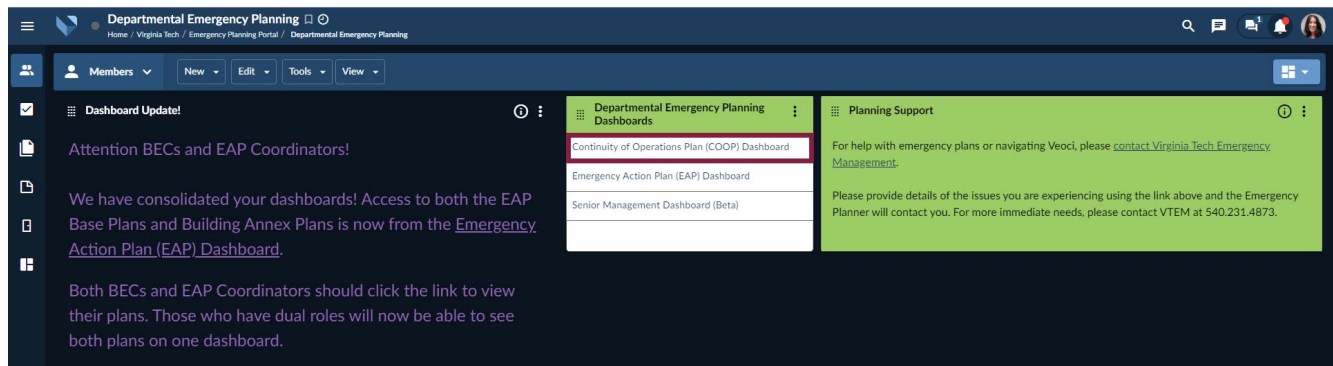
ACCESSING THE COOP DASHBOARD

Once in the portal, there will be a list of active rooms associated with the individuals account. There will likely only be one titled, "Departmental Emergency Planning," but there may be others listed if an individual is involved in other Emergency Management functions (e.g. game day operations). Click anywhere on the title or arrow to enter the room.

Clicking to enter the room will take the user to the Emergency Planning Dashboard, which includes links to access either the COOP or EAP dashboard, depending on the user's roles.
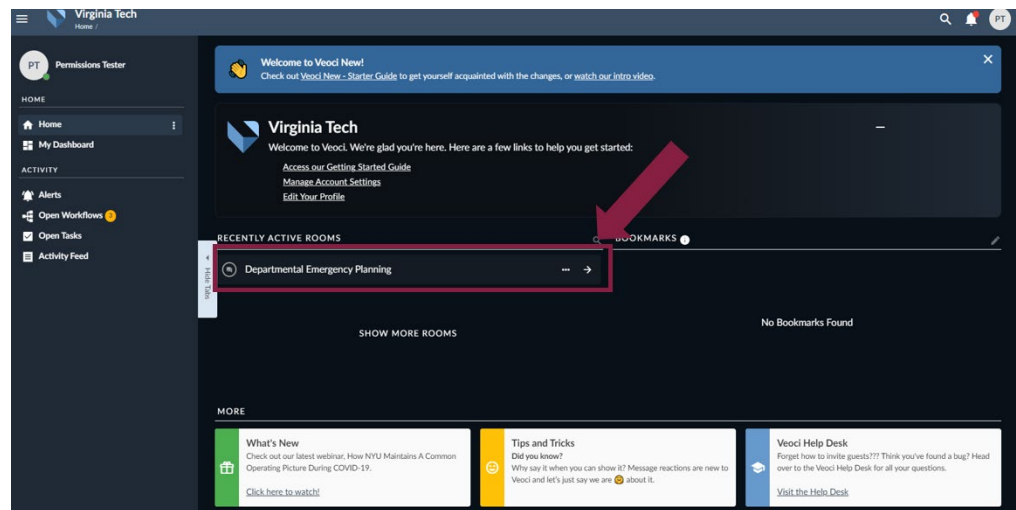
Click the link for
Continuity of Operations Plan (COOP) Dashboard to access the COOP Narrative and Essential Functions.

