



BUILDING A MORE RESILIENT UB

Jessica Alaimo, UB Senior Emergency Manager

UB Business Day Presentation

Niagara Falls Conference Center

October 2024



University at Buffalo

Emergency Management

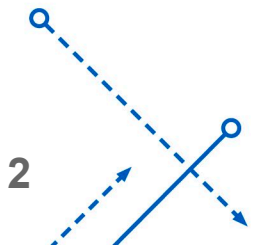


RESILIENT



DEFINING RESILIENCE

Resilience isn't about avoiding falls, but about having the strength and perseverance to get back up, learn from each experience, and continue moving forward.



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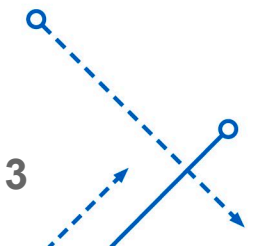
How does this image connect to your own understanding of resilience?



DEFINING RESILIENCE

Resilience means not only sheltering yourself through storm, but also having the strength and resources to withstand, adapt, and recover.

How does this image connect to your own understanding of resilience?



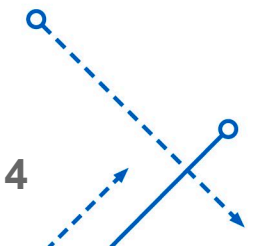


DEFINING RESILIENCE

How does this image connect to your own understanding of resilience?



Resilience means feeling ready and confident. While no plan is foolproof, the process of planning helps build confidence and preparedness, which are essential for resilience. It allows you to approach challenges with a sense of purpose and direction, even when things go wrong.

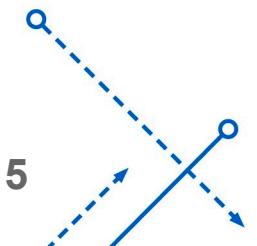


How does this image connect to your own understanding of resilience?

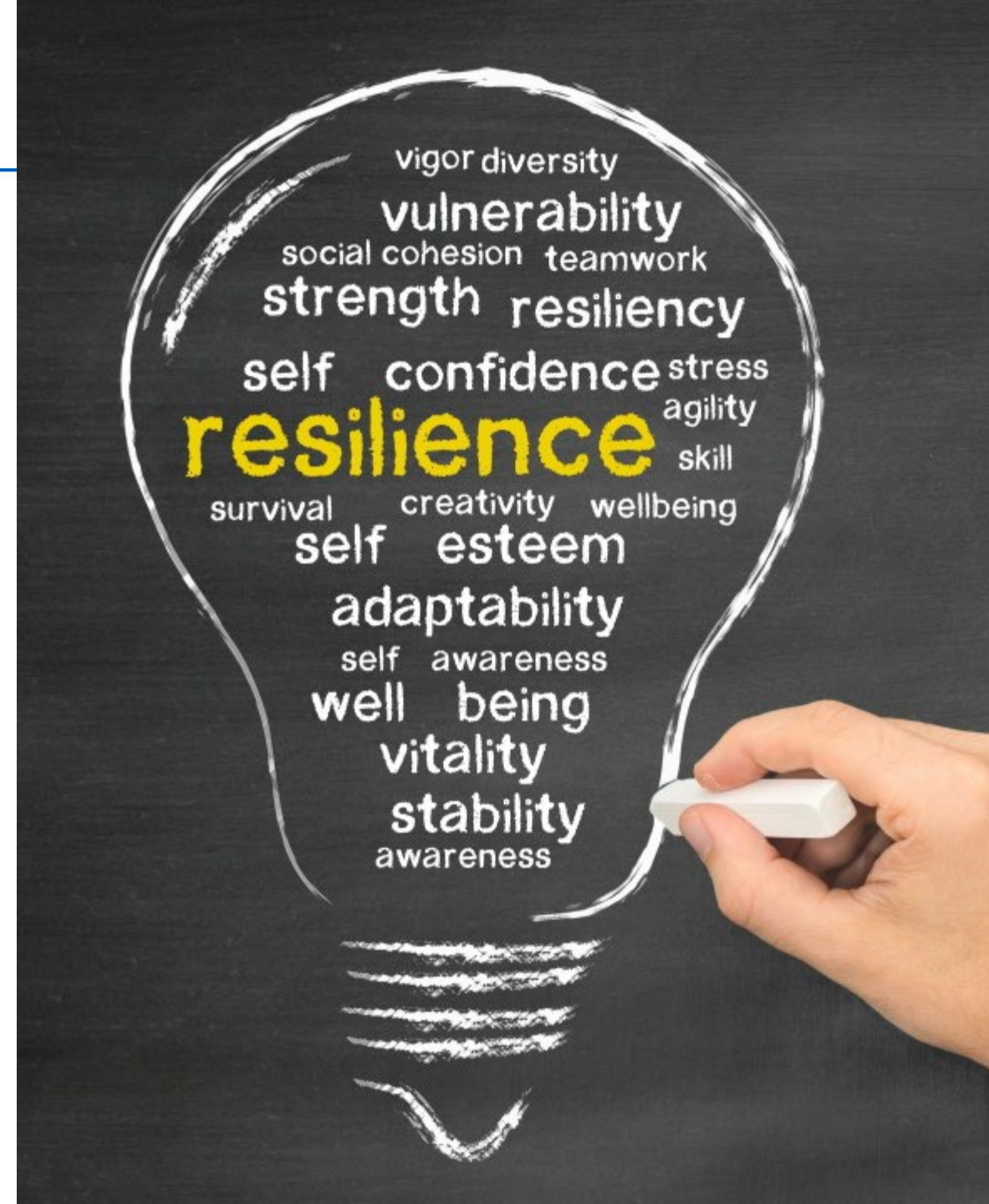


DEFINING RESILIENCE

While they are on opposing teams, the act of helping each other up suggests a recognition of shared humanity and a willingness to collaborate, even in a competitive environment. This speaks to the resilience of community and the power of working together.



