

Continuity of Operations Training

Proposed Methodology for UMBC

- 10:15 AM Introduction to Emergency Management (30 min)
- 10:45 AM Break (5 min)
- 10:50 AM Continuity Overview (30 min)
- 11:20 AM Break (5 min)
- 11:25 AM The Continuity Planning Process (35 min)
- 12:00 PM Lunch (120 min)
- 2:00 PM Review your Organizational Functions (30 min)
- 2:30 AM Break (5 min)
- 2:35 PM Business Process Analysis (30 min)
- 3:05 PM Business Continuity Workshop (30 min)
- 3:35 PM Share your Workshop Results (10 min)
- 3:45 PM Debrief, Wrap-up, Roadmap for Next Steps (15 min)
- 4:00 PM Depart

Introduction

10:15 AM – 10:45 AM

- Not everyone is an Emergency Manager.
- Everyone can manage emergencies at their own level.

- **How it started...**
 - UMBC's current EM program was *decentralized*.
 - EM functions were *spread out* across departments without oversight.
 - Well intentioned planning efforts occurred *without a definitive scope*, goal, or common vision.
 - Independent pockets of strong institutional knowledge across campus *within individuals*.

- **How it's going...**
 - *Empowering* professionals to unify all aspects of the program.
 - *Coordinating* diverse capabilities, aligned under a single framework.
 - *Cooperating* to ensure planning is mindful of impacts on each department's piece of the mission.
 - *Standardizing* language and problem-solving techniques in easy-to-use products and documents.



*Leaving behind the REACTIVE
crisis mindset*



*Adopting a PROACTIVE
readiness model*

- Provide strategic direction to build and enhance EM capabilities.
- Reduce vulnerability to hazards.
 - Physical incidents.
 - Natural, accidental, and intentional.
 - Impacts to life safety, security, property, the environment, and operations.
- Empower Emergency Managers at all levels.
 - Ensure coordination, cooperation, and focused effort.
 - Engage the entire University and its many partners.

Response is organizing resources to take action after an incident.



A **hazard** is a potential source of harm



An **incident** is the actual occurrence of a hazard.



Mitigation is anything you do to reduce (not prevent) the severity of impacts.



A **disruption** is anything that impacts our ability to perform essential functions.

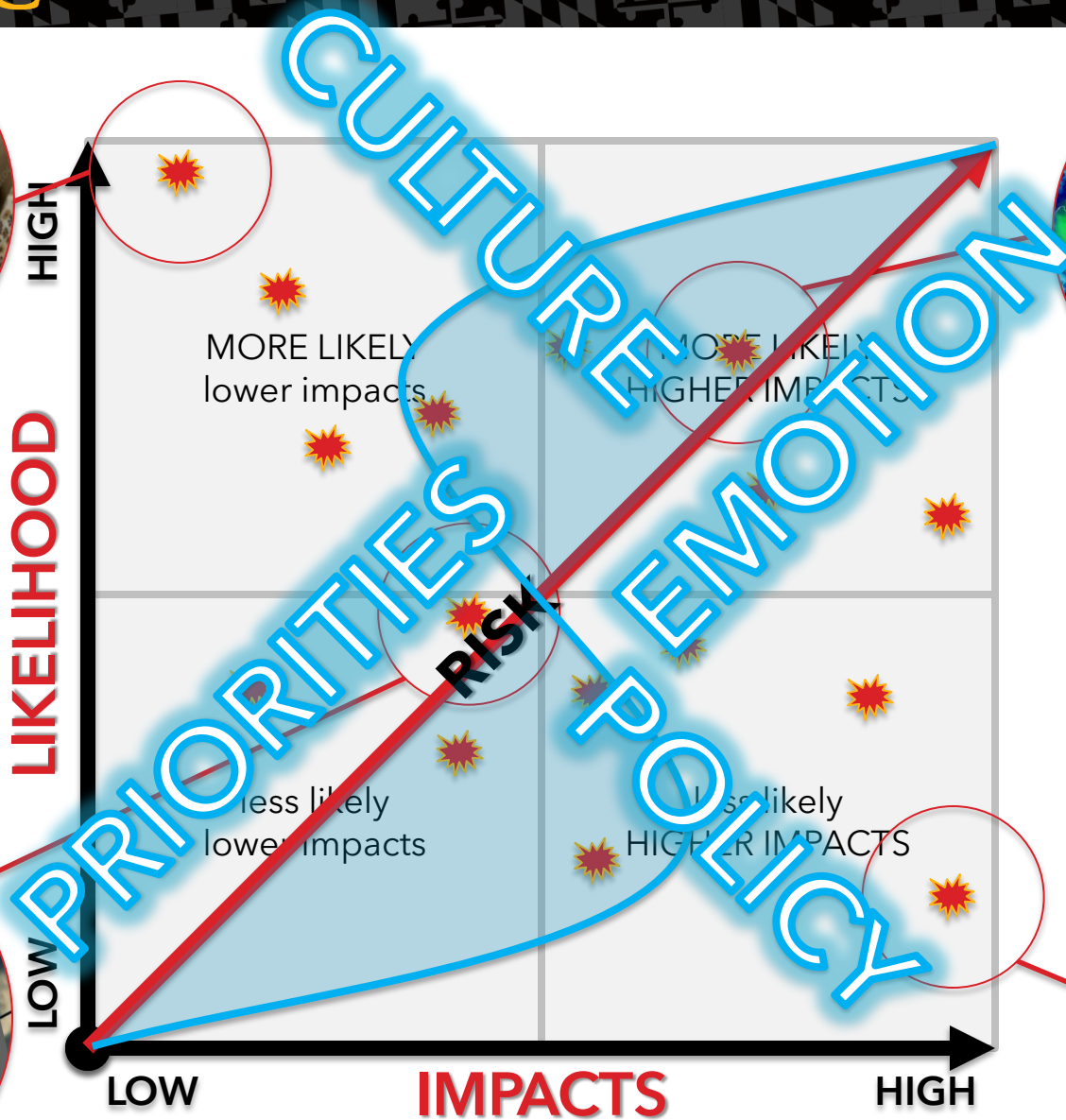
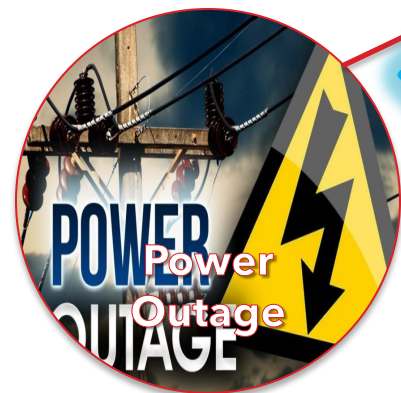
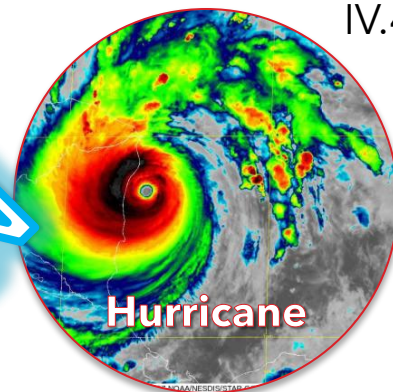
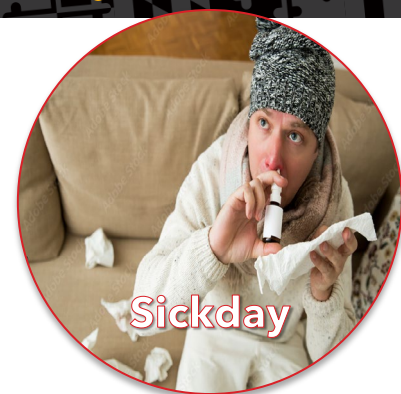


A **vulnerability** is a weakness that can increase risk and severity of impacts.



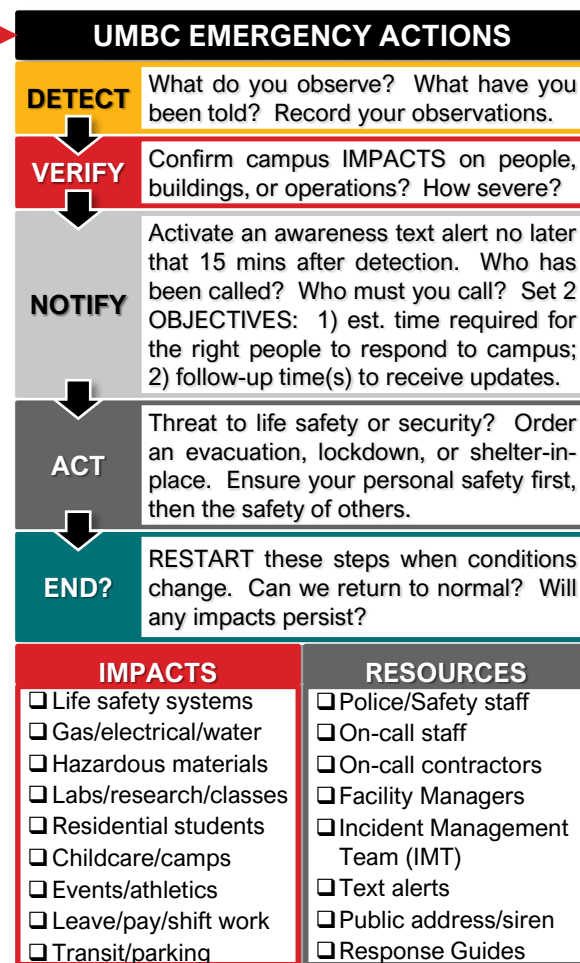
A **risk** is the likelihood that an incident or disruption will occur.