After clicking the link, the COOP Dashboard should be visible with multiple tiles, including tiles for Helpful Links (1), upcoming COOP specific training (2), COOP specific forms (3), the COOP Narrative (4), and Essential Functions (5).
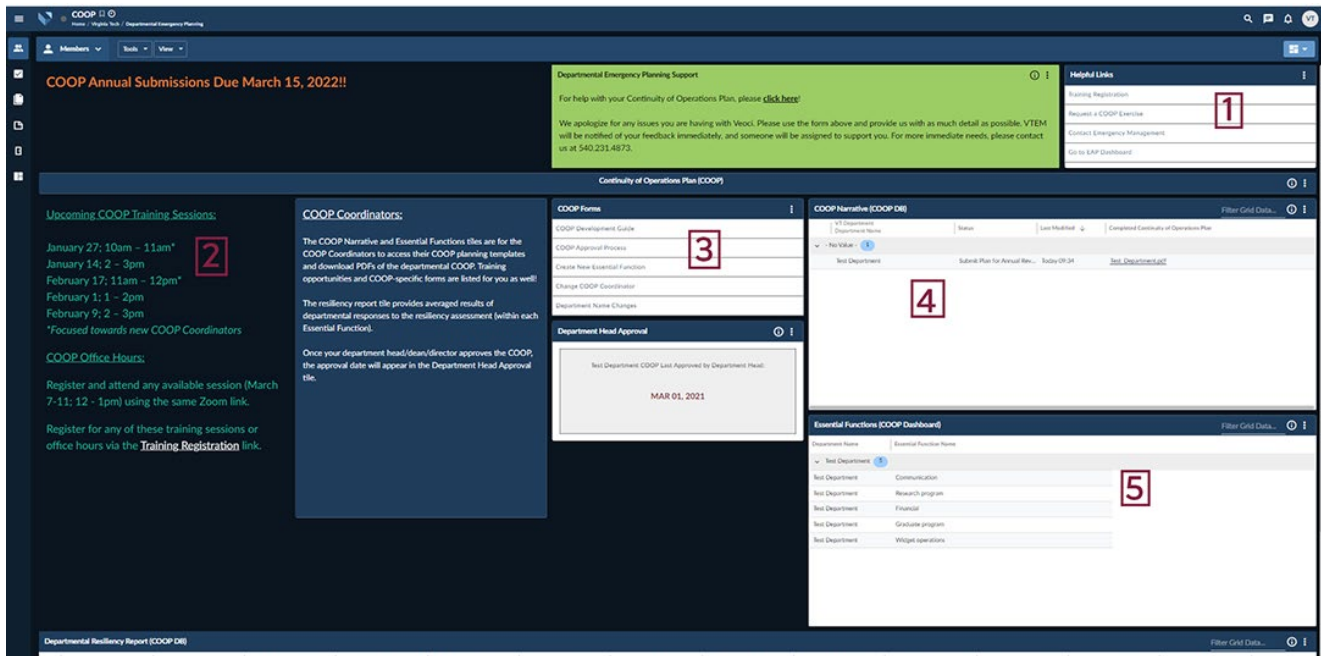

For any questions or issues, please contact Emergency Management via the "Contact Emergency Management" link on the Dashboard.

If lost in the system, look for the light blue icon in the top right corner of the screen. Click for a drop-down menu, and select Dashboard.
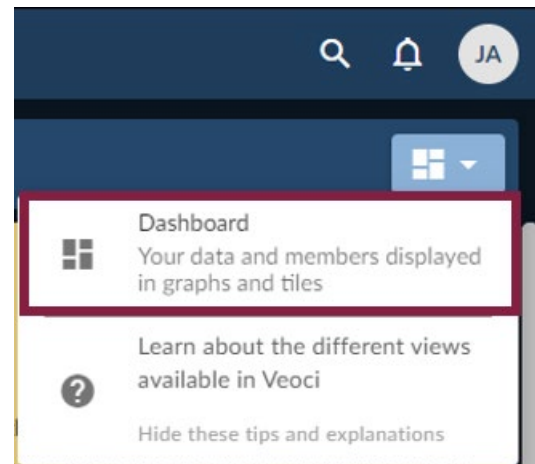
ACCESSING THE COOP NARRATIVE

To access the COOP Narrative template, click on the page icon to the left of your department name in the COOP Narrative tile, and the departmental COOP Narrative will open a pop up window.
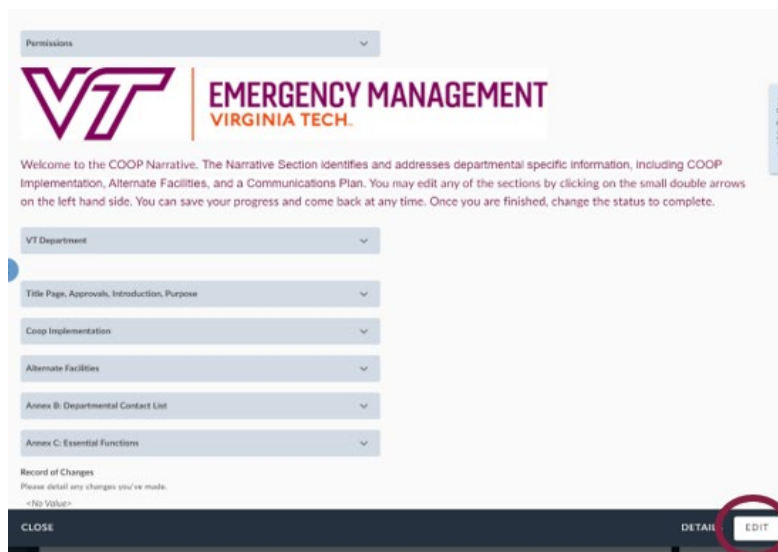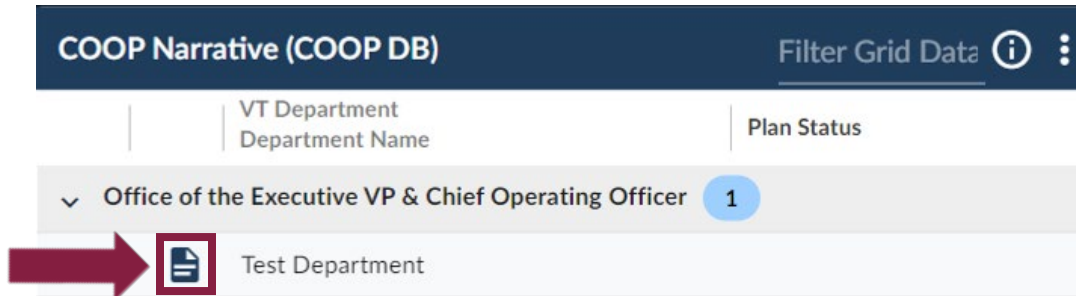
To revise the department's COOP Narrative, open the narrative as described above and click the "Edit" button on the bottom right hand corner of the small window.
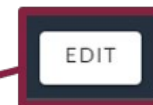
Each section can be expanded by clicking the blue bars. Follow through the template and fill out or update any necessary information. Make sure to click the "Update" button (which will be the same button as the Edit button) to save prior to closing the template window so data is not lost.