Resilience is the ability of individuals, communities, and systems to **anticipate**, **withstand**, and **recover** from **disruptions**. It's about **bouncing back** from adversity and **adapting** to change.



Emergency Management is all about RESILIENCE!

Resilience minimizes the impact of emergencies on our campus community.

Resilience ensures the continuity of university operations, even in the face of disruptions.

Resilience protects the safety and well-being of students, faculty, and staff.

Resilience helps us recover faster and stronger from unexpected events.

Mitigation: Taking steps to reduce risks *before* an emergency.

Preparedness: Planning and preparing for potential emergencies.



Recovery: Rebuilding and restoring the community after an emergency.

Response: Acting effectively during an emergency.



EVERYONE has a role to play!

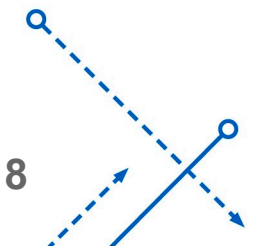
Personal Strength: Emergencies can happen at any time. Cultivating resilience helps us adapt, protect ourselves, and support those around us.

Confidence in the Face of Challenges: Knowing procedures and having access to resources builds confidence, reduces anxiety, and allows us to focus on our work, even during difficult times.

Bouncing Back Stronger: Resilience ensures a swift and coordinated response to disruptions, minimizing harm and allowing us to recover quickly.

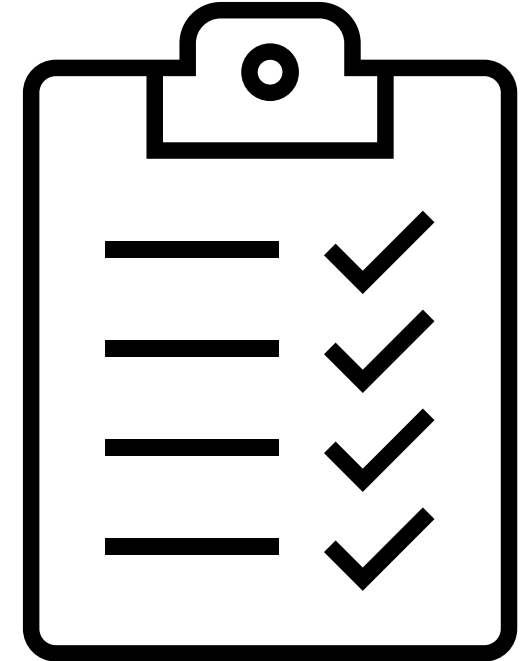
A Community that Overcomes: A resilient staff contributes to a safer environment for students, faculty, visitors, and the entire UB community, fostering a sense of shared strength.

Our Shared Commitment: As UB staff, we have a shared responsibility to cultivate resilience and maintain a safe and thriving campus.