- Preparedness:
 - “We have the teams, training, and tools for a possible emergency.”
- Readiness:
 - “We have the knowledge, skills, and abilities to use these resources, **take immediate action,** and mitigate negative impacts of an actual incident.”
- Readiness requires:
 - Situational awareness.
 - **Well-documented institutional knowledge.**

Key to continuity



- Focus on the **KNOWN**.
 - Hazards most likely to impact our community.
 - Avoid being reactive to unknown or unanticipated crises.
 - Stop “*what if’ing*.”
- Don’t leave anyone behind.
 - Account for diversity, accessibility, and functional needs.
- Simplify.
 - Reduce complex systems and operations into understandable components.
 - Minimize the amount of specialized knowledge.
 - Allow anyone to take appropriate and immediate action.

- A crisis is not often the result of a single issue or event.
 - A confluence of events.
 - Unfortunate timing.
 - Consequences on other priorities.
 - Disproportionally impact some more than others.
- For UMBC – defined by USM policy...
 - Growing controversy.
 - Negative climate.
 - Threatens our reputation.
 - Threatens legal, or financial stability.
- Examples.
 - Freedom of speech.
 - Racial issues.
 - Title IX reports.
 - Political activism.
 - Leadership or management issues.
 - Academic issues (cheating, theft of intellectual property).

- Align response with your values.
 - *Quality of response can have more influence on your reputation than the event.*
 - Uphold our core *values* during even the most difficult of times.
 - Know how to *escalate* negative reports *appropriately*.
- Focus on impacts.
 - Some groups are impacted more than others.
 - You can't always prevent a negative outcome.
 - Don't expect damage to be inevitable.
 - Reduce the severity of harm.
- Stay positive.
 - Remain mutually supportive.
 - Work toward parallel objectives.

Get the right information

to the right people

at the right time

to help them make better, quicker decisions

and take appropriate actions

that will reduce the severity of harm caused by a disruption

BREAK

Return 10:50 AM

Continuity

10:50 AM – 11:20 AM

Dictionary

Definitions from [Oxford Languages](#)



con·ti·nu·ity

noun

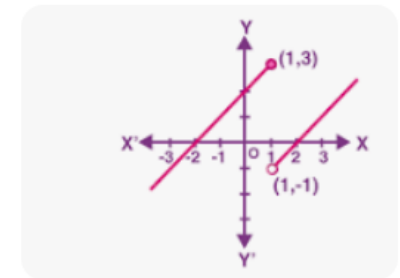
1. the unbroken and consistent existence or operation of something over a period of time.
"pension rights accruing through continuity of employment"
2. the maintenance of continuous action and self-consistent detail in the various scenes of a movie

- **Reliability**
- **Consistency**
- **Trust**

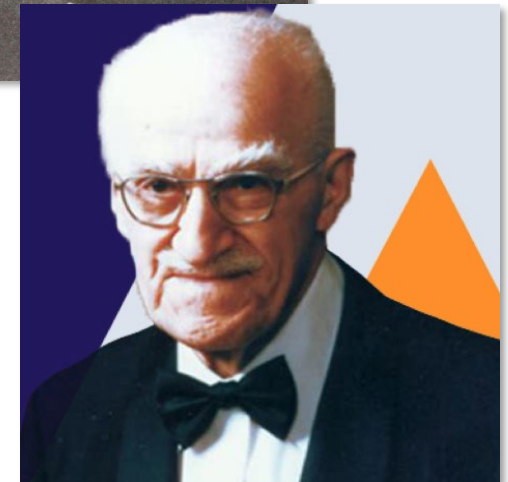
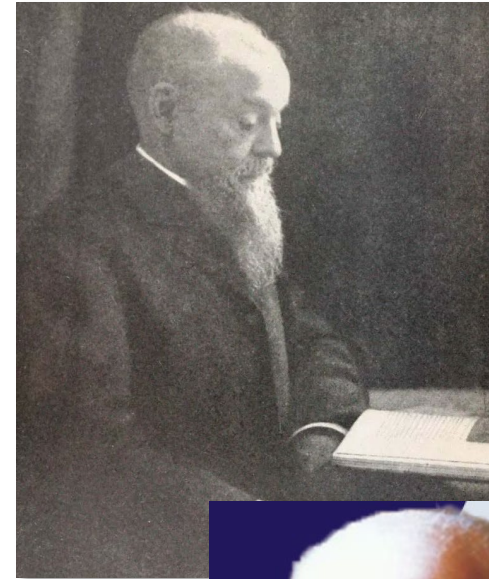
"99% of your problems will stem from people failing to meet your expectations."

What defines a continuous function?

In mathematics, a continuous function is a function that does not have discontinuities that means any unexpected changes in value. A function is continuous if we can ensure arbitrarily small changes by restricting enough minor changes in its input.



- Pareto's Principle:
 - Italian economist, Vilfredo Pareto, 1906.
 - 20% of his country's people owned 80% of the land and wealth.
- The 80/20 rule:
 - *"The vital few and trivial many."*
 - Dr. Joseph Juran, "The Father of Quality."
 - 20% of input is always responsible for 80% of the output.
 - **A small percentage of root causes can result in a high percentage of problems.**
- In terms of continuity...
 - What is essential?
 - What is non-essential?
 - ***Who and what is most likely to cause the most serious problems?***

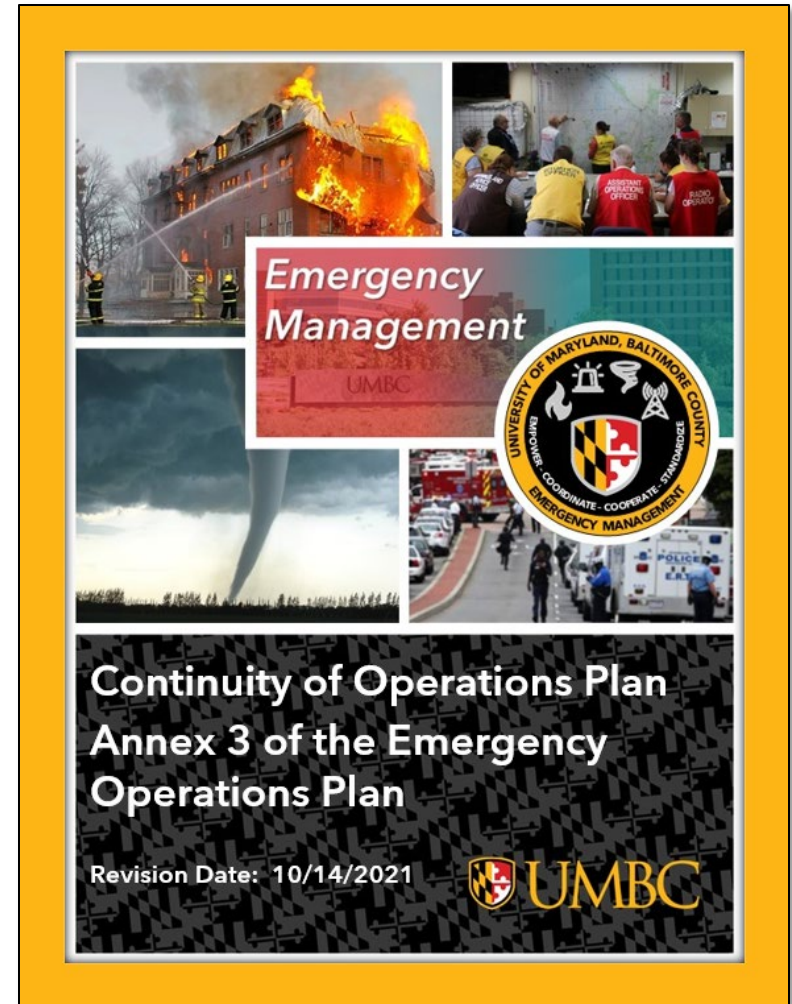


- Continuity is.... **ALL ABOUT WHAT'S ESSENTIAL**
REALLY, REALLY BORING
AS DIFFICULT AS YOU MAKE IT
A LOT EASIER THAN YOU THINK

*"The business continuity manager's main task is to identify the 'Pareto Principle risks' and mitigate these. These risks will not be the headline grabbers, **they will be the mundane threats** of fire, and flood; of natural disaster; of loss of critical IT and telecoms systems; and of loss of human resources."*

~David Honour, "Boring, Boring Business Continuity." [Continuity Central](#)