REVISING THE 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.

The following sections of the COOP Narrative can be revised and submitted:
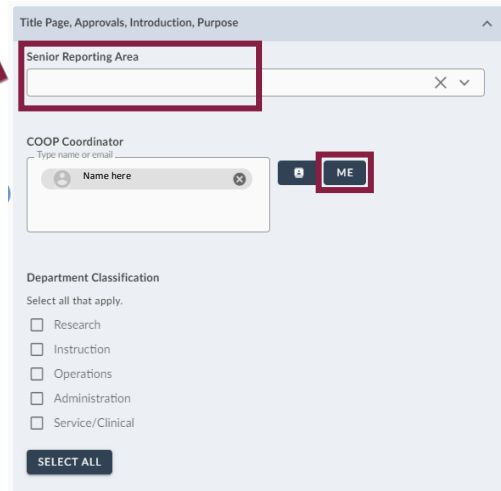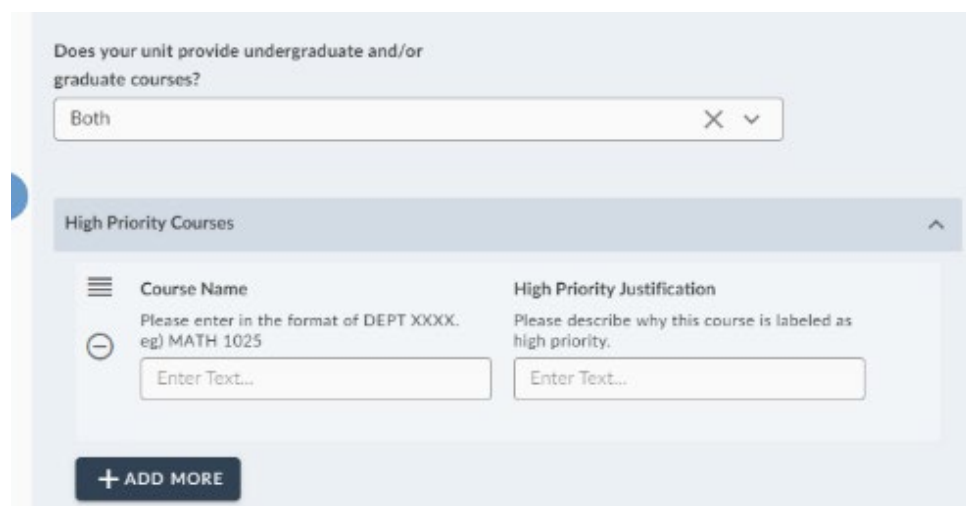
Title Page, Approvals, Introduction, Purpose:

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.
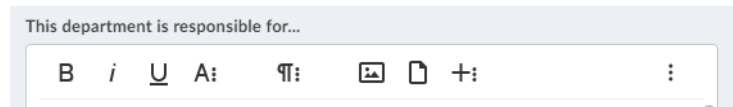
If your department is involved with instruction, here you can identify any high priority courses that might be affected should an incident disrupt operations. High priority courses could include core courses broadly required to graduate, or courses that are mandatory but held infrequently during specific 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. *There are no Veoci fields for you to enter in this section of the document.*

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. *There are no Veoci fields for you to enter in this section of the document.*

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.
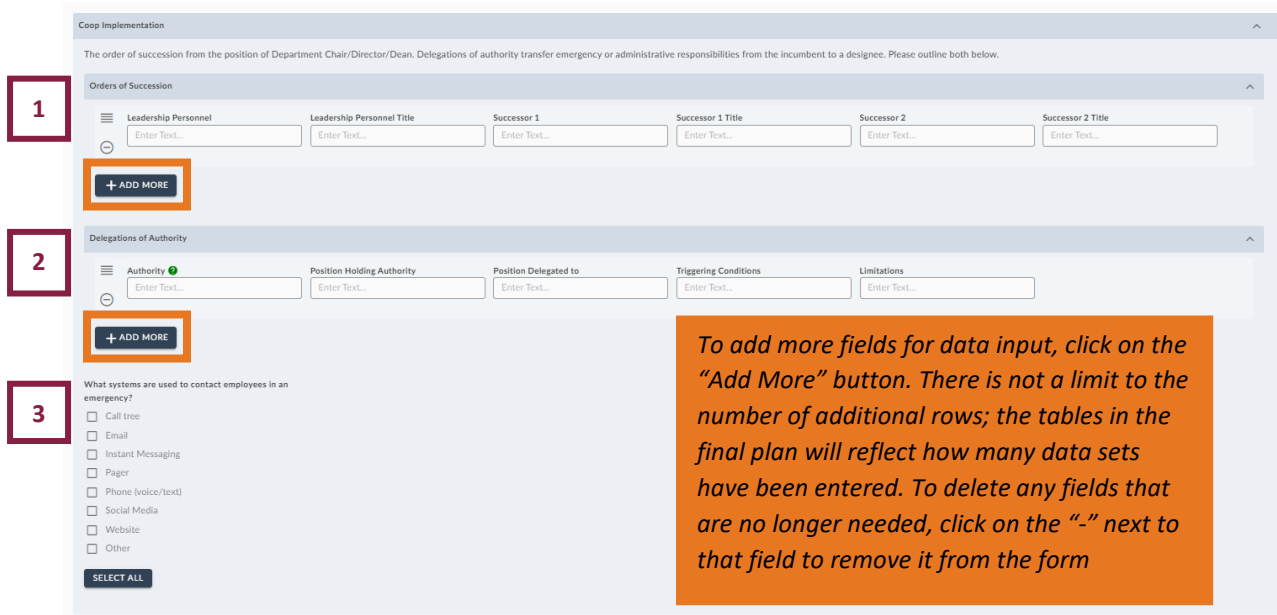
COOP Implementation:

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 COOP activation, 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.

To add more fields for data input, click on the "Add More" button. There is not a limit to the number of additional rows; the tables in the final plan will reflect how many data sets have been entered. To delete any fields that are no longer needed, click on the "-" next to that field to remove it from the form

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 (e.g., positions that are unable to work remotely and require onsite operations). You should also develop plans for a reduction in personnel, and mitigation strategies to continuing operations with minimal staffing.
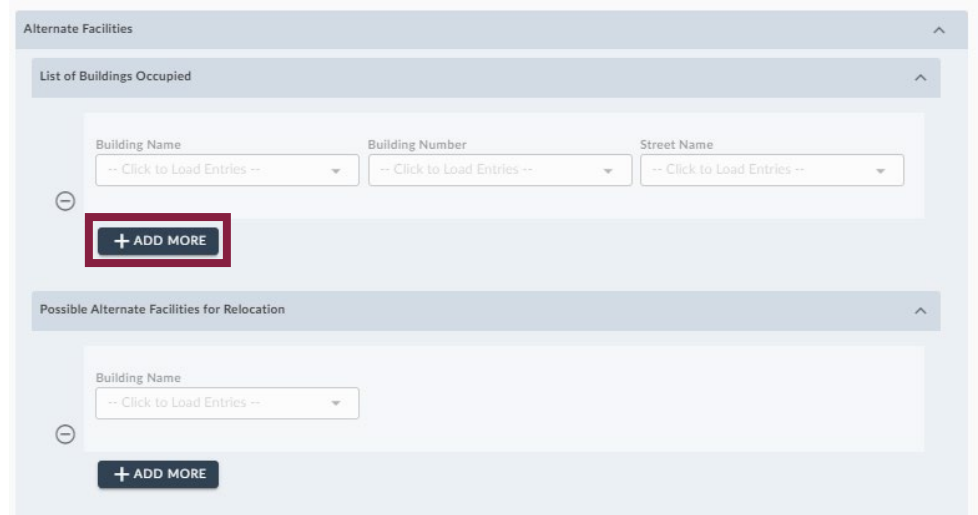
Alert and Notification

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)?

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 (Appendix A).

First, select the buildings that are currently occupied by your department. Add additional buildings by clicking +ADD MORE.
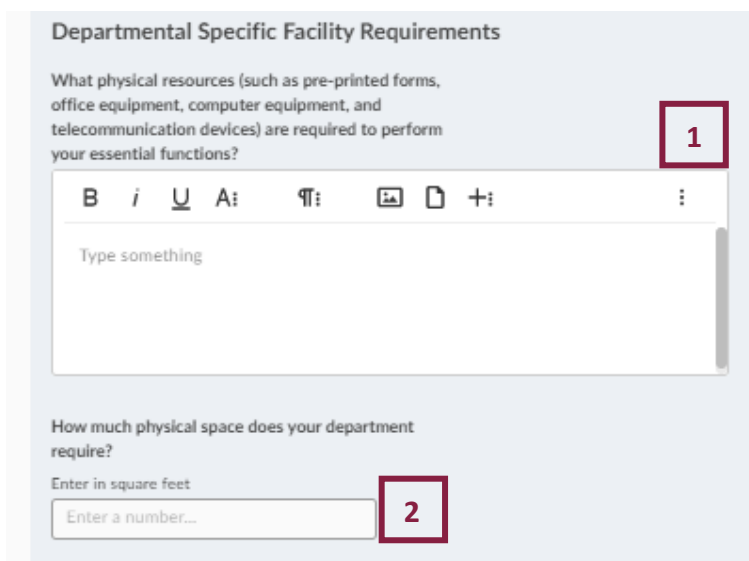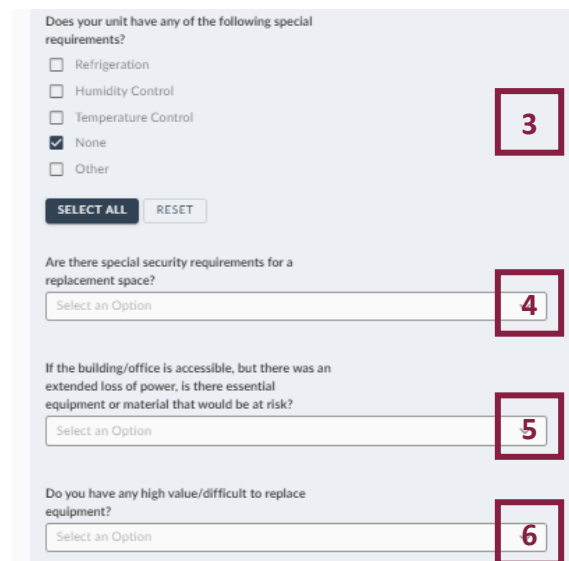
Next, you can choose some possible alternate facilities for relocation, should your department have those agreements in place.
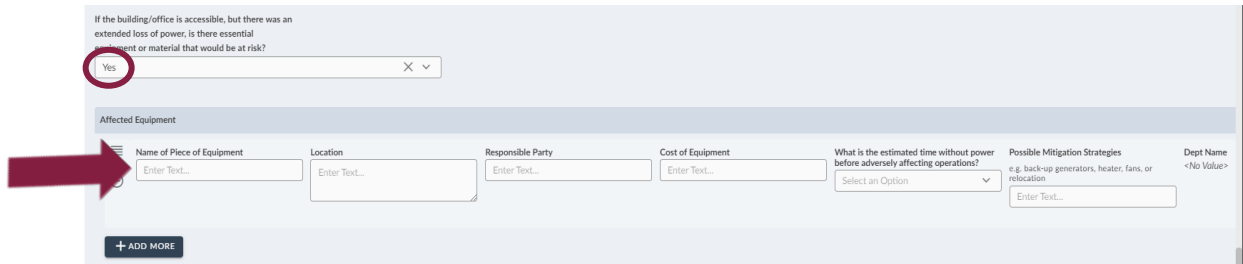
Department Specific Facility Requirements

