The aim of WashU Continuity is to increase the university’s resilience in the face of disruptive events. Resilience means being able to continue performing the university’s mission of teaching, research, public service and patient care during any disruptive event – and to return to normal performance as quickly as possible. Continuity plans contain information and strategies that would be needed during a recovery process, as well as recommendations for advance preparations.
INTRODUCTION

Disruptions of all types and severity occur on campus and can have a devastating impact on you, your work, and your colleagues. Consider the following situations:

- A fire breaks out in your area or an adjacent area, forcing you to evacuate the building...
- A sprinkler head malfunctions and floods your area...
- A blizzard paralyzes St. Louis region closing all roads for three days...
- A pandemic flu has sickened 50% of your staff...

How would you respond to these events? What would you do to prevent a major disruption in your area or the loss of valuable work? What would you do to preserve equipment, specimens, samples and vital records?

Knowing what to do and having a plan will help limit disruptions and reduce unacceptable losses in your operations.

A continuity plan is a collection of resources, actions, procedures and information that is developed for use in the event of a major disruption of operations. This planning helps prepare WashU departments and organizations to maintain essential functions after a disaster or other major disruption. In the event of a major disaster or other disruption, having a business continuity plan will minimize the impact and help you return to normal operations as quickly as possible.

A continuity plan is different from an emergency plan. An emergency plan tells you what to do immediately before or during an emergency, like what to do if you see a fire, or what to do during a blizzard. A continuity plan helps you minimize the impact on our operations regardless of the event and helps you return to normal operations as soon as possible.

A PDF version of this guide and additional resources are available on the WashUContinuity section of the Emergency Management Web site at http://emergency.wustl.edu

Washington University in St. Louis (WashU) Emergency Management utilizes a continuity planning software, WashUContinuity, to capture a department/divisions continuity plan. WashU Emergency Management manages this system and WashU IT has restricted access. Upon conclusion of documenting all necessary plan requirements into the WashUContinuity system, the plan is converted to a PDF and provided to the planning team of the department/division. The planning team has the rights to send it to anyone in their department they choose, but we suggest keeping the plan within the leadership and planning team of the department/division.
GETTING STARTED

Developing a continuity plan may seem like an overwhelming task, but in reality you probably already have much of the required information and process. This guide will help you walk through the planning process in a logical order.

- Don’t do this alone. Continuity planning is everyone’s responsibility. Develop a planning team to help bring all the pieces together. Consider including your director or manager, lead administrator, information technology (IT) specialist and other essential staff.
- Schedule a meeting with the planning team and WashU emergency management continuity planning program manager. During this introductory meeting the program manager for continuity planning will provide an overview of continuity planning walk through this guide and the process to developing a continuity plan.
- WashU Emergency Management prefers to start with one hour meetings once a week for 4-6 weeks with the planning team. Add additional meetings as needed.
- Follow this guide and complete the provided worksheets.
- Review existing plans such as your department or building’s Emergency Plan. They may provide helpful information for developing your continuity plan.

CONTINUITY PLANNING PROCESS
DEVELOPING BASIC PLAN

The basic plan provides an overview of the department/divisions approach to continuity operations. It identifies policies, describes the organization and assigns tasks. Although the basic plan guides the development of the more operational parts of the plan, its primary audience consists of the department/divisions senior staff. WashU Emergency Management has created a template for all section of the Basic Plan (Purpose, Scope, Situation, Assumptions, Concept of Operations, Assignment of Responsibilities, Communications, Plan Maintenance, Authorities and References). To better understand the purpose of these sections, a brief description of each of these areas are discussed below. The department/division is encouraged to add to the template or remove concepts that are not applicable to your area.

Purpose:

The introduction to the continuity plan should explain the importance of continuity planning to the department/division and why they are developing a continuity plan. It may also discuss the background for planning, referencing recent events that have led to the increased emphasis on the importance of a Continuity capability for the organization.

Scope:

The continuity plan should explicitly state the scope of the emergency and disaster response and the entities (e.g. departments, agencies, private sector, citizens) and geographic areas to which the plan applies.