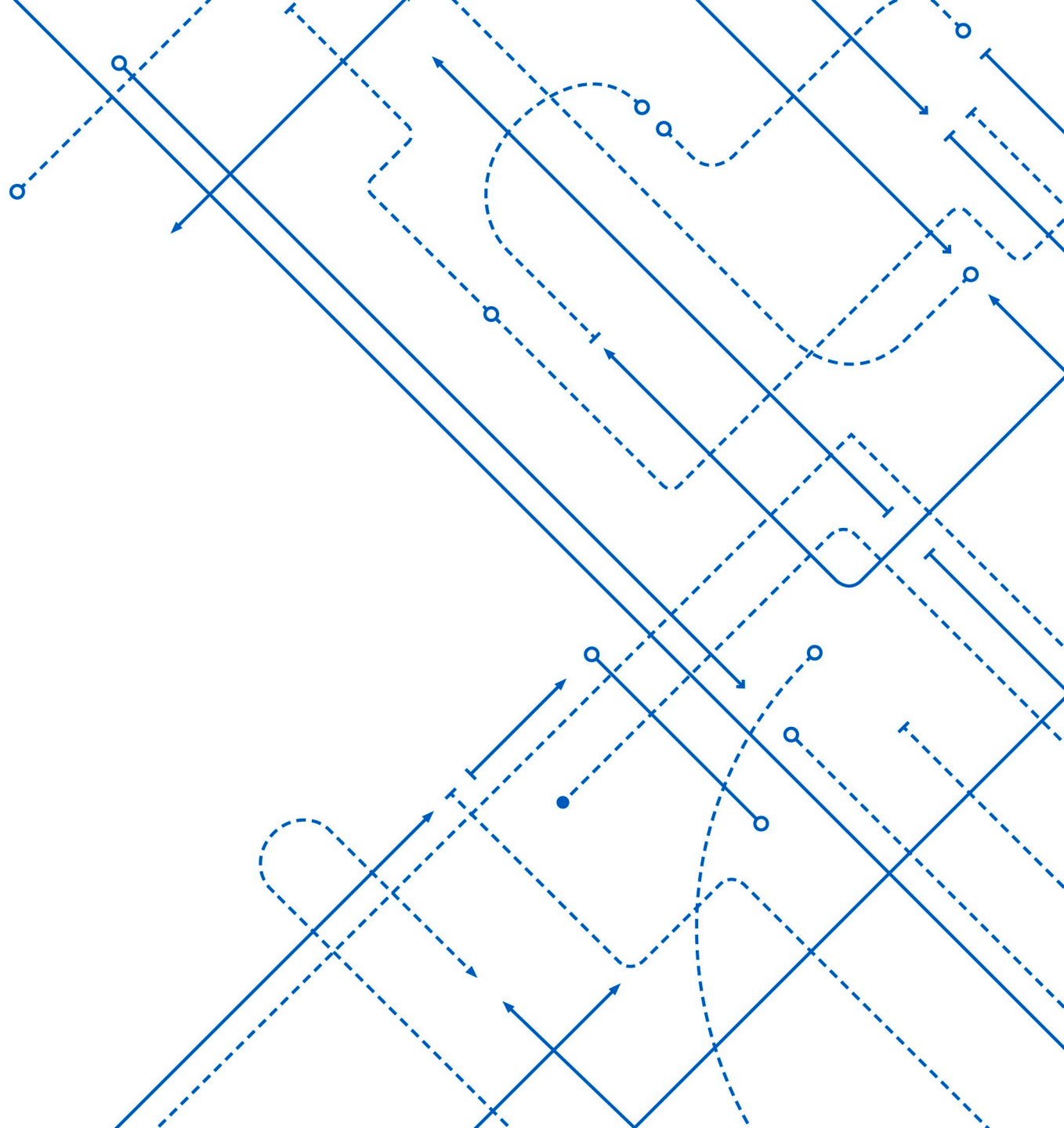


Today's Presentation

- Emergency Management: What is it, and how does it work at UB?
- How UB Emergency Management is building a more resilient community
- Focus areas and lessons learned from Hurricanes Helene and Milton
- Why resilience matters



ABOUT EMERGENCY MANAGEMENT AT UB



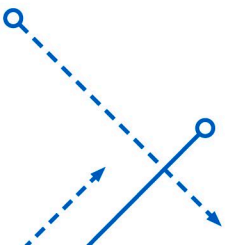


About Me

Jessica Alaimo

Senior Emergency
Manager

- Started at UB on 1/19/23, housed in EH&S
- Certified Associate Emergency Manager (International Association of Emergency Managers)
- Masters Degree in Public Administration (SUNY Brockport)
- Certified in OSHA Health and Safety Fundamentals
- Previously worked for City of Rochester
- Emergency Operations Coordinator 2020-2022
 - Coordinated COVID response and oversaw vaccine clinics and testing sites, with a focus on urban equity. After the pandemic, focused on safety and active shooter preparedness.
- Public Information Officer 2014-2020
- 8 years in print journalism





1970s

Incident Command System (ICS) developed during California wildfires, becomes best practice for incident management.



2001

9/11 demonstrates need for national standards for command and control in large-scale incidents.



2004

After 9/11, US government creates Department of Homeland Security and National Incident Management System (NIMS).



2005

Hurricane Katrina reveals flaws in national preparedness and incident coordination.



2009

Obama appoints Craig Fugate FEMA Administrator. He changes the game.



2017

FEMA updates NIMS to reflect lessons learned, draw distinction between on scene command and off scene coordination

Modern Emergency Management: A Brief Timeline

Emergencies, Managed

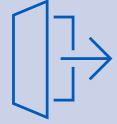

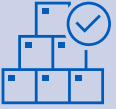








- Extreme Weather Response
Snowstorms, wildfire smoke, and tornados
- Campus Activism
Supported Police efforts, stood up emergency operations centers, and kept stakeholders informed
- Total Solar Eclipse
Coordinated eclipse response, planned for worst case scenarios
- Special Events Support
Assisted with the planning process for large campus events

When the emergency happens, what do we do?

- If an incident exceeds a division or unit's capacity to respond, UB Emergency Management gets involved to coordinate stakeholders and facilitate communication.
- When we get the heads up that an incident is occurring or may occur, we start gathering information.
- What's happening? What are the potential impacts? Is it getting better or worse?
- If the incident materializes, we activate an Emergency Operations Center using Emergency Support Functions.
- If the incident expands further, we organize our Emergency Support Functions into groups to make coordination easier.