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 in Veoci 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 following 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?
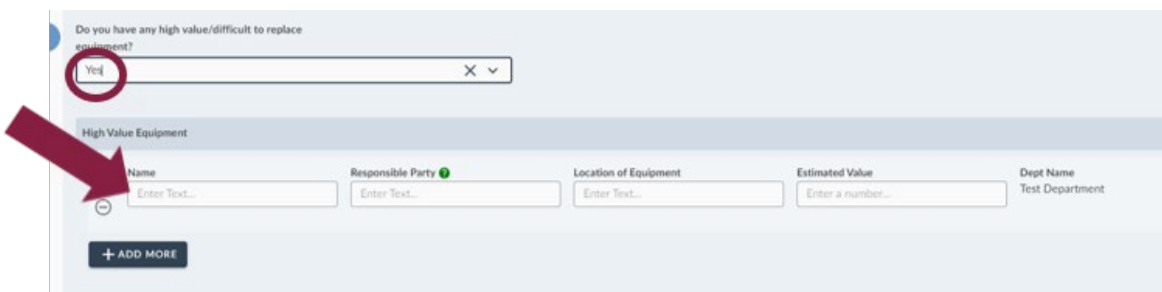6. Do you have any high value/difficult to replace equipment?

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 (MRI machines), 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.

Appendix 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, with available personnel and resources, to guide the implementation of the COOP. *You do not have the ability to edit this within the template.*

Appendix B: Departmental Contact List

The Departmental Contact List should contain 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.
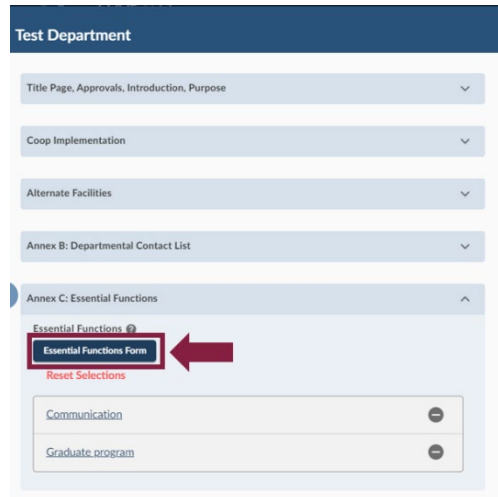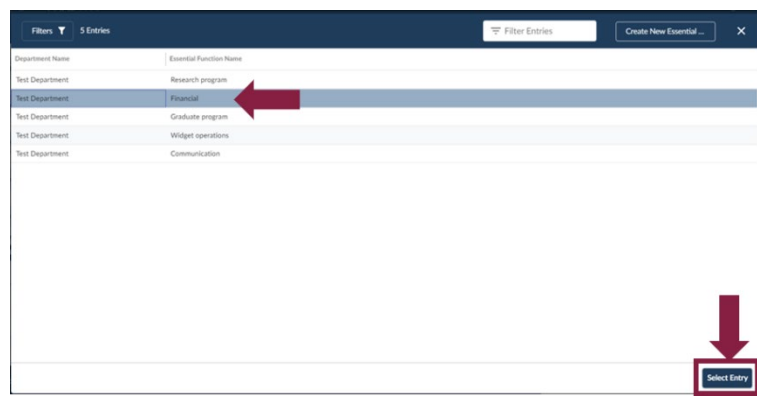

Note: Be sure to fill out the Department Head email field, as this is the email address where your COOP will be sent for electronic signature at the time of annual submission!