Situation:

WashU Emergency Management has conducted an extensive Hazard Identification and Risk Analysis, which will be available for all continuity plans. However, to better understand this section of the plan the situation section characterizes the “planning environment,” making it clear why a continuity plan is necessary. The level of detail is a matter of judgment; some information may be limited to a few specific sections of the plan. At a minimum, the situation section should summarize hazards faced by the department/division.

Assumptions:

WashU Emergency Management has identified several planning assumption for continuity planning. However, the department/division is welcome to add more assumptions if they desire. Planning assumptions identify what the planning team assumes to be facts for planning purposes in order to make it possible to execute the plan.
Communications

This section addresses communications systems needed to ensure connectivity during crisis and disaster conditions. The ability for the department/division to execute its essential functions at its alternate location depends on the identification, availability, and redundancy of critical communications and information technology systems to support connectivity among key leadership personnel, internal organization elements, other organizations, critical customers, and the public, during crisis and disaster conditions.

Plan Evaluation, Revision, and Maintenance

This section describes the process and methodology the organization uses to maintain the plan. It identifies who is responsible for plan updates, how often the plan will be reviewed and updated, and describes the coordination process.

Assignment of Responsibilities

This section includes additional outlining of continuity responsibilities of each essential position.

Direction and Control

This section describes the framework for all direction, control, and coordination activities. It identifies who has tactical and operational control. Additionally, direction, control, and coordination explain how multidepartment coordination systems support the efforts of organizations to coordinate efforts across campus while allowing each department to retain its own authorities.
DEVELOPING CONCEPT OF OPERATIONS

This section explains how the department/division will implement its continuity plan. This section is separated into four phases for planning purposes: Response; Relocation; Continuity of Operations; and Reconstitution.

Response
This section explains how your department will activate the continuity of operations plan and the initial steps that the management team or leadership will take to determine the scope of the disruption.

Relocation
This section explains the activation process from the primary operating location and provide a process or methodology for attaining operations capability at the alternate location with minimal disruption to operations within ‘X’ hours of plan activation. This section should also address procedures and guidance for organization personnel who will not relocate to the alternate location.

Continuity of Operations
This section describes the initial arrival process and operations procedures for the continuation of essential functions.

Reconstitution
Departments/Divisions need to identify and outline a plan to return to normal operations once department/division leadership or their designee determines that reconstitution operations for resuming normal business operations can be initiated. Reconstitution is defined as the transition and phase-down of continuity operations at the alternate location and transfer of essential function back to the primary location.
DETERMINING ESSENTIAL FUNCTIONS

Essential functions are those services, programs or activities that are necessary to the ongoing operations of the university and would directly affect the success of your department if they were to stop for an extended period. The success of your department and the support you provide to the university rely on these functions. Stopping them for an extended period of time would cause harm to your department and the university.

Your essential functions will serve as your guide for how to restart your operations following a disaster or major disruption. They help answer the question “What is the minimum level of service or activity my department must offer to still consider us to be in business?” By identifying and prioritizing your essential functions, you can determine which personnel, facilities, equipment and materials are necessary to keep your department functioning following a disaster or major disruption.

Typical essential functions for Academics include, but are not limited to:

- Conduct teaching
- Conduct research
- Maintain student admissions
- Support staff and faculty
- Continue visible leadership

In general, you should be able to organize your mission into three to five essential functions; more if you are a highly complex department.
CRITICALITY ANALYSIS

While everything you do each day may seem essential, in reality some functions and activities are more essential than others. Some activities can be suspended for several weeks, while others cannot stop for more than a few hours. Knowing the priorities of your functions will help you establish a recovery plan that focuses on the functions that are the most important. Below is general guidance to help you prioritize your functions. Completing the criticality analysis will also help determine the priority for each function.

To assist you in prioritizing your essential function, measuring the Disruption Tolerance, Range of Impact, and identifying the Priority for Recovery allows you to analyze how critical the essential function is to your daily operations. Below are the measurements for Priority for Recovery, Disruption Tolerance, and Range of Impact used analyze the criticality.