UB EMERGENCY SUPPORT FUNCTIONS

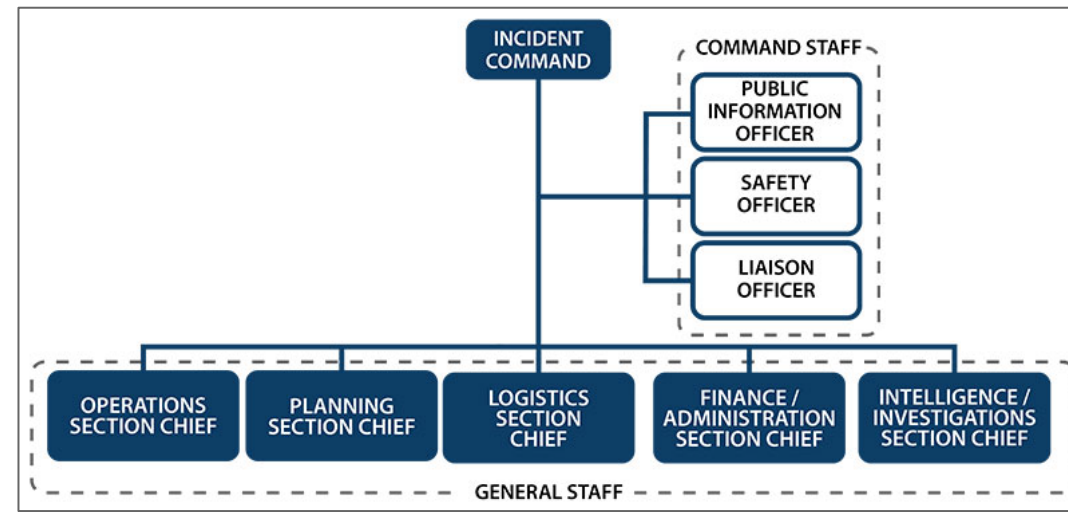
 <p>ESF #1 Parking and Transportation</p> <hr/> <p>Primary Unit(s): Parking and Transportation</p>	 <p>ESF #2 Information Technology</p> <hr/> <p>Primary Unit(s): IT</p>	 <p>ESF #3 Facilities Operations</p> <hr/> <p>Primary Unit(s): All Facilities Units, FPMOs</p>	 <p>ESF #4 Fire and Life Safety</p> <hr/> <p>Primary Unit(s): Fire and Life Safety</p>	 <p>ESF #5 Emergency Management</p> <hr/> <p>Primary Unit(s): Emergency Management</p>	 <p>ESF #6 Mass Care</p> <hr/> <p>Primary Unit(s): Housing, Dining, Student Unions, Childcare, Res Life</p>	 <p>ESF #7 Logistics & Financial Management</p> <hr/> <p>Primary Unit(s): Business Services, Finance, UBOs, Uni Advancement</p>
 <p>ESF #8 Health and Wellness</p> <hr/> <p>Primary Unit(s): Student Wellness</p>	<p><i>NOTE: UB ESFs are based on State ESFs.</i></p> <p><i>We skip #9 and 11, because UB doesn't have a significant counterpart for those areas.</i></p>	 <p>ESF #10 Environment, Public Health, and Safety</p> <hr/> <p>Primary Unit(s): EH&S</p>	 <p>ESF #12 Utility Operations</p> <hr/> <p>Primary Unit(s): Facilities Operations</p>	 <p>ESF #13 Police</p> <hr/> <p>Primary Unit(s): UB Police</p>	 <p>ESF #14 Long-term University Recovery</p> <hr/> <p>Primary Unit(s): Emergency Management, Internal Audit, D&C, Others TBD</p>	 <p>ESF #15 Public Information</p> <hr/> <p>Primary Unit(s): University Communications</p>
<p>UB Specific ESFs →</p> <hr/> <p>No state/federal equivalent</p>	 <p>ESF #16 Academic Continuity</p> <hr/> <p>Primary Unit(s): Provost's Office, University Libraries, University Registrar</p>	 <p>ESF #17 Employee/Labor Relations</p> <hr/> <p>Primary Unit(s): Human Resources</p>	 <p>ESF #18 Events and Athletics</p> <hr/> <p>Primary Unit(s): Athletics, CFA, University Events</p>	 <p>ESF #19 Research and Animal Care</p> <hr/> <p>Primary Unit(s): Research, Lab Animal Facilities</p>	 <p>ESF #20 Student and Family Support</p> <hr/> <p>Primary Unit(s): Dean of Students, EDI, International Education</p>	 <p>Policy Group</p> <hr/> <p>Primary Unit(s): University Cabinet Members</p>

National Incident Management System (NIMS)

- A comprehensive, nationwide, systematic approach to incident management, including the command and coordination of incidents, resource management, and information management.
- A set of concepts and principles for all threats, hazards, and events across all mission areas (Prevention, Protection, Mitigation, Response, Recovery).
- Scalable, flexible, and adaptable.