Appendix C: Essential Functions

Appendix C lists the departmental Essential Functions that will be attached to the COOP Narrative. If the department has created Essential Functions previously, they will be listed here. New essential functions may also be created and added to the plan in this section.
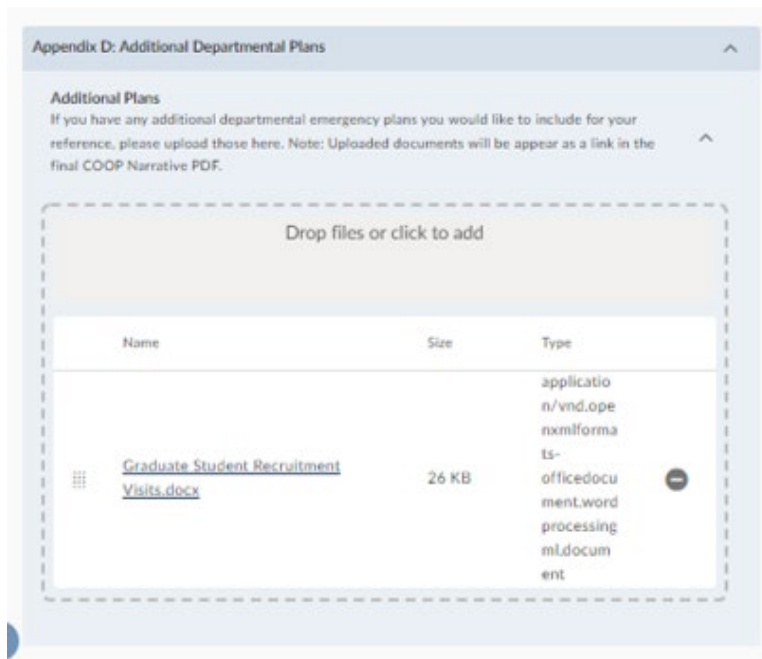

To add additional Essential Functions to the plan, click the Essential Functions Form button. A pop-up window will appear with the option to select from a list of the departmental functions that have been created. Selecting a function will highlight the row, at which point clicking the Select Entry button will add the function to the COOP Narrative.
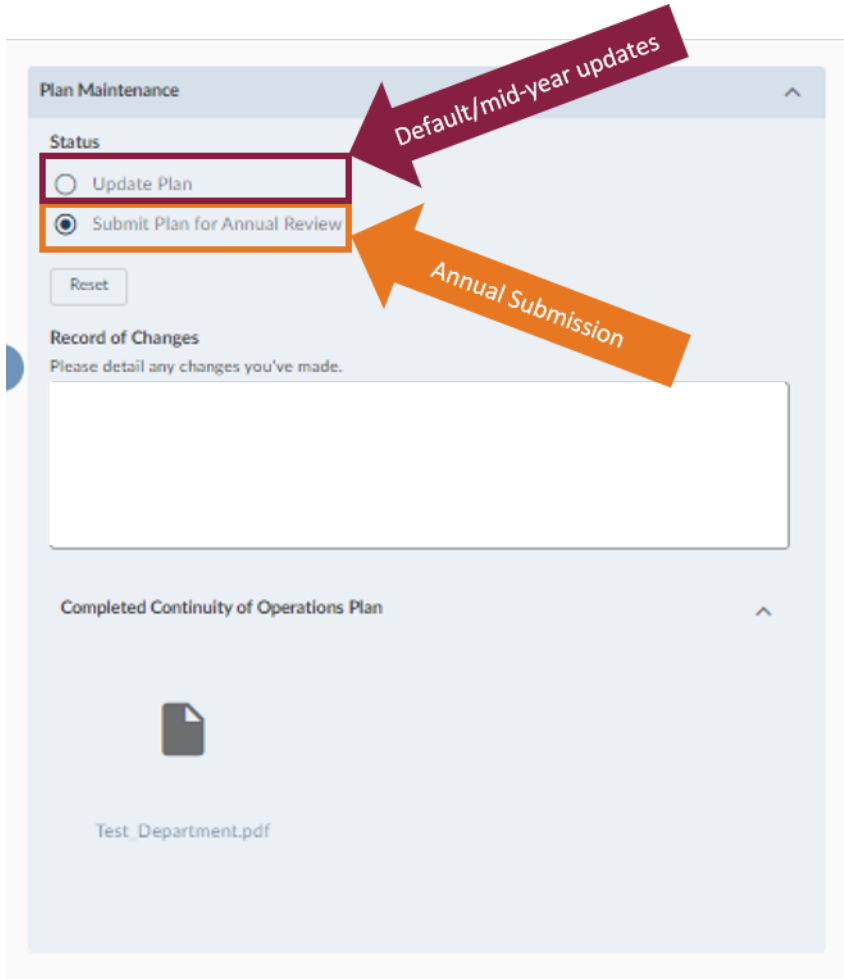

Appendix D: Additional Plans

This section provides space to upload any additional departmental plans, standard operating procedures (SOPs), or other documents that you wish to keep together with your COOP.

Note: Documents uploaded to this section will show as a link in the final PDF.

Plan Maintenance

This last section includes the COOP Status field, which drives the annual update process. The status should be *Update Plan* for the majority of the year, including when making any mid-year revisions to the plan. When it is time for the annual COOP submission to VTEM, change this to *Submit Plan for Annual Review* by clicking the radio button.

The Record of Changes field 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.

Whether it is a mid-year update or submitting for annual review, click the *Update COOP Narrative* button to save your data. A PDF will be automatically generated, and can be accessed from the link in the Plan Maintenance section, or on your COOP dashboard.

If you are submitting for your annual update and have selected *Submit Plan for Annual Review*, once you click the *Update COOP Narrative* button, a custom action will send your complete plan to your department head for electronic signature, and your COOP is considered submitted for that plan year.

