The purpose of this guide is to serve as a tool to all departments, divisions, and labs across the University in building a Continuity Plan to guide recovery operations. This will lead toward a resilient culture that sustains the critical operational functions of WashU.
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, tested and held in readiness 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 business plan helps you minimize the impact on our business regardless of the incident and helps you return to normal operations as soon as possible.

A PDF version of this guide and additional resources are available on the WashU Continuity section of the Emergency Management Web site at [http://emergency.wustl.edu](http://emergency.wustl.edu)

Washington University in St. Louis (WashU) Emergency Management utilizes the 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
Developing the 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 operationally-oriented 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. The situation section covers a general discussion of:

- Relative probability and impact of the hazards
- Geographic areas likely to be affected by particular hazards
- Vulnerable critical facilities (e.g., labs, research facilities, clinics)
- Student, faculty, staff and patient locations; including any concentrated populations of these groups with disabilities or functional needs, or individuals with limited English proficiency, as well as unaccompanied minors and children in WashU daycare and WashU pre-school settings
- Dependencies on other department/divisions for critical resources
- The process used by the department/division to determine its capabilities and limits in order to prepare for and respond to the defined hazards
- The actions taken in advance to minimize an incident’s impacts, including short- and long-term strategies.
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.

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: Readiness and Preparedness; Activation and Relocation; Continuity of Operations; and Reconstitution Operations.

- **Readiness and Preparedness**
  This section addresses the readiness and preparedness activities to ensure personnel can continue essential functions. Readiness is the ability of a department/division to respond to a continuity event. This phase includes all organization continuity readiness and preparedness activities. Departments/Divisions should only include those readiness and preparedness activities and systems that are applicable to their plan.

- **Activation and 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 Operations**
  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.
Assignment of Responsibilities

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

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 Maintenance

This section describes the process 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.

Authorities and References

The key authorities and references on which the department/division continuity plan is based should be listed in this section.
Determining Your 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. Prioritizing your functions will also help you determine the recovery time objective (RTO), the length of time the function can be suspended without causing significant disruption to your operations.

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

- Check in/Check out patients
- Maintain medicines
- Provide Clinical Services
- Scheduling appointments
- Ordering supplies
- Diagnostic testing
- Document patient information
- Manage staff

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

In addition, Emergency Management in conjunction with the Continuity Planning Committee have developed ten university essential functions. These are large, broad functional categories the university deems as essential function to maintain and operate the mission of WashU. You will select all university essential functions that relate to your clinical essential functions.

The ten university essential functions are listed below:

- Provide Visible Leadership for WashU
- Conduct Teaching
- Conduct Research
- Maintain University Operations (e.g Facilities, IT, HR)
- Maintain the Reputation of the University
- Maintain University Relations with Alumni, Development and key Stakeholders
- Maintain Campus Safety and Security
- Provide Patient Care
- Maintain Financial Stability of the University
- Maintain Campus Residential Life Services (e.g. Student Housing)
Prioritizing Your Essential Functions

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 impact analysis will also help determine the priority for each function.

To assist you in prioritizing your essential function at the clinic level, measuring the Disruption Tolerance, Breadth of Impact, and identifying the Priority for Recovery allows you to determine how important the essential function is to your daily operations. For example, your essential function is Check in Patients. The priority for recovery might be high – you need this function back up immediately to continue your mission. Secondly, your operations may only allow less than four hours of non-operational status before it starts to impact patient care or your daily operations. Lastly, if this essential function is disrupted will it only impacts your clinic or would the breadth of impact stretch to other departments and divisions across the campuses?