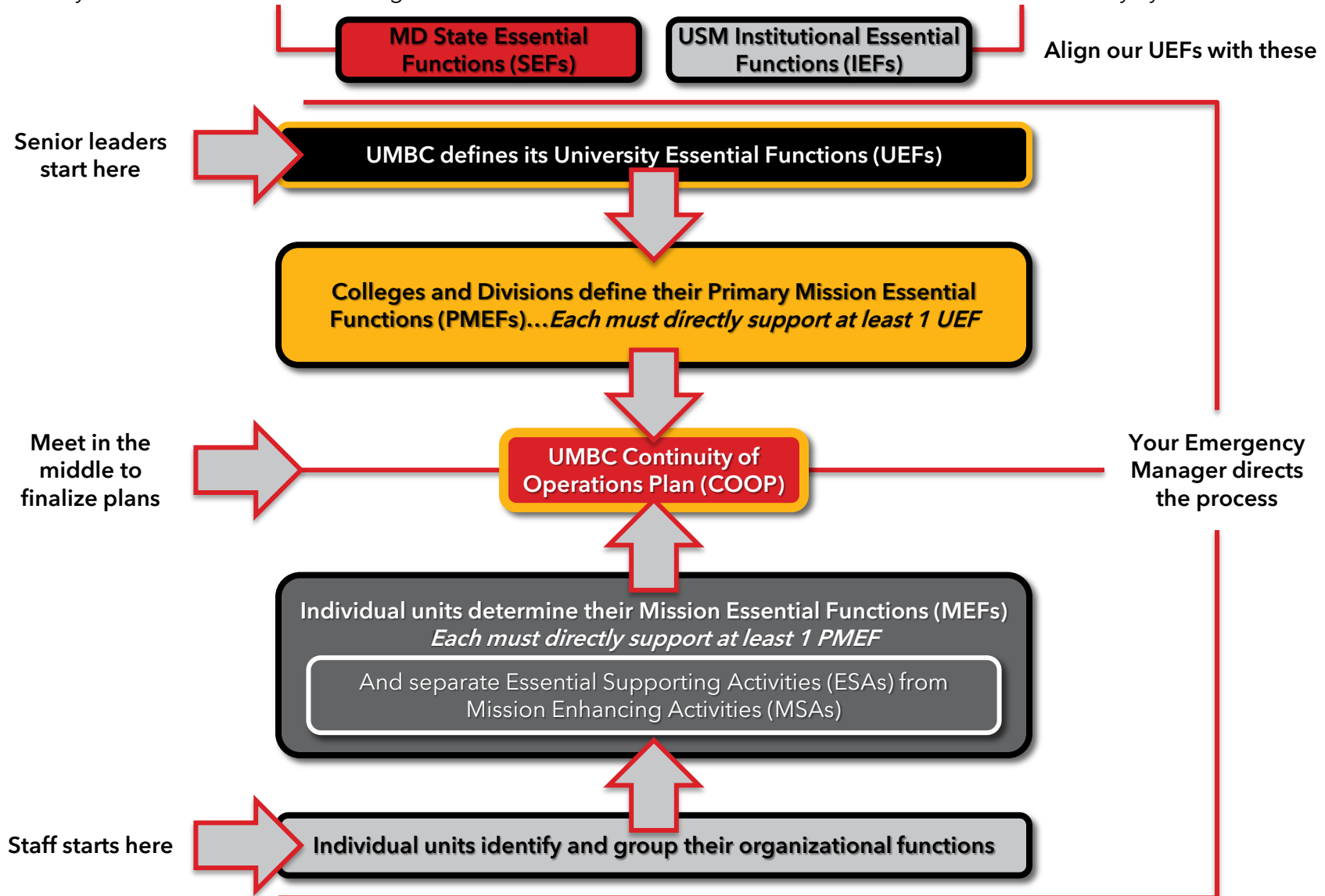
- Continuity is a **collective** process to continue the institution's mission.
 - The continuous performance of our organization's essential functions during a **disruption**.
 - This is NOT GUARANTEED.*
 - Requires senior leader commitment.*
 - An ONGOING process.*
- Continuity of Operation Plan (COOP) - EOP Annex 3.
 - The continuity plan for the University.
 - Documents our continuity process.
 - Defines our strategy and sets requirements.
 - Expectation:** Update every 2 years.



Disruption = Any event that impacts our ability to perform an essential function.

See Maryland COOP Guide for State Agencies Dec 2021

To be determined/drafted by System



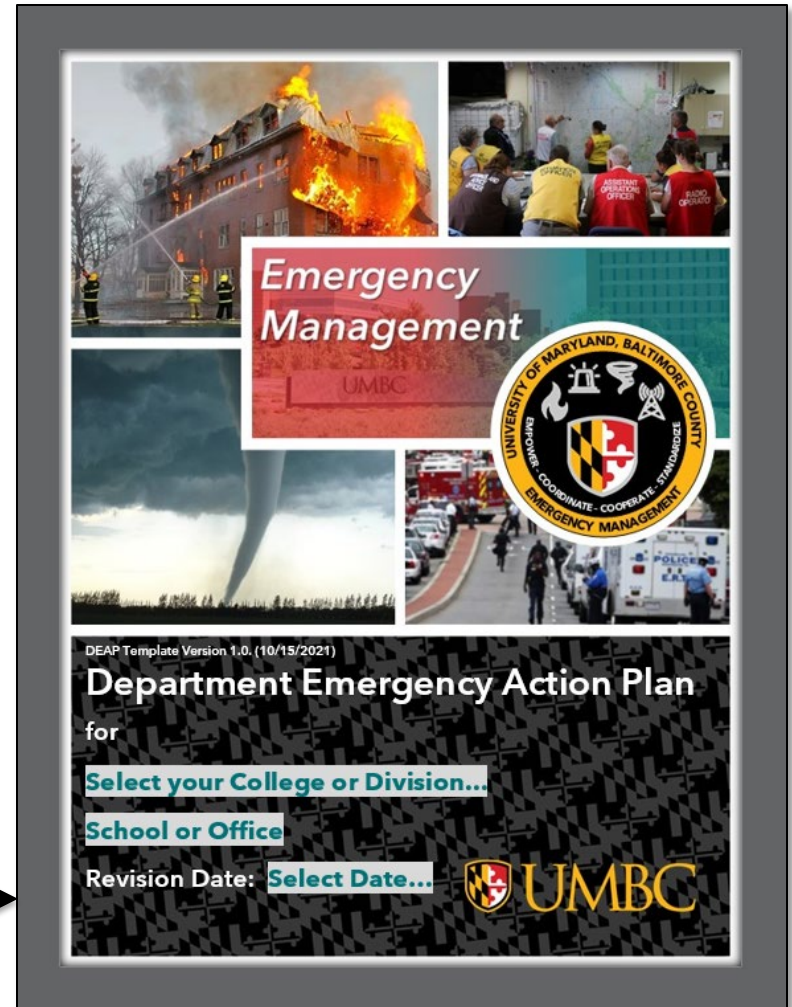
- The COOP is the continuity plan for the entire University.
 - Each College and Division can maintain an individualized plan.
 - Subordinate units within the College or Division may also have a DEAP.
 - The plan for a College or Division describes its own PMEFS and lists each subordinate unit that has its own plan.
 - States the **Emergency Action Procedures (EAPs)** taken during a disruption.
 - Specifies your unit's MEFs and ESAs.
 - **Expectation:** Update at least annually or after major organizational changes.

THIS IS A TACTICAL LEVEL DOCUMENT

It describes operational procedures and actions to achieve program plan objectives

and A PREPAREDNESS COMPONENT of the EM Program

It describes training, preparedness, or prevention activities



DEAP Template Version 1.0, (10/15/2021)

Department Emergency Action Plan

for

Select your College or Division...