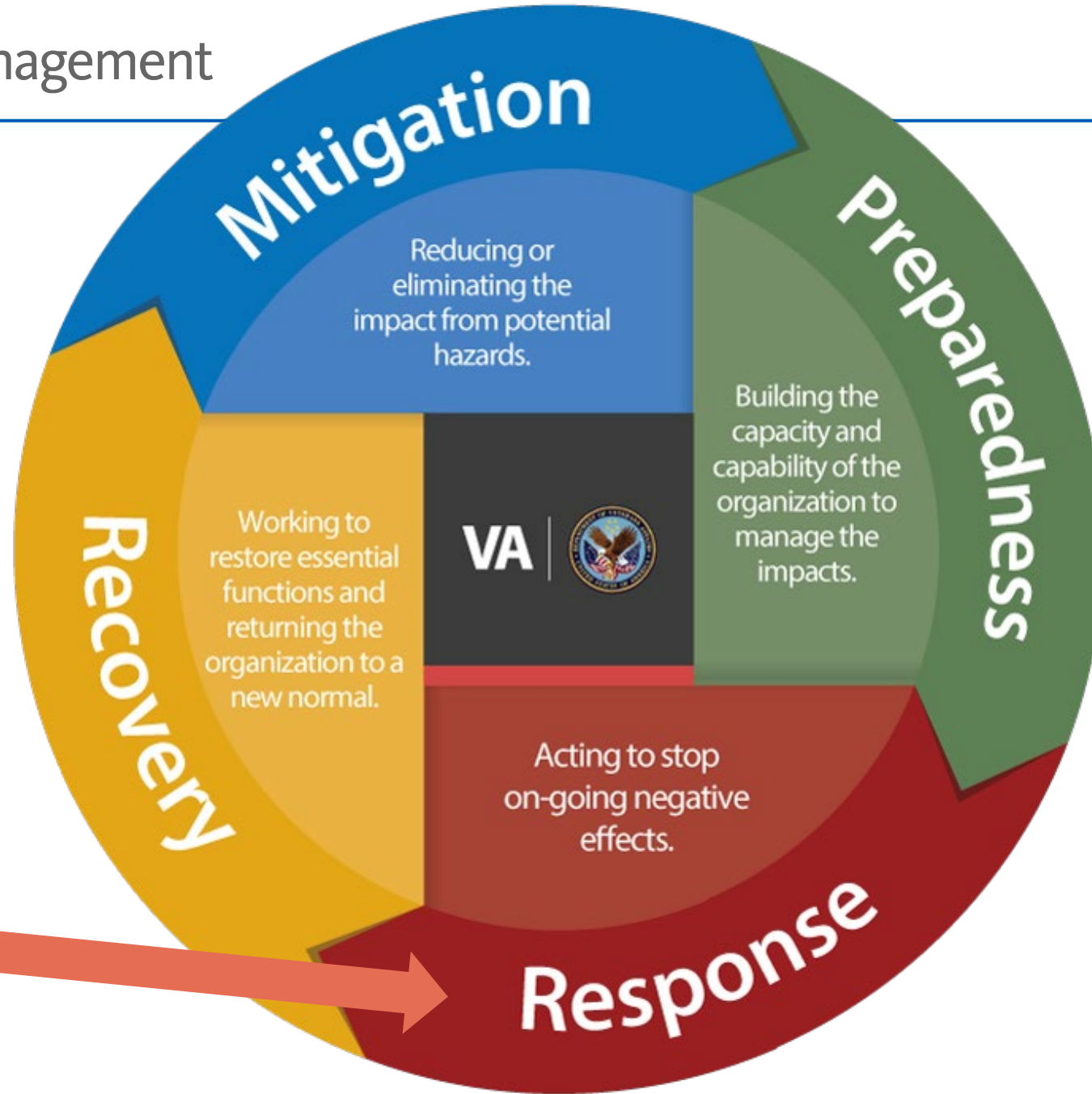


The Incident Command System and Emergency Operations Centers are two of the four NIMS coordinating structures.

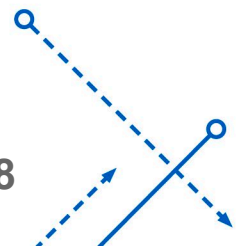




4 Phases of Emergency Management



Only 5% of our time is spent here!





UB Emergency Management:
Building a **resilient campus** through preparedness, collaboration, and effective response, ensuring UB’s mission can continue.



Mission

The University at Buffalo is a diverse, inclusive scholarly community dedicated to bringing the benefits of our research, scholarship, creative activities and educational excellence to local and global communities in ways that impact and positively change the world.

We view the three traditional pillars of the public higher education mission—research, education and service—as interdependent endeavors that continually enrich and inform each other. Groundbreaking research, transformative educational experiences and deeply engaged service to our communities define the University at Buffalo’s mission as a premier, research-intensive public university.