<table>
<thead>
<tr>
<th>Priority for Recovery Level</th>
<th>Importance</th>
<th>Disruption Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Function directly impacts the life, health, safety or security and stopping would have significant consequences</td>
<td>Less than 4 hours</td>
</tr>
<tr>
<td>High</td>
<td>Functions must continue at normal or increased level. Pausing for more than 24 hours may cause significant consequences or serious harm to operations.</td>
<td>1 day</td>
</tr>
<tr>
<td>Medium</td>
<td>Function must be continued if at all possible, perhaps in reduced mode. Stopping for more than one week may cause major disruption to operations.</td>
<td>1 week</td>
</tr>
<tr>
<td>Low</td>
<td>Function could be suspended for one month without causing significant disruption to operations.</td>
<td>1 month</td>
</tr>
<tr>
<td>None</td>
<td>Function would not be impacted by a disruption.</td>
<td>Longer than 1 month</td>
</tr>
</tbody>
</table>

Range of Impact

<table>
<thead>
<tr>
<th>Range of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
</tr>
<tr>
<td>A single office or area on one campus</td>
</tr>
<tr>
<td>Several offices or areas on one campus</td>
</tr>
<tr>
<td>A majority of offices or areas on one campus</td>
</tr>
<tr>
<td>Every office or area on multiple campuses</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>Does Not Apply</td>
</tr>
</tbody>
</table>
DEVELOPING RECOVERY STRATEGIES

You have identified and prioritized your essential functions, have identified the required resources and possibly alternate locations. The next step is to outline the actions to take after a disaster or major disruption to maintain or restore each function. This will involve developing recovery strategies.

Recovery strategies are the backup plans that help you stay in business after a disaster or major disruption. They indicate what the practice or department needs to do to recover and return to normal operations.

Recovery strategies serve as checklists that guide your recovery actions and are organized by required resources (people, places and things). Recovery strategies can help answer the basic question, “What if?”

- What if 50% of your staff was out sick with the flu for several weeks?
- What if you lost your facility to a fire? Where would you go?
- What if your specialized equipment was damaged or destroyed?
- What if you lost access to the internet?

When creating your recovery strategies be sure to include enough details to make them useful. If they are too vague they won't be helpful. You are given the option to select pre-identified recovery strategies or you can create a new recovery strategy. In addition, please provide detailed information about executing this recovery strategy in the Details section under each recovery strategy. An effective recovery strategy and recovery tasks should be easily understood by all of your recovery team.

We have identified seven likely scenarios that recovery strategies should be developed for. Some of the recovery strategies scenarios may not be applicable. In that case, select does not apply to this essential function and in the details section explain why it does not apply.

Those scenarios identified in the plan to consider are:

- Operate with reduced staff
- Loss of facility
- Loss of IT applications and services
- Loss of power
- Loss of water
- Loss of vendor
- Loss of resources

REQUIRED BUILDINGS AND ALTERNATE BUILDINGS

When creating your continuity plan it is important to identify your required buildings and any alternate locations you may be able to relocate. An important consideration in determining alternate locations is the capabilities at the new location. For example, if you need to relocate your office you wouldn't want to identify a free weights room at the recreation center. Also things to consider in determining an alternate location is the owner of the location, is it WashU IT/Voice supported, does it have any emergency/backup power capabilities and most importantly is it big enough.
REQUIRED IT APPLICATIONS

WashU has a very robust and complex information technology system. It consists of IT services, applications, databases, servers, internet, etc. For the purpose of continuity planning it is important to identify what IT application and services your essential function depend on. This information will help us work with WashU IT to better understand the complexities and interdependencies of IT applications and services throughout the WashU community. In addition to identify the needed IT applications, it is also important to consider the Priority for Recover – High, Moderate, Low; essentially how important is this IT application to your essential function; the Recovery Time Objective and the Recovery Point Object.

Recovery Time Objective (RTO) is defined as the maximum tolerable amount of time you can be without the IT application.

Recovery Point Objective (RPO) is defined as the amount of acceptable data loss between the last backup and the present.

REQUIRED VENDORS

Supply chain management for disruptions is a key part of continuity planning. As an important step in continuity planning process, identifying if the essential function depends on a vendor is key. Identify any vendors that have a direct impact your supply chain management for your operations. For example, if your department depends on a vendor to provide staff or a resource that is delivered every day to your office then identify them as a vendor. Remember, you are developing a recovery strategy for what to do if you lost your vendor. Identifying those essential vendors is an important step in communicating with the vendor representative about continuity planning and if the vendor has continuity plan.