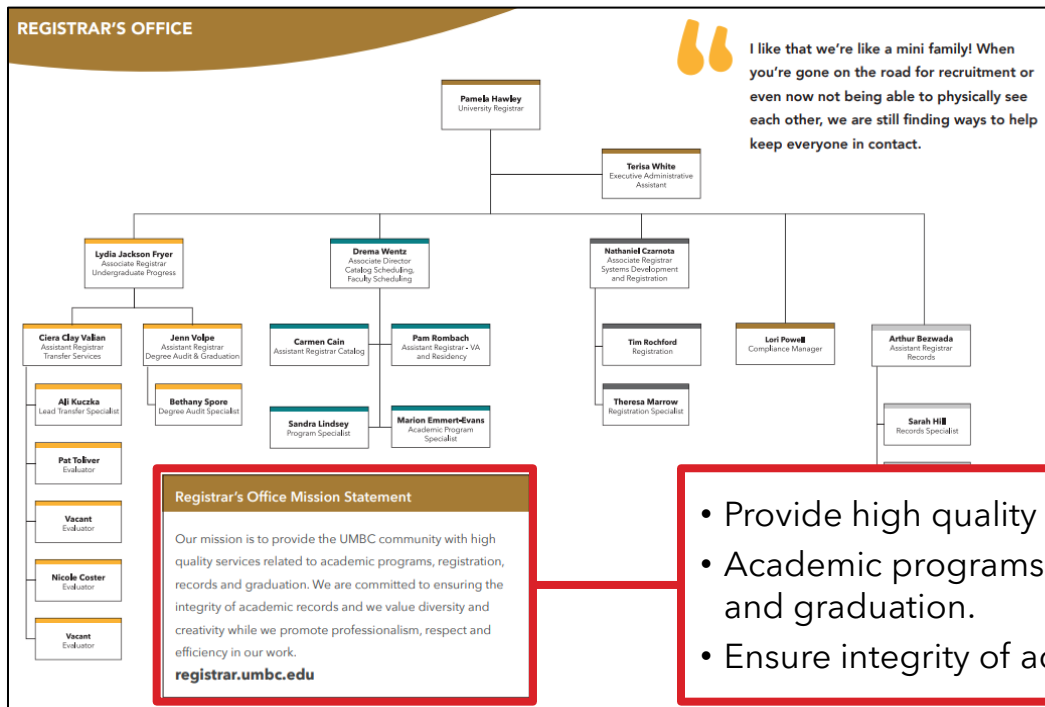
School or Office

Revision Date: **Select Date...**

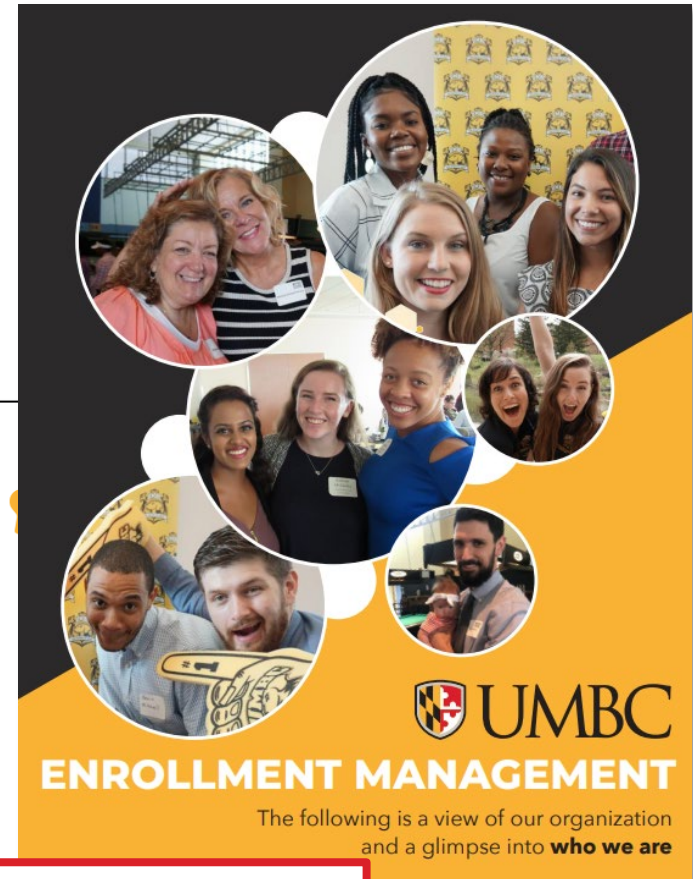


EAPs = Immediate actions taken during a disruption to mitigate impacts on our ability to perform an essential function.

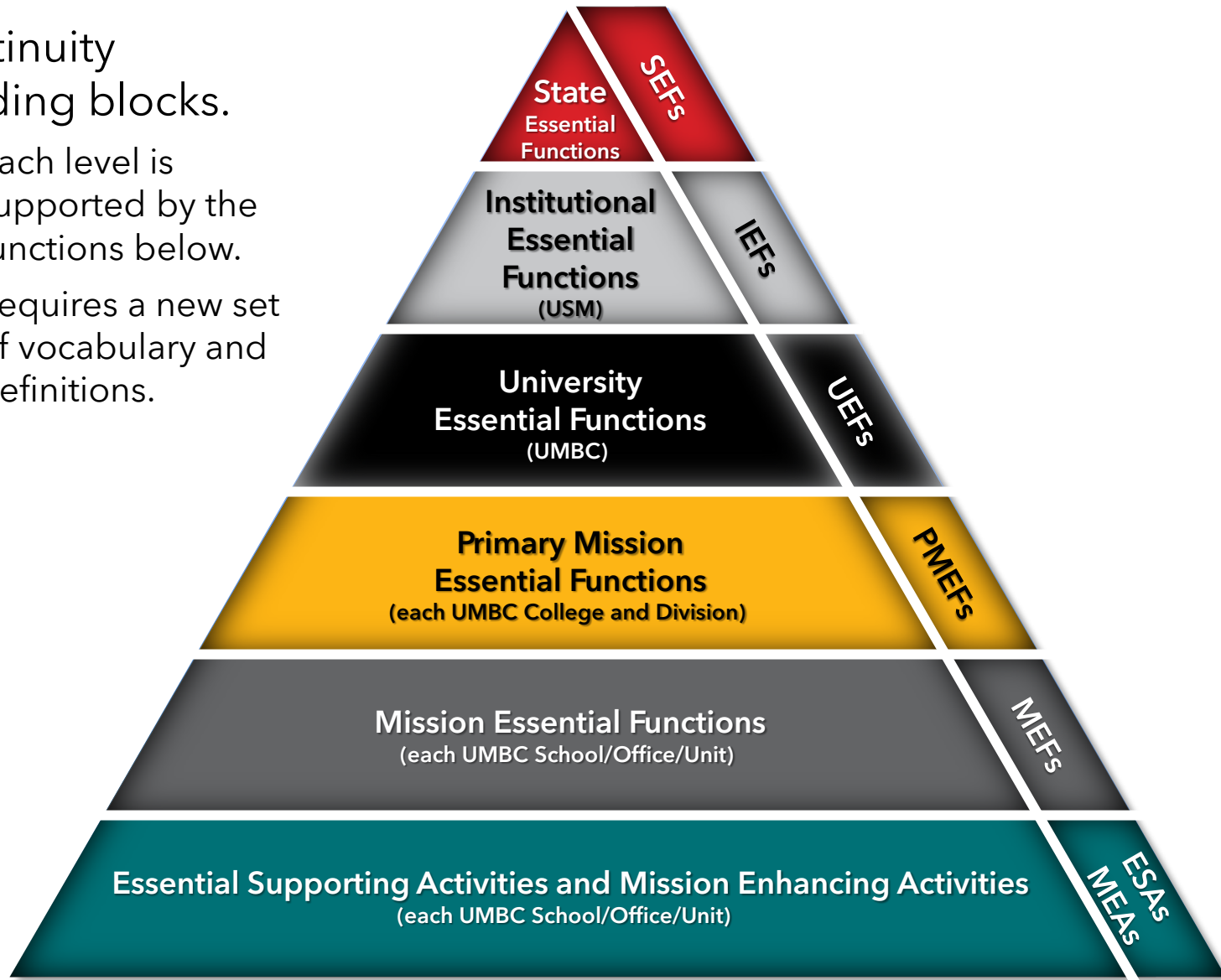
- Set the standard for UMBC...
 - <https://enrollment.umbc.edu/wp-content/uploads/sites/303/2021/06/Enrollment-Management-Who-We-Are.pdf>.
 - Mission Statements can be the foundation for continuity.



- Provide high quality services:
- Academic programs, registration, records, and graduation.
- Ensure integrity of academic records.



- Continuity building blocks.
 - Each level is supported by the functions below.
 - Requires a new set of vocabulary and definitions.



- UEFs form the basis for all continuity decisions.
 - Responsibilities of the University necessary to sustain our mission.
 - Primary focus of the President and senior leaders before, during and after disruptions.
 - **Successfully maintain UEFs at all times**...especially during emergencies.
 - The objective of each College and Division is the continuation of our five UEFs.

our existence!