UB Emergency Management



Incident Response
Coordination



IMT Coordination



Emergency Planning
and Preparedness



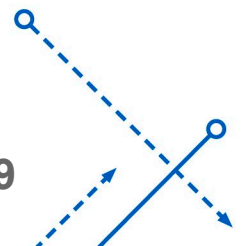
Collaboration with
Community Partners



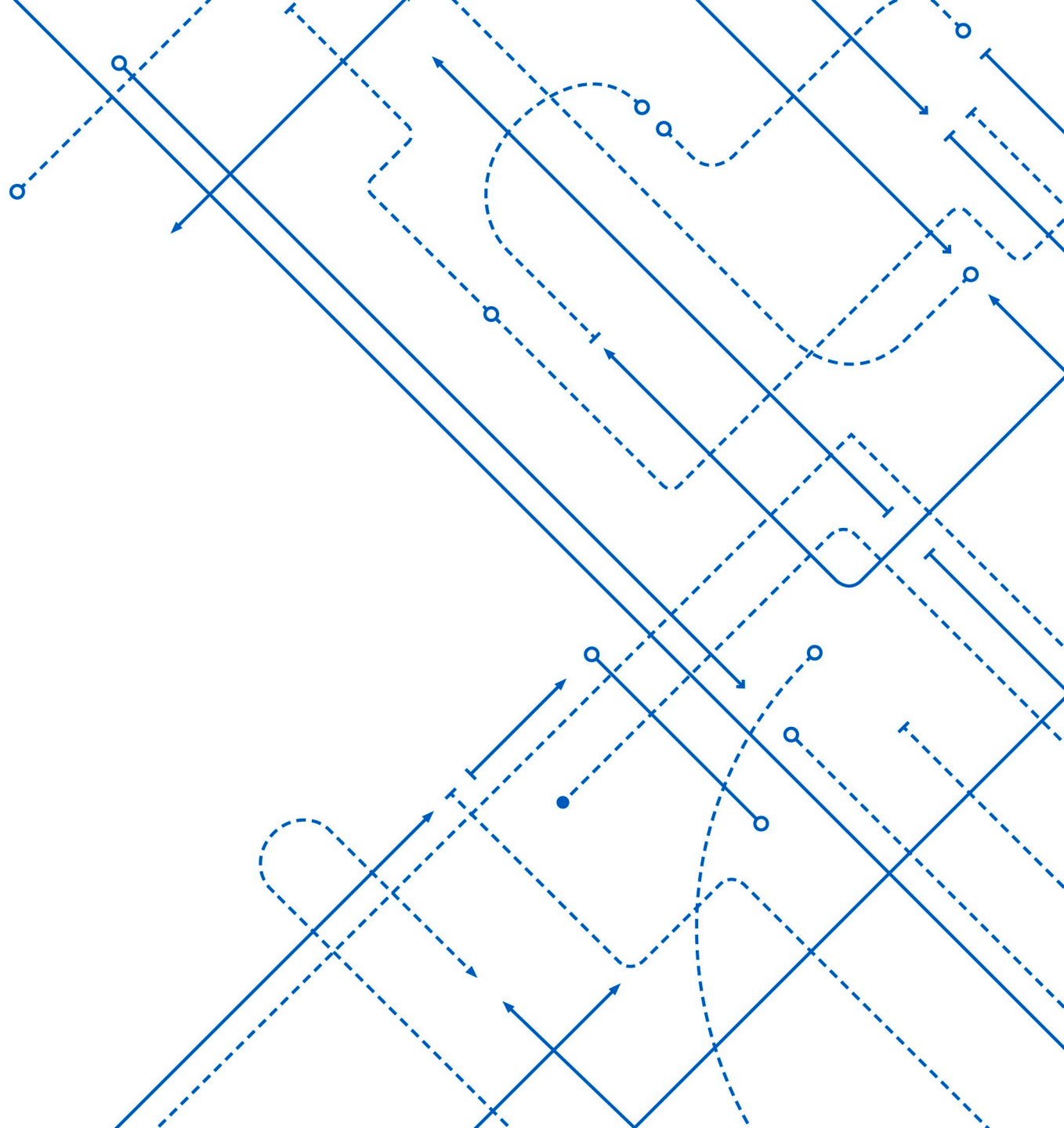
Drills and Exercises



After-Action Reviews,
Process Improvement



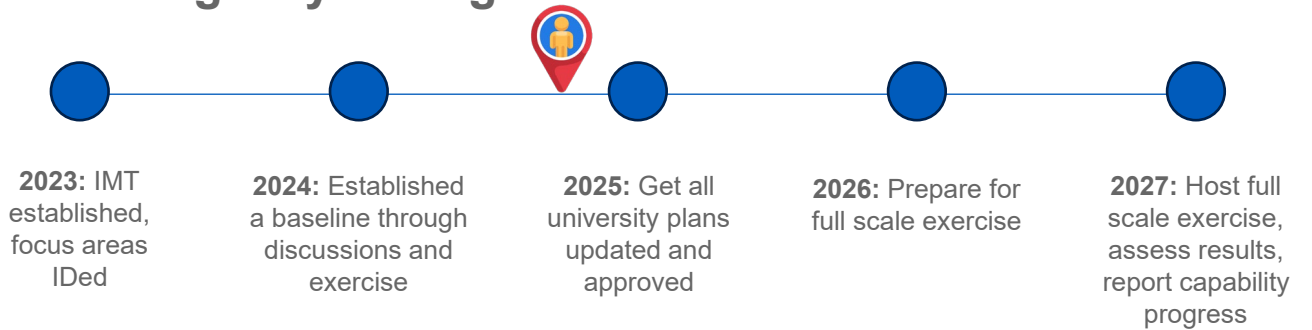
5 YEARS TO A MORE RESILIENT COMMUNITY



5 Years to a More Resilient UB

- UB Emergency Management will ultimately operate on a 3-year cycle (but the first 3 years will last 5).
- Each cycle will focus on a set of capabilities, which will help us show measurable progress.
- We will identify those capabilities at the beginning of each 5-year cycle with a threat and hazard assessment, and test them at the end with a full-scale exercise,

UB Emergency Management: 2023 to 2027



UB Emergency Management: Future Cycles



UB Emergency Management Activities To Date: 2023

- January 2023: Jessica starts at UB.
- Spring 2023: Listening tour to get acquainted with University Units.
- Summer 2023: Incident Management Team re-launches, orientations held introducing concept of ESFs.
- Fall 2023: Tabletop exercise for BSL-3 lab.
- Fall 2023: Ride-Out Teams rolled out.
- Fall 2023: Threat and Hazard Assessment (THIRA) Workshop held at the Student Union.
 - This workshop brought stakeholders together to discuss the biggest threats and hazards facing our University. We assessed our capacity to respond using FEMA's core capabilities.