VITAL RECORDS

The identification, protection and ready availability of vital records, databases and hardcopy documents needed to support the essential function under the full spectrum of all-hazards emergencies are critical elements of a successful continuity plan and program. Identify any vital records you may have in your area, how they are safeguarded and what the priority for recovery is.

REQUIRED RESOURCES

Knowing your essential function and their criticality/priority rating is the first step in creating a continuity plan. Next you will want to determine what essential resources you need for each function. Resources can be broken down into seventeen broad categories.

For example, if you need tables and chairs to continue the essential functions then select the resource category and office supplies and furniture.

This information is vital if in the need to relocate to an alternate location identified in your plan. You will have already determined what resources you must have in order to resume the function. Knowing this information will make procuring or acquiring the resources much easier.
ESSENTIAL ROSTER AND TEAMS

Identifying those individuals that have a critical role in running the department or performing the essential functions should be documented. They three most common types of essential rosters in continuity planning are Employee, Lines of Succession, and Essential Position rosters.

- **Employee**
  - You are encouraged to have a list of employees and contact information for them in case you needed to contact all your employees. Typically a call tree design is employed for this type of mass notification within a department.

- **Lines of Succession**
  - Identify who would be in charge if the current administrator is unable to fulfill essential duties.

- **Essential Position**
  - Identify any positions that are critical to the essential functions or the recovery operations of the essential functions.

In addition to creating essential rosters, you may develop teams that will be responsible for specific activities in a continuity event.

For example, a leadership team may assemble within so many minutes following a disruption to determine the next steps. Another example might be a damage assessment team. This would be a team of individuals following a disruption, e.g. flood would return to the building to assess the damage and report that information back to the leadership team.

**SUMMARY**

Continuity planning may seem overwhelming in the beginning. Most individuals immediately default to thinking about catastrophic operations and how they could continue operations. Thinking this way will only create confusion and frustration because it is hard to plan for continuity operations during a total loss of infrastructure and services for the entire university. WashU Continuity program instead tries to focus attention on those disruptions that could be faced on a daily basis, but could be extended to 3-5 days in length. Washington University Emergency Management will guide the chosen planning team through the process and providing guidance and incite every step of the way. You will never be left “alone” to develop a plan.
GLOSSARY

Activation – The implementation of a Continuity plan, whether in whole or in part.

All-Hazards – The spectrum of all types of hazards including accidents; technological events; natural disasters; terrorist attacks; warfare; and, chemical, biological (including pandemic influenza), radiological, nuclear, or explosive events.

Alternate Buildings – Alternate buildings are locations other than the primary facility used to carry out Essential Functions by relocating ERG members following activation of the Continuity Plan. These sites refer to facilities, locations, and also work arrangements such as telework and mobile work concepts.

Business Process Analysis – A method of examining, identifying, and mapping the functional processes, workflows, activities, personnel expertise, systems, data, interdependencies, and facilities inherent in the execution of a function or requirement.

Communications – Voice, video, and data capabilities that enable the leadership and staff to conduct the mission Essential Functions of the organization.

Continuity – An uninterrupted ability to provide services and support, while maintaining organizational viability, before, during, and after an event.

Continuity of Government (COG) Plan – Plan establishing defined procedures that allow the university leadership to continue during a disruption or an emergency. This plan defines the University line of succession and delegation of authorities for University Leadership.

Continuity of Operations Plan – Plan that details the coordinated effort within each critical department of Washington University to ensure the University’s Essential Functions continue to be performed during a disruption or an emergency.

Continuity of Operations – An effort within individual organizations to ensure they can continue to perform their Essential Functions during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies.

Continuity Manager – The senior Continuity planner who manages day-to-day Continuity programs, represents their department or agency on the Continuity Advisory Group and working groups, as appropriate, and reports to the Continuity Coordinator on all Continuity program activities.

Continuity Personnel – Those personnel, both senior and core, who provide the leadership advice, recommendations, and functional support necessary to continue essential operations. Continuity personnel are referred to as ERG members.
Continuity Program Management Cycle – An ongoing, cyclical model of planning, training, evaluating, and implementing corrective actions for Continuity capabilities.

Corrective Action Program (CAP) – An organized method to document and track improvement actions for a program.