**UEF 1:
Innovation &
Vitality**

**UEF 2:
Research &
Creative
Achievement**

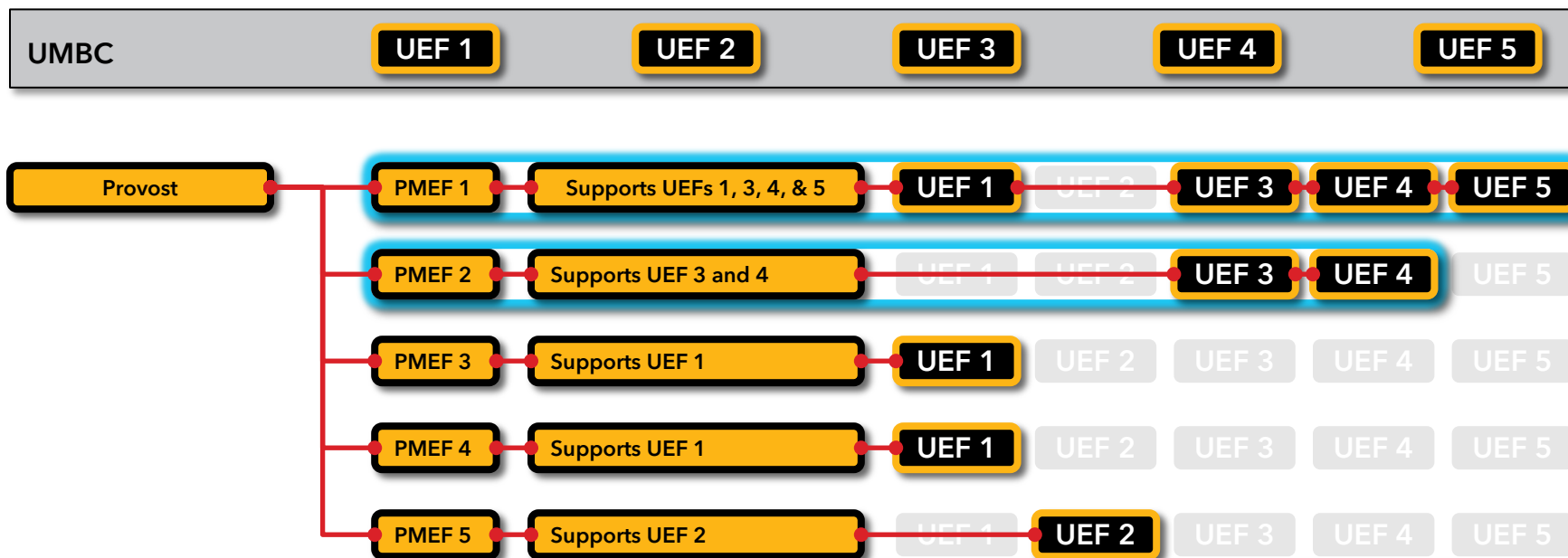
**UEF 3:
Strengthen
Maryland & its
Communities**

**UEF 4:
Student
Opportunity &
Success**

**UEF 5:
Teaching &
Learning**

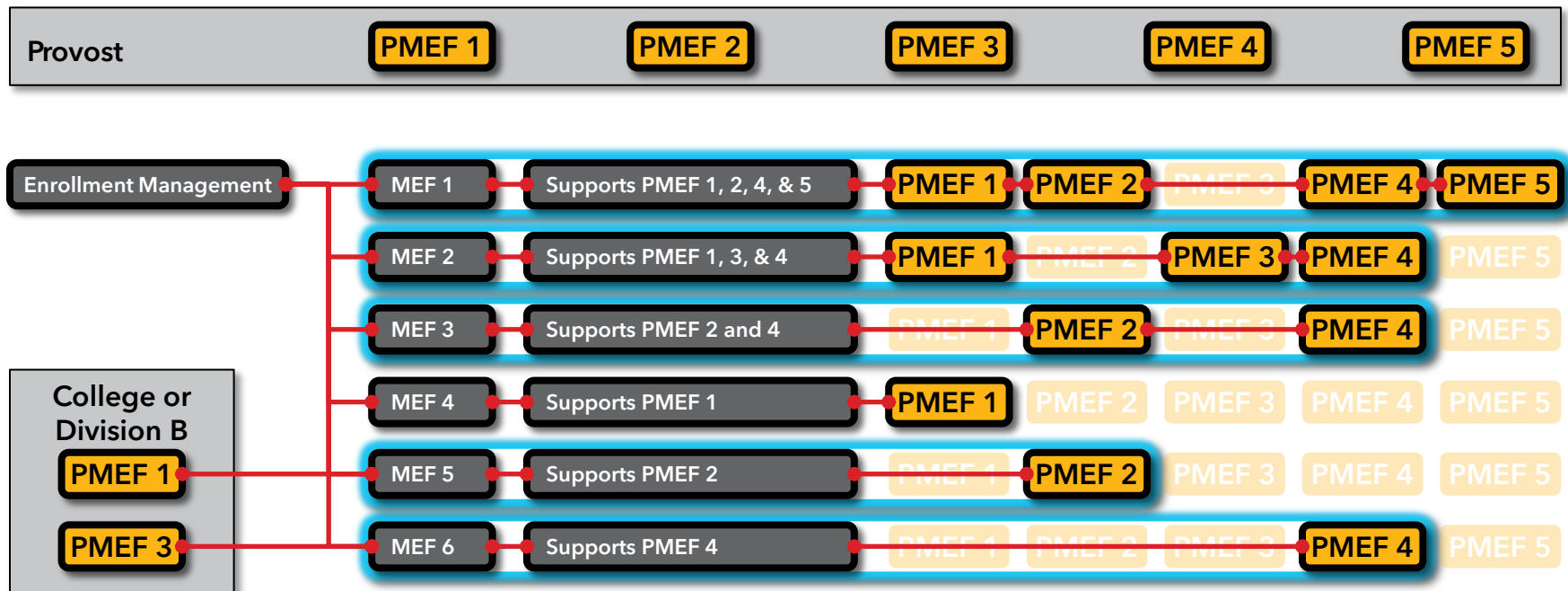
- 1 Innovation & Vitality.** Embrace a workplace culture of continuous improvement and innovation, investing in the future by investing in our people and an environment that is inclusive and welcoming for all.
- 2 Research & Creative Achievement.** Set new standards for research and creative excellence as an R1 institution, building an inclusive, transdisciplinary, and translational enterprise that advances scholarship, discovery, understanding, and innovation across all fields, and contributes to economic prosperity, cultural vitality, and the public good.
- 3 Strengthen Maryland & its Communities.** Deepen reciprocal collaborations and engagement with our neighboring communities and partners in education, arts, government, civic organizations, and industry; contributing to the state's well-being and capacity to thrive.
- 4 Student Opportunity & Success.** Lead in advancing student opportunity and success by expanding access, strengthening high-impact programs and supports, and creating new pathways to improve the student experience and post-graduate success.
- 5 Teaching & Learning.** Lead the nation in pedagogical excellence through innovative and evidence-based practices that educate students for inclusive collaboration, meaningful careers, civic responsibility, critical navigation of emerging technologies, and lifelong learning.

- Each College and Division has its own PMEFs.
 - Services that directly support continuation of **one or more UEF**.
 - Remain continuous OR resumed within 12 hours after disruption.
 - Maintained up to 30 days during disruption OR until normal operations resume.



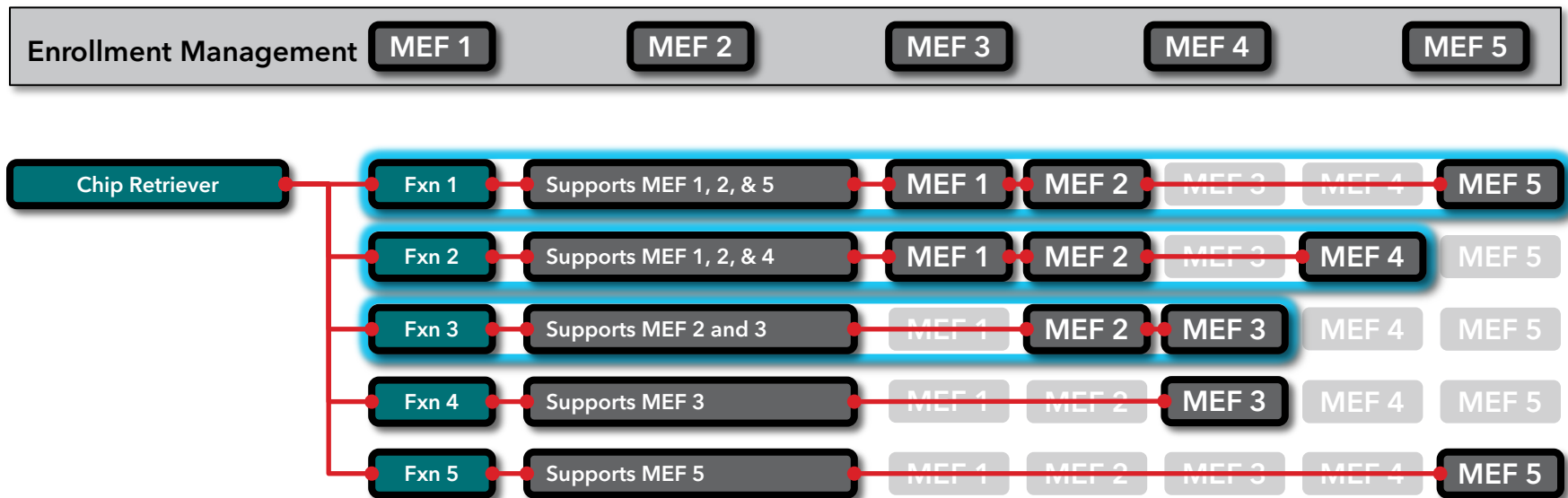
Prioritize PMEFs that support multiple UEFs.

- Each school and office in a College or Division has its own MEFs.
 - Services that directly support continued performance of **one or more PMEF**.
 - Limited** set of office-level functions that provide vital services to our community.
 - Continue throughout a disruption or resume rapidly after a disruption.