Please make sure to also review and revise your Essential Functions as necessary prior to submitting your annual update to your Department Head and VTEM. See Accessing and Revising Essential Functions on pages 17-22.
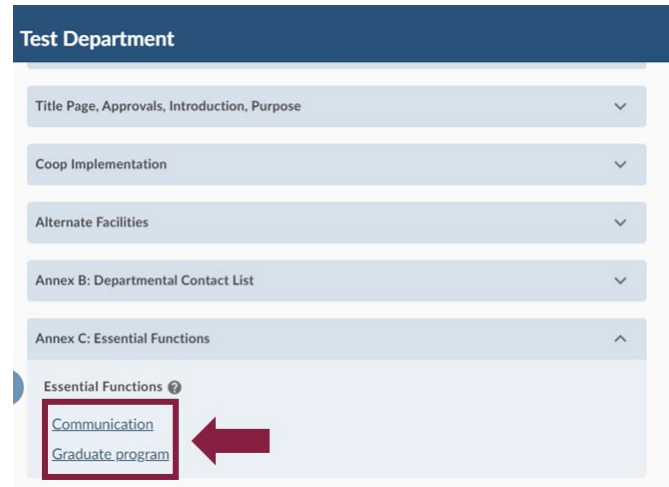
ACCESSING ESSENTIAL FUNCTIONS

The Essential Functions can be accessed in two ways: from the Dashboard or from the COOP Narrative template.

Note: If there are no Essential Functions listed, please see section Creating & Revising Essential Function(s) or contact VTEM using the "Contact Emergency Management" link on the dashboard.

To access the Essential Functions from the COOP Dashboard, click on the department name in the Essential Functions tile, and the essential function will open in the same window.
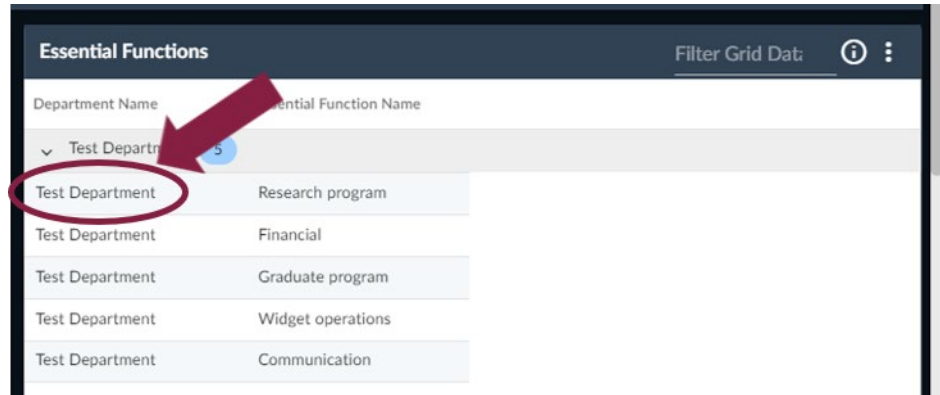
To access the Essential Functions from the COOP Narrative template, scroll down to Appendix C: Essential Functions, and click on the Essential Function name (it is a link), and the essential function will open in the same window.

Once the Essential Functions template is open, click the Edit button to begin entering data. As with the Narrative, clicking each blue header bar will expand the corresponding section of the Essential Function.
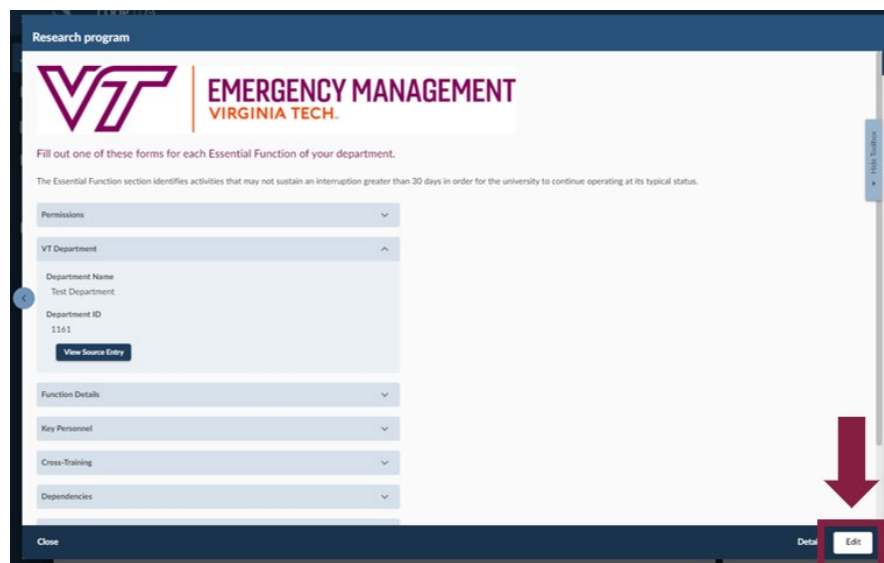
REVISING ESSENTIAL FUNCTIONS

As you are identifying department Essential Functions, consider those services, programs, or activities which may not sustain an interruption greater than 30 days in order 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 Care)