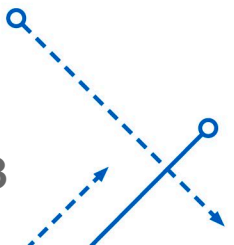
Hazard Name	Probability	Human Impact	Facilities/ Asset Impact	Institutional Impact
Severe Winter Storm	4.6	3.5	3.7	3.6
Severe Storm (Non-Winter)	3.2	2.6	2.8	2.5
Extreme Temperatures	3.4	2.9	2.6	2.5
Air Quality Alert	3.1	2.5	2.0	2.3
Active Shooter/ Mass Casualty Event	2.7	4.6	3.2	4.3
Cyber Attack	3.8	1.9	3.3	4.3
Civil Unrest	4.0	3.0	2.8	3.3
Disruption to IT Infrastructure	4.1	2.0	3.1	3.9
Utility Failure	4.2	2.3	3.4	3.6
Loss of Critical Operating Facility	3.0	2.6	3.7	3.5
Disruption to Water Supply	2.8	2.9	3.1	3.5
National or International Incident Affecting UB Community	3.9	2.9	1.8	2.5
Hazardous Materials Release	2.9	3.5	3.3	3.3
Pandemic, Endemic, or Disease Outbreak	3.5	3.9	2.8	4.0

Threat Assessment Methodology 2023

Considerations:

- This is a subjective review.
- This considers the likelihood and impact of an event that will not only occur, but that it will disrupt day-to-day operations at UB.
- Review of previous incidents at UB and similar events.
- Poll of Incident Management Team.
- Emerging threats and hazards.

Scale: 1 is least likely/least severe
5 is most likely/most severe





UB Emergency Management Activities to Date: 2024

Establishing a Baseline

2024's priority has been to establish a baseline to understand where we are and where we need to go in the areas of:

- Operational Coordination
- Operational Communication
- Community Resilience
- Planning

Late 2024 and Early 2025

- Finalize Comprehensive Emergency Management Plan (CEMP)
- Finalize Multi-year Training and Exercise Plan
- Monthly Tabletop Exercises
- Summer workshops to get written plans together

August 6 Exercise

- About 100 staff gathered at the Center for Tomorrow to simulate a Mass Casualty Incident.
- The scenario was a bus explosion in front of the Health Sciences Complex.
- The exercise focused on coordination, communication, and community resilience.
- Lessons Learned:
 - Need to train staff who will play key roles in emergency response.
 - Need a digital solution for incident communications.
 - People need to be familiar with system ahead of time.
 - System needs to integrate with text/email.
 - Need for a fixed Emergency Operations Center site.
 - For large-scale incidents.
 - For IMT practice.

The background features a complex network of blue lines and arrows. Solid lines intersect at various angles, while dashed lines form loops and paths. Small circles, some filled and some hollow, are placed at various points along these lines, suggesting nodes or data points in a network or process flow.

FOCUS AREAS AND LEARNING FROM HELENE AND MILTON



University at Buffalo

Emergency Management

UB Emergency Management Focus Areas 2023-2027



Operational Coordination

How do we work together?



Operational Communication

How do we talk to each other?



Planning

How do we prepare?



Community Resilience

How do we support each other?



2023-2027: Focus Area #1 Operational Coordination

2023-2027 Objective

Develop a robust operational coordination structure and process that enables all UB stakeholders to effectively collaborate during emergencies and incidents, ensuring seamless communication, efficient decision-making, and successful incident management.

Activities

- Relunched Incident Management Team
- Trained staff on National Incident Management System
- Exercises and drills
- Increased winter storm preparedness and resilience

What You Can Do

- Understand your department's emergency plans and your role.
- Help maintain up-to-date contact lists for essential personnel, vendors, and emergency services.
- Assist in identifying critical operations and developing alternative procedures for disruptions.
- Help coordinate with other departments or units during an emergency to ensure a unified response.