Criticality Analysis – A method to assist in prioritizing essential functions, measuring the Disruption Tolerance, Range of Impact, and identifying the Priority for Recovery allows you to analyze how critical the essential function is to your daily operations.

Delegation of Authority – Identification, by position, of the authorities for making policy determinations and decisions at HQ, regional and field levels, and all other organizational locations. Generally, pre-determined Delegations of Authority will take effect when normal channels of direction have been disrupted and will lapse when these channels have been reestablished.

Devolution – Devolution requires the transition of roles and responsibilities for performance of Essential Functions through pre-authorized Delegations of Authority and responsibility. The authorities are delegated from an organization’s primary operating staff to other employees internal or external to the organization in order to sustain Essential Functions for an extended period.

Disruption Tolerance – The length of time essential function could be non-operational before the downtime began to have severe impacts on operations.

Emergency Operating Records – Records that support the execution of an organization’s Essential Functions.

Emergency Relocation Group – Staff assigned responsibility to continue Essential Functions from an alternate site in the event that their primary operating facilities are threatened or have been incapacitated by an incident.

Essential Functions – Essential Functions are a subset of University functions that are determined to be critical activities. These Essential Functions are then used to identify supporting tasks and resources that must be included in the organization’s Continuity planning process.

Essential Position – Positions that are critical to the departments or essential functions determined to be continued or recovered.

Vital Records and Documents – Electronic and hardcopy documents, references, and records needed to support Essential Functions during a Continuity event.
**Interoperability** – “Interoperability” has two meanings: (1) The ability of systems, personnel, or organizations to provide services to and accept services from other systems, personnel, or organizations, and to use the services so exchanged so that these organizations can operate together effectively; (2) A condition that is realized among electronic communications operating systems or grids and/or among individual electronic communications devices, when those systems and/or devices allow the direct, seamless, and satisfactory exchange of information and services between the users of those systems and devices.

**Leadership** – The senior decision makers in a department.

**Line of Succession** – Orders of succession are a formal, sequential listing of organization positions (rather than specific names of individuals) that identify who is authorized to assume a particular leadership or management role under specific circumstances.

**Memorandum of Agreement/Memorandum of Understanding (MOA/MOU)** – Written agreements between organizations that require specific goods or services to be furnished or tasks to be accomplished by one organization in support of the other.

**Multi-Year Strategy and Program Management Plan (MYSPMP)** – A plan that guides the development of the Continuity program over a set number of years via process that ensures the maintenance and continued viability of Continuity plans.

**Priority of Recovery** – A method to determine the importance of recovery of an essential function.

**Primary Buildings** – The primary location an essential function is performed.

**Range of Impact** – The scope of the effects an essential function would have over the University.

**Reconstitution** – The process by which surviving and/or replacement organization personnel resume normal organization operations from the original or replacement primary operating facility.

**Recovery** – The implementation of prioritized actions required to return an organization’s processes and support functions to operational stability following an interruption or disaster.

**Recovery Strategy** - Identifies what needs to be done to recovery or continue an essential function

**Required Essential Functions** – Those essential functions that must be operational in order for department essential function to continue.

**Required IT Applications** – Those IT applications that are required to continue essential function.
**Required Resources** – Resources required for continuing essential function.

**Required Teams** – A pre identified group of personnel responsible for the continuation or recovery of a specific essential function.

**Required Vendors** – Those vendors that are required to continue essential function.

**Redundancy** – The state of having duplicate capabilities, such as systems, equipment, or resources.

**Risk Assessment** – A product or process which collects information and assigns values to risks for the purpose of informing priorities, developing or comparing courses of action, and informing decision making.

**Risk Management** – Risk management is the process of identifying, analyzing, assessing, and communicating risk and accepting, avoiding, transferring, or controlling it to an acceptable level considering associated costs and benefits of any actions taken.

**Telework** – A work flexibility arrangement under which an employee performs the duties and responsibilities of such employee’s position, and other authorized activities, from an approved worksite other than the location from which the employee would otherwise work.

**Tests, Training, and Exercises (TT&E)** – Measures to ensure that an organization’s Continuity plan is capable of supporting the continued execution of the organization’s Essential Functions throughout the duration of a Continuity event. TT&E activities are designed to familiarize, impart skills and ensure viability of Continuity plans.