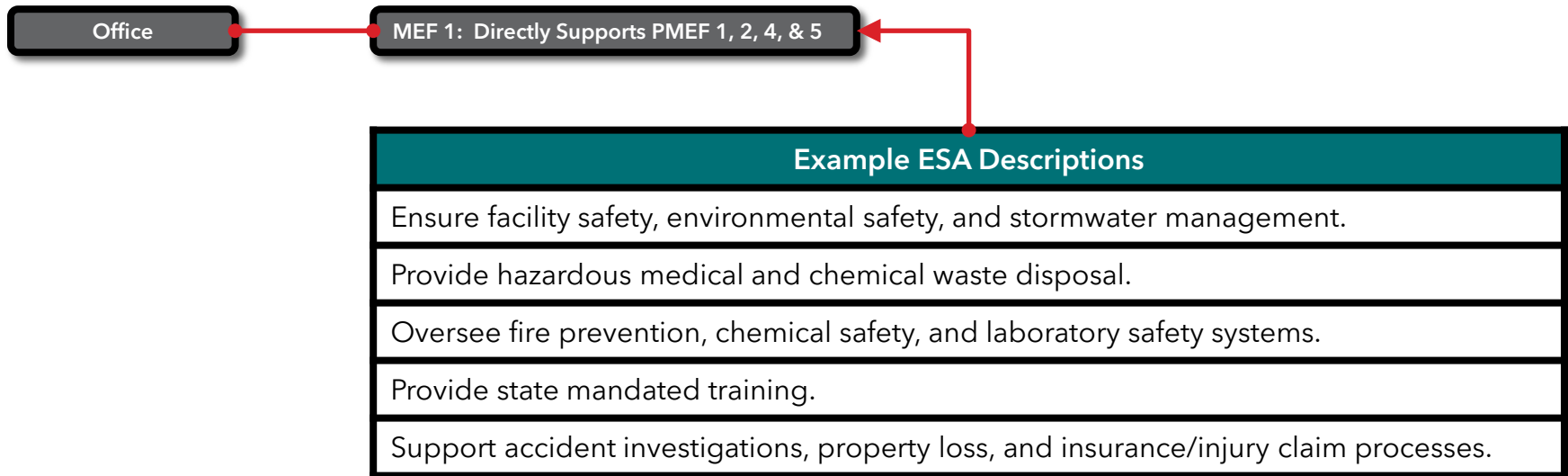
Prioritize MEFs that support multiple PMEFs within AND external to your College or Division.

- Each person has their own organizational functions.
 - Functions that directly support continued performance of **one or more MEF**.
 - Your individual **primary** day-to-day work functions.



Prioritize Functions that support multiple MEFs within your office.

- Functions that support the performance of MEFs.
 - They **may** have a mandate (policy, regulation, or legal requirement).
 - They are important activities...however, ***performance of ESAs alone does not accomplish your mission.***
 - MEFs may be supported by multiple ESAs.
 - ESAs must remain aligned to a single MEF, though different MEFs may have similar ESAs.



- Activities that ***compliment*** a MEF or an ESA.
 - Products of best practices, established customs or traditions, or industry recommendations.
 - They have ***no*** mandate (policy, regulation, or legal requirement).
 - Expect to defer MEAs during a disruption.
 - Communicate this expectation to your partners, customers, and stakeholders.
- Use a 4-phase process to differentiate "***essential***", "***supporting***", and "***enhancing***."
 - Phase 1: Identify Your MEFs (3 steps).
 - Phase 2: Business Process Analysis (BPA - 9 steps).
 - Phase 3: Business Impact Analysis (BIA - 5 steps) .
 - Phase 4: Prioritize and Document (4 steps).

BREAK

Return 11:25 AM

Continuity Planning Process

11:25 AM – 12:00 PM

- Phase 1: Identify your MEFs.
- Phase 2: Conduct your Business Process Analysis (BPA).
- Phase 3: Business your Impact Analysis (BIA).
- Phase 4: Prioritize and Document.

[Source: Federal Continuity Directive 2 \(Annex B\), FEMA, Issue Date: June 13, 2017](#)

VIII.2

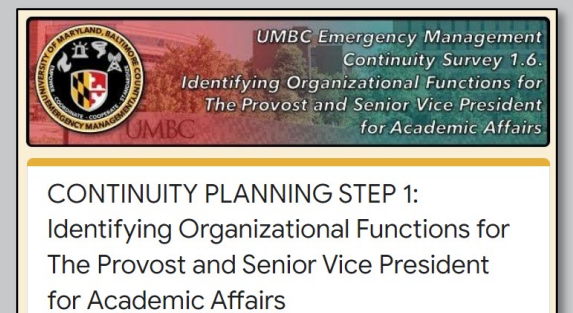
- **Step 1:** Identify organizational functions. This includes:
 - All functions which the organization performs...an **"inventory."**
 - Mandates to perform each function (policy, regulation, or legal requirements).
 - Outputs (products, services, or outcomes).
 - Partners, customers, or stakeholders who receive outputs.
 - Flexibility to perform tasks partially or completely through remote telework.
- **Step 2:** Identify candidate MEFs.
 - Group organizational functions into "buckets" to find common themes.
 - Determine which are **"essential"** vs. "non-essential."
 - Group those that are determined "essential" into candidate MEFs.
- **Step 3:** Link your MEFs to PMEFS.
 - Draft a list of MEFs for review and approval.
 - Demonstrate how each MEF directly supports continued performance of one or more PMEFS.

"Essential" (in quotes) = a leadership determination prior to aligning functions with College or Division PMEFS.

- Identify Organizational Functions.
 - All major organizational functions that support performance of your mission.
 - Leaders review and validate existing lists of organizational functions.
 - Staff describe their primary day-to-day work functions in basic terms. These are activities that are ***central to the performance of their job requirements***.
 - Provide policy, regulation, or other legal citations for each function (if known).
 - List outputs (products, services, or outcomes) each work function accomplishes.
 - Identify the partners, customers, or stakeholders who receive outputs.
 - Indicate flexibility to perform tasks partially or completely through remote telework, or if a function **MUST** be done in person at a specific location.

- **Step 1A: Operationalize it:**

- Each College and Division uses an individualized survey for their reporting units.
- Staff responses are captured in a spreadsheet.
- Step 1B: Leaders review responses to identify gaps and interdependencies.

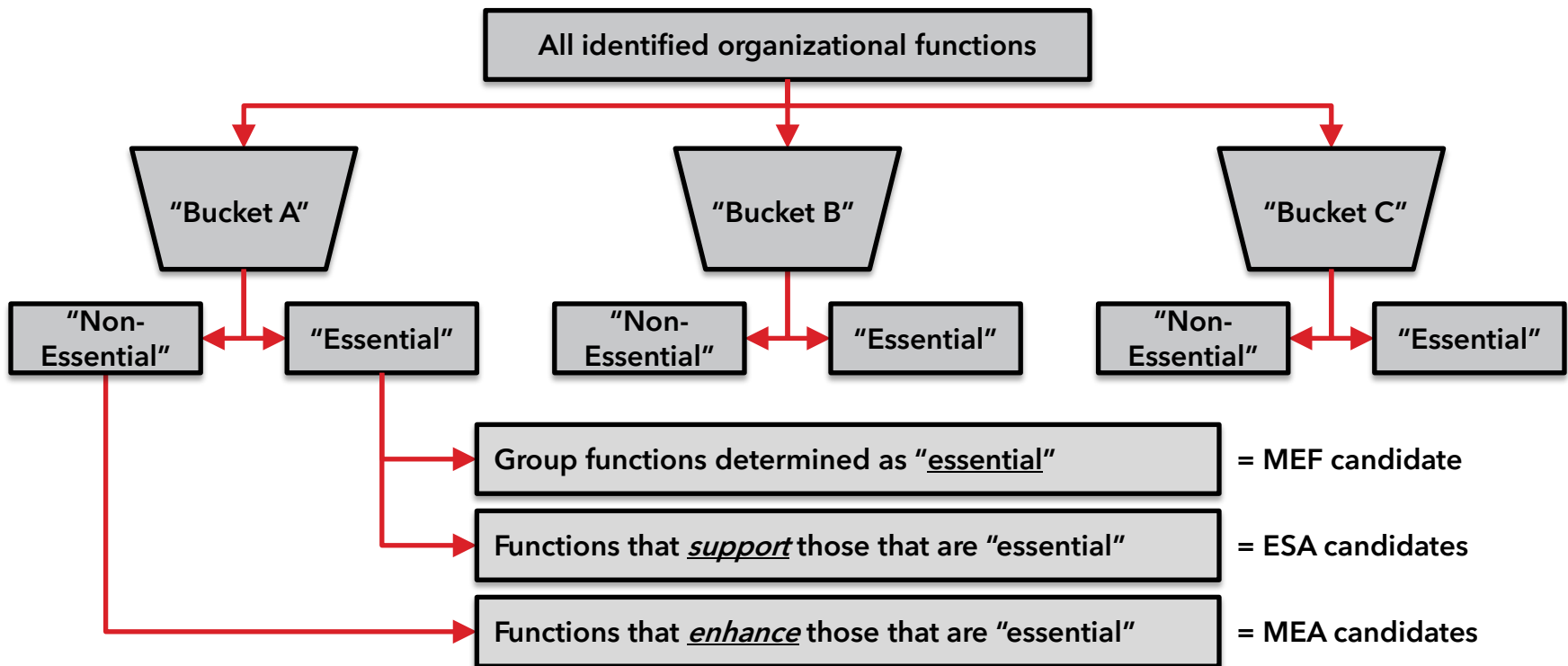


[Google Form Example](#)

- Step 1B: Leaders review staff responses.
 - **Identify gaps**...functions that are known to be missing (or functions that are not being performed due to known staffing shortages).
 - **Expand**...identify unique activities that a listed function depends on (these also may be activities central to the performance of job requirements).
 - **Identify interdependencies**...link functions to each other where connections are known.
 - Create “**buckets**” based on common themes.