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.
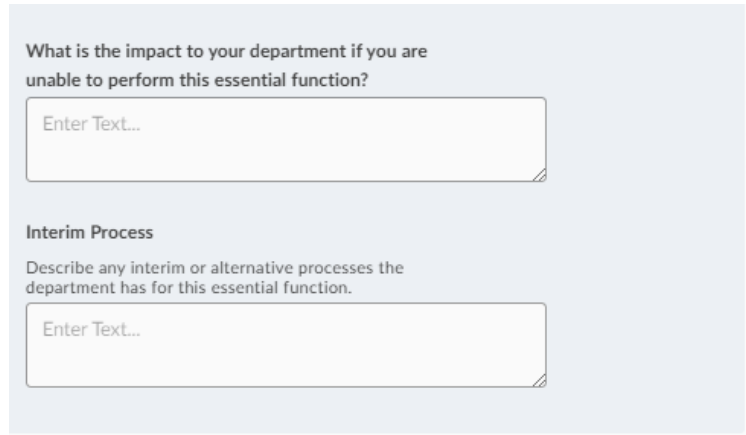
Next, consider whether the Essential Function is dependent on other internal university, or external vendor partners' resources. Answering "Yes" to the dependencies question when filling out the form will bring up a "Dependencies" section to provide more information. Answering "No" means this section will not be included as part of the essential functions form.

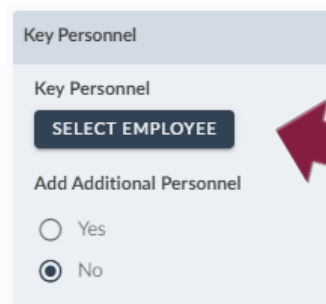The final part of this section asks you to consider the impact an inability to perform the Essential Function would have on the department. You are also asked to describe any interim or alternative processes the department has for the essential function.

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.
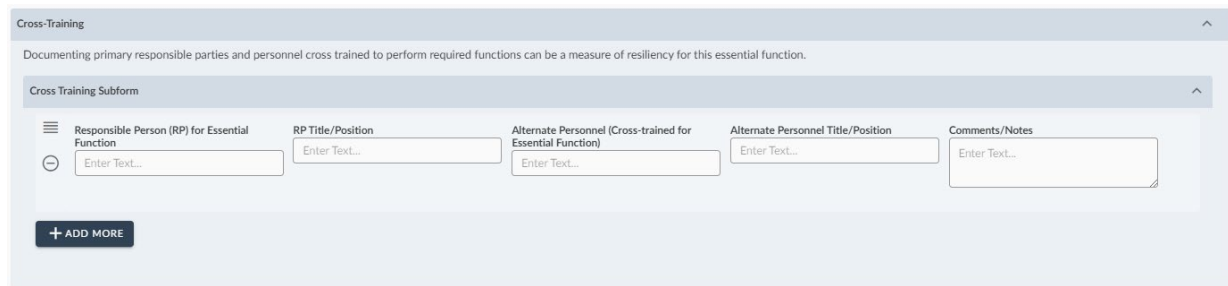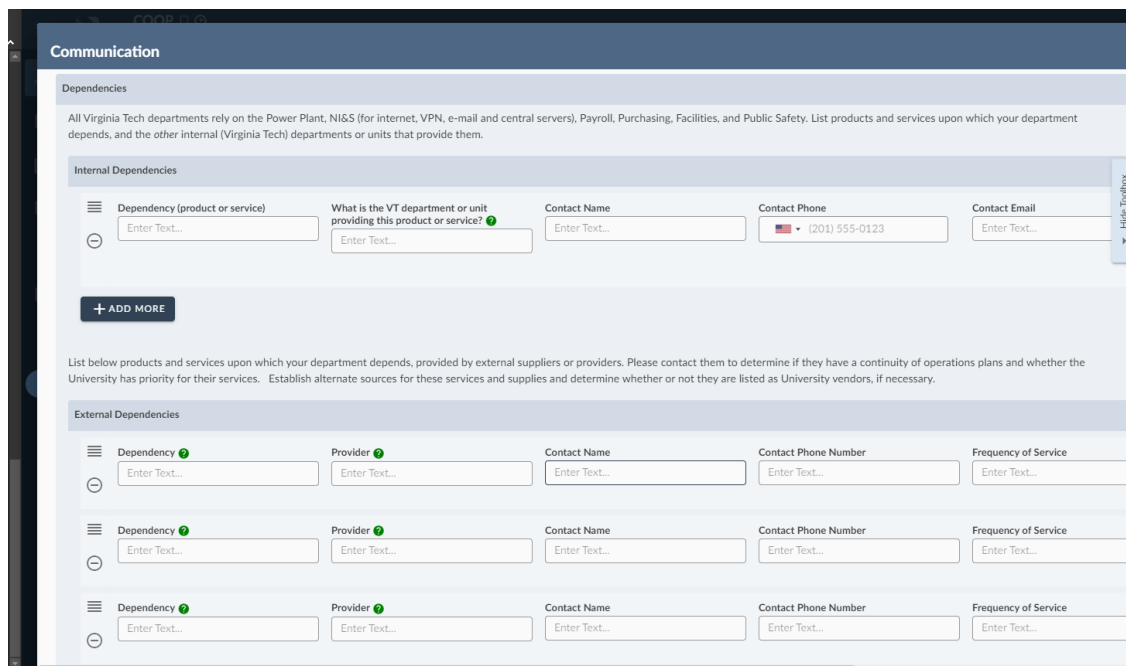
3. CROSS-TRAINING

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 or not 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.

Click to expand each section and answer the questions within to complete each resiliency assessment.

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 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.