Below are the measurements for Priority for Recovery, Disruption Tolerance, and Breadth of Impact

### Priority for Recovery

<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 of the WashU community 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 business operations, upstream and downstream dependent organizations or units, revenue and finances, reputation or other core mission services.</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 business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.</td>
<td>1 week</td>
</tr>
<tr>
<td>Low</td>
<td>Function could be suspended for one month without causing significant disruption to business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.</td>
<td>1 month</td>
</tr>
<tr>
<td>None</td>
<td>Function would not be impacted by a disruption. Deferring this function for more than one month will not cause any significant disruption to business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.</td>
<td>Longer than 1 month</td>
</tr>
</tbody>
</table>

### Breadth of Impact

- **No Impact**
- **Disruption of this function will mainly impact a single unit or area on one campus**
- **Disruption of this function will mainly impact multiple units or areas on one campus**
- **Disruption of this function will impact a majority of units or areas on one campus**
- **Disruption of this function will impact almost every unit or area on multiple campuses**
- **Unknown**
- **Does Not Apply**
**Conducting an Impact Analysis**

An Impact Analysis is completed for each essential function to help assess and document potential impacts and negative consequences of a disaster or major disruption on the function from a university perspective. The impact analysis developed for WashU measures two concepts. First, the **criticality point** – at what point in time would failure to recover or continue the essential function become critical to your day-to-day operations.

- 1 day
- 3 days
- 1 week
- 1 month

Second, the level of **impact** – what impact (No Impact, High, Moderate, Low) do you assign to this essential function in relation to the Impact Category (see below) being measured.

Refer to page 10 as a guide to assist in determining the level of impact.

Impact Categories:

- Teaching
- Research
- Department Operations
- Department Finances
- Compliance
- Safety and Security
- Patient Care

You may realize that your operations don't impact certain categories. For those impact categories that your operations do not directly affect choose No Impact.

For example, if your essential function is to check in patients, it does not directly affect Teaching, Research, and Safety and Security. However, checking in patients may have a direct impact on Departmental Operations, Departmental Finances, and Patient Care impact categories. Discuss among your planning team to determine which impact categories your essential functions directly affect.

While everything you do each day may seem essential, in reality some functions and activities are more essential than others are. Some activities can be suspended for several weeks, while others cannot be stopped for more than one day. 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.
### Impact on Teaching

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on coursework and/or student degree progress</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on coursework and/or student degree progress</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on coursework and/or student degree progress</td>
</tr>
</tbody>
</table>

### Impact on Research

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on ability to conduct lab or non-lab research projects</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on ability to conduct lab or non-lab research projects</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on ability to conduct lab or non-lab research projects</td>
</tr>
</tbody>
</table>

### Impact on Department Operations

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on day-to-day job activities</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on day-to-day job activities</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on day-to-day job activities</td>
</tr>
</tbody>
</table>

### Impact on Department Finances

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on revenues and/or expenses</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on revenues and/or expenses</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on revenue and/or expenses</td>
</tr>
</tbody>
</table>
### Impact on Compliance

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on compliance with laws, regulations, or financial controls</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on compliance with laws, regulations, or financial controls</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on compliance with laws, regulations, or financial controls</td>
</tr>
</tbody>
</table>

### Impact on Patient Care

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on patient care</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on patient care</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on patient care</td>
</tr>
</tbody>
</table>

### Impact on Safety and Security

<table>
<thead>
<tr>
<th>Level of Impact</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Impact</td>
<td>No Impact</td>
</tr>
<tr>
<td>High</td>
<td>Severe impact on life safety, occupational health and safety, and security</td>
</tr>
<tr>
<td>Moderate</td>
<td>Significant impact on life safety, occupational health and safety, and security</td>
</tr>
<tr>
<td>Low</td>
<td>Minimal impact on life safety, occupational health and safety, and security</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 and 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 specialized equipment and/or supplies.
**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 clinic 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. Back to the previous example, if your clinic holds 30 people at a time you wouldn’t want to identify a utility closet as your back up location.

**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**

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

- Office Equipment
- Software
- Office Supplies
- Office Furniture
- Telecommunications
- Clinical Exam Room
- Classroom
- Clinical Supplies
- Workspace
- Food & Water
- Transportation
- Communications

**Essential Rosters 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.

Brandon Robbins, CEM, CBCP
Continuity Program Manager
brandon.robbins@wustl.edu
314-273-0382