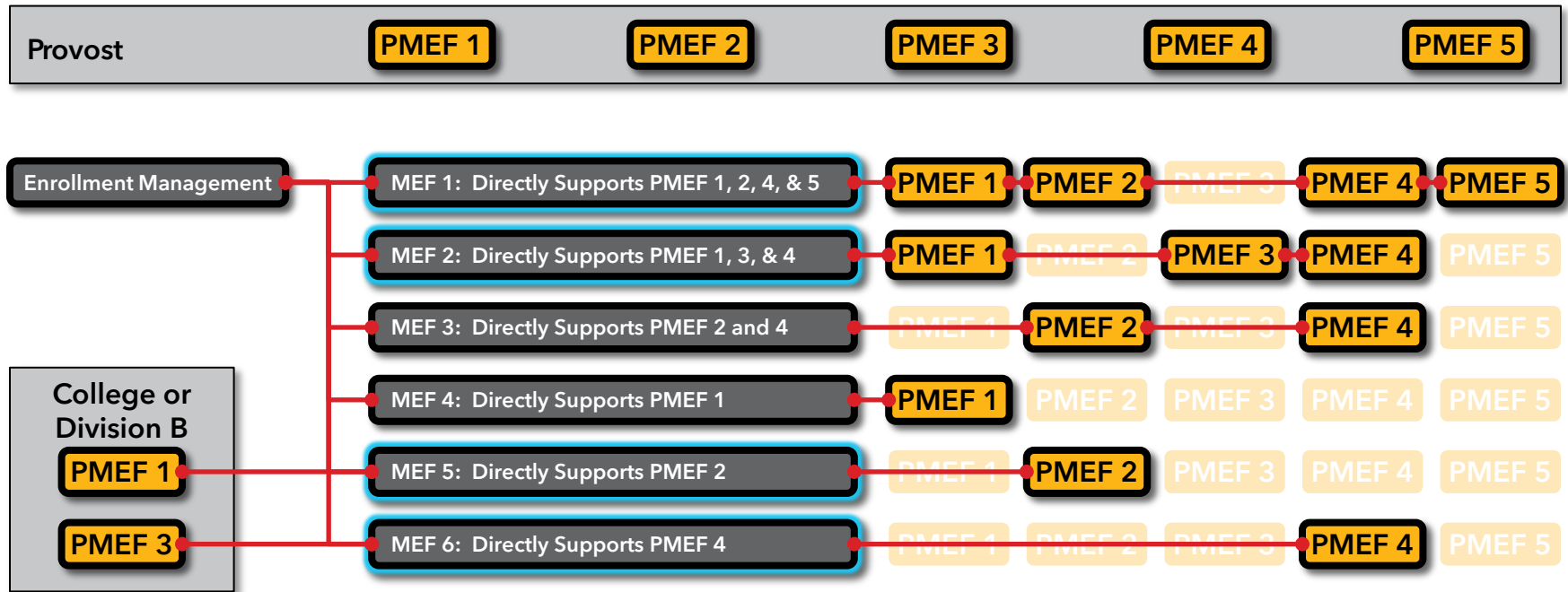
“Buckets” = common themes that group organizational functions together.

- Identify candidate MEFs.
 - Analyze organizational functions to find common themes.
 - Group themes into "buckets" to determine candidate MEFs.
 - Determine which are **"essential"** vs. "non-essential."
 - Determine which are MEFs, which are ESAs, and which are MEAs.



"Essential" (in quotes) = at this stage, this is a leadership determination prior to conducting a BIA.

- Link your MEFs to PMEFs.
 - Present candidate MEFs to leadership.
 - Draft a list of MEFs for review and approval.



- Once approved by your Dean or VP, subject each MEF to:
 - A Business Process Analysis (BPA); and
 - A Business Impact Analysis (BIA).

- Phase 1: Identify your MEFs.
- *Phase 2: Conduct your Business Process Analysis (BPA).*
- *Phase 3: Business your Impact Analysis (BIA).*
- Phase 4: Prioritize and Document.

We will address 2 and 3 after lunch.

- Document your MEFs, MSAs, and MEAs in your Department Plan.
 - Include your BPA and BIA results.
- **Step 1:** Develop MEF data sheets.
 - Your data sheets will be created automatically by using the online worksheets used to complete your BPA and BIA.
- **Step 2:** Prioritize MEFs. Use:
 - 1) The quantitative assessment of impacts;
 - 2) MTDs; and
 - 3) RTOs.
- **Step 3:** Develop emergency action procedures to address disruptions.
- **Step 4:** Submit MEFs for approval.
 - Use the online template for MEF submission.

- Include these in your DEAP:
 - Organization Charts
 - Mission statements.
 - Key positions, personnel, and succession.
 - Delegation order (**WHO** can act).
 - Delegations of authority (**WHAT** they can do).
 - Human capital, vital records, systems, and equipment.
 - Telework policies.
 - Communications, training, and execution.

These are more advanced components of continuity. Establish them AFTER essential functions are defined.

LUNCH

Return 2:00 PM

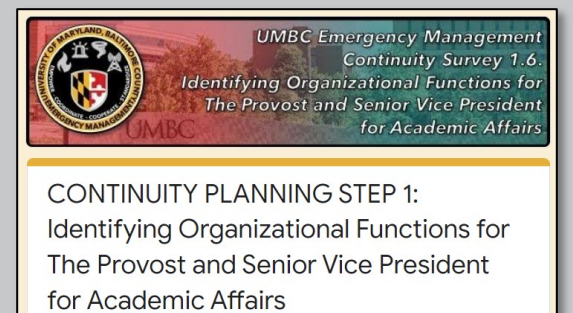
Your Organizational Functions

2:00 PM – 2:30 PM

- Step 1: Identify Organizational Functions.
 - All major organizational functions that support performance of your mission
 - Leaders review and validate existing lists of organizational functions.
 - Staff describe their primary day-to-day work functions in basic terms. These are activities that are ***central to the performance of their job requirements***.
 - Provide policy, regulation, or other legal citations for each function (if known).
 - List outputs (products, services, or outcomes) each work function accomplishes.
 - Identify the partners, customers, or stakeholders who receive outputs.
 - Indicate flexibility to perform tasks partially or completely through remote telework, or if a function MUST be done in person at a specific location.

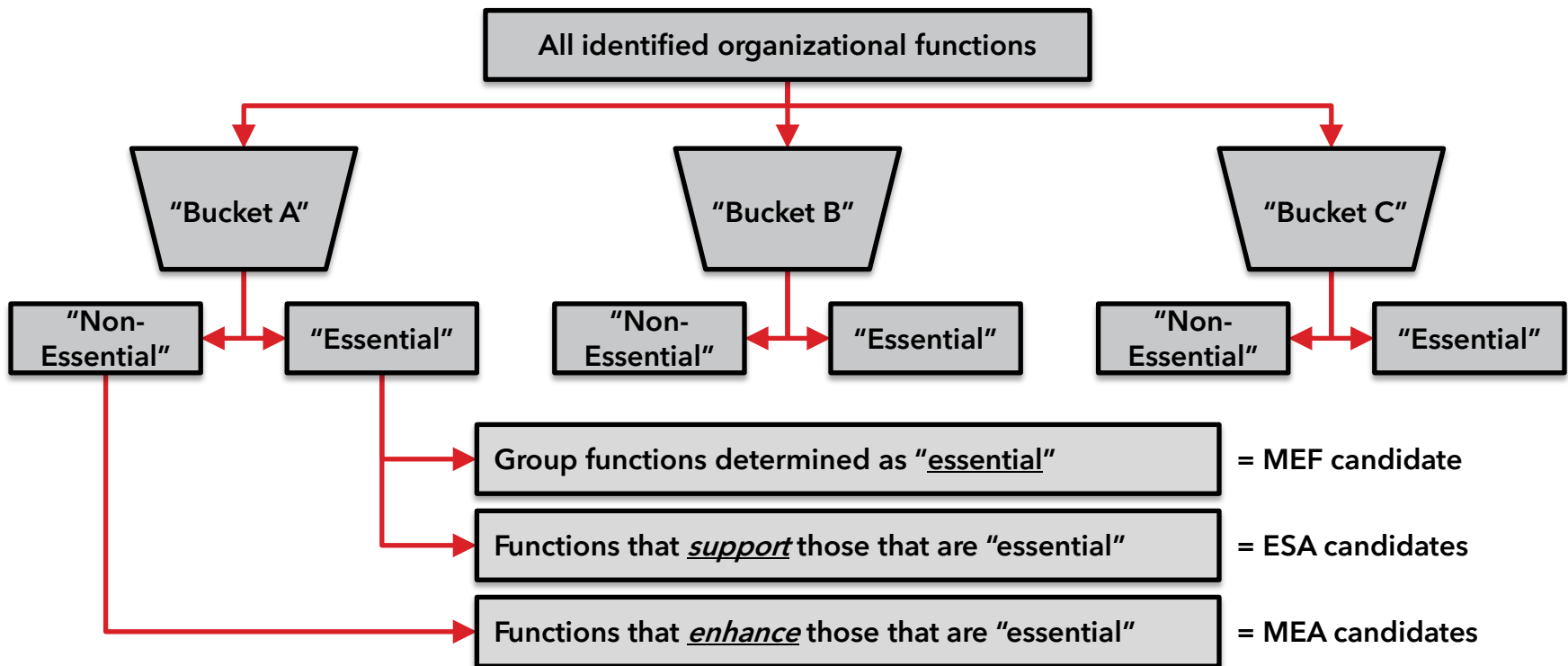
• Step 1A: Operationalize it:

- Each College and Division uses an individualized survey for their reporting units.
- Staff responses are captured in a spreadsheet.
- Step 1B: Leaders review responses to identify gaps and interdependencies.



[Google Form](#)

- Identify candidate MEFs.
 - Analyze organizational functions to find common themes.
 - Group themes into "buckets" to determine candidate MEFs.
 - Determine which are **"essential"** vs. "non-essential."
 - Determine which are MEFs, which are ESAs, and which are MEAs.



"Essential" (in quotes) = at this stage, this is a leadership determination prior to conducting a BIA.

- Step 1B: Leaders review staff responses.
 - **Identify gaps**...functions that are known to be missing (or functions that are not being performed due to known staffing shortages).
 - **Expand**...identify unique activities that a listed function depends on (these also may be activities central to the performance of job requirements).
 - **Identify interdependencies**...link functions to each other where connections are known.
 - Create “**buckets**” based on common themes.

“**Buckets**” = common themes that group organizational functions together.

• Bucket 1 - Student Records, Data, and Systems.

- 54 out of 161 (34% of all functions).
- 31 "Essential."
- 23 "Non-Essential."
- 3 functions must be done in person at a specific location.
 - *"Managing the purchase of technical equipment."*
 - *"Manage sensitive inventory."*
 - *"Processing citizenships."*
 - 51 can be done in part or entirely via telework.



• Bucket 2 - Compliance and Audits.

- 11 out of 161 (7% of all functions)
- 1 "Essential."
- 10 "Non-Essential."
- All functions can be done in part or entirely via telework.



• **Bucket 3 - Student Services and Service Delivery.**

- 55 out of 161 (34% of all functions)
- 35 "Essential."
- 20 "Non-Essential."
- 53 functions can be done in part or entirely via telework (2 unknown)



• Bucket 4 - Academic Student Support, Advising, and Counselling.

- 27 out of 161 (17% of all functions).
- 7 "Essential."
- 20 "Non-Essential."
- All functions can be done in part or entirely via telework.



• Bucket 5 - Events and Activities.

- 8 out of 161 (5% of all functions)
- 3 "Essential."
- 5 "Non-Essential."
- All functions can be done in part or entirely via telework.



• Bucket 6 - Administrative Actions.

- 6 out of 161 (4% of all functions).
- 3 "Essential."
- 3 "Non-Essential."
- 1 function must be done in person at a specific location.
 - *"Peer Advisors Management."*
 - 5 can be done in part or entirely via telework.



BREAK

Return 2:35 PM

Business Process Analysis (and Business Impact Analysis)

2:35 PM – 3:05 PM

- COOP is **institutional** and **organizational** continuity.
- "BC" will be our *method to document how you continue your **individual** mission for any organizational change.*
 - *Detail your **work functions**.*
 - *Verify that what you believe matches what actually happens.*
 - *Validate institutional knowledge.*
- What are your primary organizational functions? Where can you find them?
 - Job descriptions.
 - Performance reviews.
 - Policy or regulations.



Your primary day-to-day activities that may or may not be deemed "essential" for COOP.

- Phase 1: Identify your MEFs.
- *Phase 2: Conduct your Business Process Analysis (BPA).*
- *Phase 3: Business your Impact Analysis (BIA).*
- Phase 4: Prioritize and Document.

- Use the **worksheet** to complete a BPA for each MEF.
- **Objective:** Identify gaps in your department and areas where multiple offices share responsibilities
- A systematic method of examining, identifying, and mapping the functions needed to perform each of your MEFs
 - Requires an in-depth understanding of each identified MEF.
 - Describe and document each element.
 - Understand required resources.
- Include identification of ESAs necessary to perform each MEF.

The BPA worksheet can also be used to document business continuity

- **Step 1:** Identify MEF outputs.
 - Expand on the information gained from your identification of organizational functions (Phase 1, Step 1).
 - What products, services, and information result from performance of the MEF?
 - Who are the partners and stakeholders that receive these outputs?
- **Step 2:** Identify input requirements.
 - What products, services, information, supplies, equipment, or resources are required to perform the MEF?
 - Which inputs come from internal to the organization?
 - Which inputs depend on external partners?
- **Step 3:** Identify dependencies and interdependencies.
 - Who are the partners and stakeholders required to perform the MEF?
 - State organization, points of contact, type of support, how coordination occurs, and timelines for support.

- **Step 4:** Identify leadership who perform the MEF.
 - Who are the leaders required?
 - What key decisions and actions must they take?
 - Can their actions be performed remotely?
 - Are actions needed in-person at a certain location?
- **Step 5:** Identify staff who perform and support the MEF.
 - How many positions must be filled?
 - How many staff members are required for each position or shift?
 - How long and how often must they be available?
 - What knowledge, skills, abilities, and access/permissions are needed for each staff position?
- **Step 6:** Identify required communications and information systems.
 - What are the unique IT capabilities and specific data access requirements?
 - What are the system dependencies and interfaces with other systems or data sources?

- **Step 7:** Identify alternate location requirements.
 - What facilities are needed to include space, configuration, security, safety, support, and storage?
 - Can primary and alternate locations be identified?
- **Step 8:** Identify resource and budget requirements.
 - What funding is required to perform the MEF for up to 30 days or until normal operations resume?
 - What standard operating procedures, essential records, and reference materials are required?
- **Step 9:** Describe the process.
 - Develop a narrative description to illustrate Steps 1 - 8 and describes the process of performing the MEF.,
 - Develop appropriate diagrams or other informational aids to support the narrative and validate each step.

- A prediction...identify and quantify the impacts from disruptions.
 - Use the information derived during your BPA process to inform your BIA
 - Conduct a formal review, update, and validation of your MEFs through a BIA at least every two years.
 - Use the **online worksheet** to complete a BIA for each MEF.
- Objective 1...Identify negative impacts of failing to perform MEFs.
- Objective 2...prioritize your MEFs and ESAs.
 - Considers consequences of their loss or degradation.
 - Shows their criticality to your mission.

- **Step 1:** Define the context.
 - Define the scope of the analysis.
 - What are the consequences of a disruption or failure to perform each MEF?
- **Step 2:** Identify and organize staff.
 - Who are the key staff with knowledge of each resource and who understand the criticality of the MEF?
- **Step 3:** Estimate impact of MEF failure.
 - 3A: Quantitative Assessment: Characterize consequences: 5 (severe), 4 (serious), 3 (significant), 2 (limited), 1 (minor), or 0 (no impact).
 - 3B: Describe and explain the level of impact of failure to perform the MEF.

- **Step 4:** Determine timeframes for loss of functions.
 - 4A: **Max Tolerable Downtime (MTD).** MTD is the maximum amount of time acceptable for a disruption of MEF performance.
 - 4B: **Recovery Time Objective (RTO).** RTO is the maximum amount of time a resource or asset can be unavailable before it has a failure impact on a MEF.
 - 4C: **Recovery priorities and Recovery Point Objectives (RPOs).** RPO is an acceptable amount of resource, information, or data loss.
- **Step 5:** Document the BIA process, include:
 - 5A: List of key staff, subject-matter experts, and leadership who provided input for the analysis.
 - 5B: Key findings from quantitative and qualitative assessments to prioritize MEFs based on criticality.
 - 5C: Description of the most likely threats and hazards, and descriptions of impacts on MEFs (include MTDs and RTOs).

Business Continuity Workshop

3:05 PM – 3:35 PM

Share Your Workshop Results

3:35 PM – 3:45 PM

- Observations, recommendations, and lessons learned:
 - Expand part 4 for more potential explanation of telework activates. Examples: number of hours, number of staff.
 - Q/C your draft with someone outside of your unit who is not familiar with your process. This will help you determine the degree of simplification needed.

Debrief, Road Map, and Wrap Up

3:45 PM – 4:00 PM