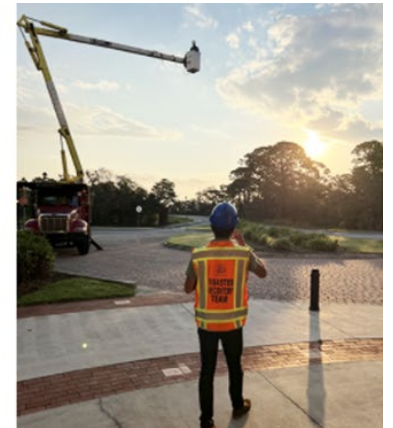
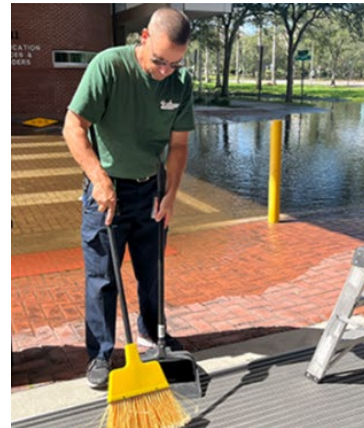
Operational Coordination: Lessons from Helene and Milton



The University of Georgia deployed dozens of staff members to the university grounds after Hurricane Helene to assist in clearing downed trees and removing debris from the roads.

As university crew continuously assessed damage and made necessary repairs, the University provided the Tifton Campus Conference Center as a place to house 2,000 storm personnel to help restore power in the region.

The University of South Florida activated its Ride Out Teams to help restore campus operations after Hurricane Milton. These teams worked to clear debris, restore power, and ensure the campus was safe for students, faculty, and staff to return. The USF St. Petersburg team worked tirelessly under challenging conditions, with many members on campus nearly every day for weeks. Students also joined in the recovery efforts, demonstrating the community's resilience in the face of the storm.





2023-2027: Focus Area #2 Operational Communication

2023-2027 Objective

Enhance UB's operational communication capabilities to ensure effective information sharing, rapid incident response, and improved situational awareness among all stakeholders during emergencies.

Activities

- Improving internal communication during emergencies using Microsoft Teams
- Developing Standard Operating Procedures for Emergency Operations Centers

What You Can Do

- Information Hub: Familiarize yourself with UB's communication channels and protocols for emergencies.
- Reliable Relay: Assist with disseminating accurate and timely information to faculty, staff, and students during an incident.
- Two-Way Street: Help gather information from your department and relay it to appropriate channels to inform the overall response.
- Calm and Collected: Project a sense of calm and confidence when communicating during stressful situations.

Operational Communication: Lessons from Helene and Milton



The University of Tampa was in communication with the Hillsborough County Emergency Operations Center.

The Hillsborough County EOC's call for mandatory evacuation left the University with the goal to evacuate all residential students by 6:00 a.m. October 8th, 2024.

At the University of Florida, Campus alerts regarding class closures, area specific weather reports, emergency preparedness resources, and additional essential information were sent out several times each day preceding, during, and after Hurricane Helene.





2023-2027: Capability #3 Planning

2023-2027 Objective

Establish a comprehensive and integrated planning framework that ensures all UB units are prepared for emergencies and that plans are regularly updated and exercised to maintain their effectiveness.

Activities

- 2025 push to get all internal emergency plans updated using a common format
- Ongoing effort to help university understand exercise and update emergency plans

What You Can Do

- Participate in departmental planning activities, such as drills and exercises.
- Help identify potential hazards and vulnerabilities within your department.
- Assist with developing and updating departmental emergency plans and procedures.
- Contribute to business continuity planning by identifying essential functions and resources.

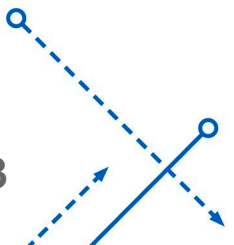
Planning: Lessons from Helene and Milton



North Carolina State relied on their climate office to provide essential information regarding the floods that proceeded Hurricane Helene.

This information included intense hurricane aftermath photography, satellite, and statewide point of view weather forecasts, wind gust speeds at county level, and record setting hurricane information.

Following Hurricane Milton, the University of Tampa provided many resources for students, staff, faculty, and the surrounding community. These resources included academic support, counseling services, financial assistance, food, health services, housing, personal resources (e.g., showers), personal care kits, charging stations, renter's insurance, and well-being support.





2023-2027: Capability #4 Community Resilience

2023-2027 Objective

Cultivate a resilient campus community capable of effectively preparing for, responding to, and recovering from emergencies, with a particular focus on supporting staff well-being and ensuring essential services continuity.

Activities

- Understand what measures should be taken to help UB staff feel prepared to handle emergencies and demonstrate resilience in the face of adversity
- Ensure clear communication channels and coordinated efforts contribute to a sense of community and shared

What You Can Do

- Keep your eyes and ears open and report anything that looks suspicious.
- Foster a culture of preparedness and collaboration within your department.
- Support colleagues and students during and after an emergency.
- Promote awareness of emergency preparedness resources and information.
- Contribute to a campus-wide culture of resilience by being an active and informed member of the UB community.

Community Resilience: Lessons from Helene and Milton



Liberty University mobilized disaster relief teams to the severely damaged areas. These disaster relief teams consisted of students from Liberty University and advisers.

Each team focused on prioritizing roof tarping, cleanup of debris for homeowners, and meeting the emotional and spiritual needs of victims.

Despite extensive damage to its own campuses, the University of Florida had their faculty and staff lend a helping hand based on their subject matter expertise.

Affected communities are being supported by UF faculty and staff with animal and farmer support, hot meals, damage surveying, collection of critical data, measuring the water, caring for seniors, shelter medicine, and emergency treatment services.

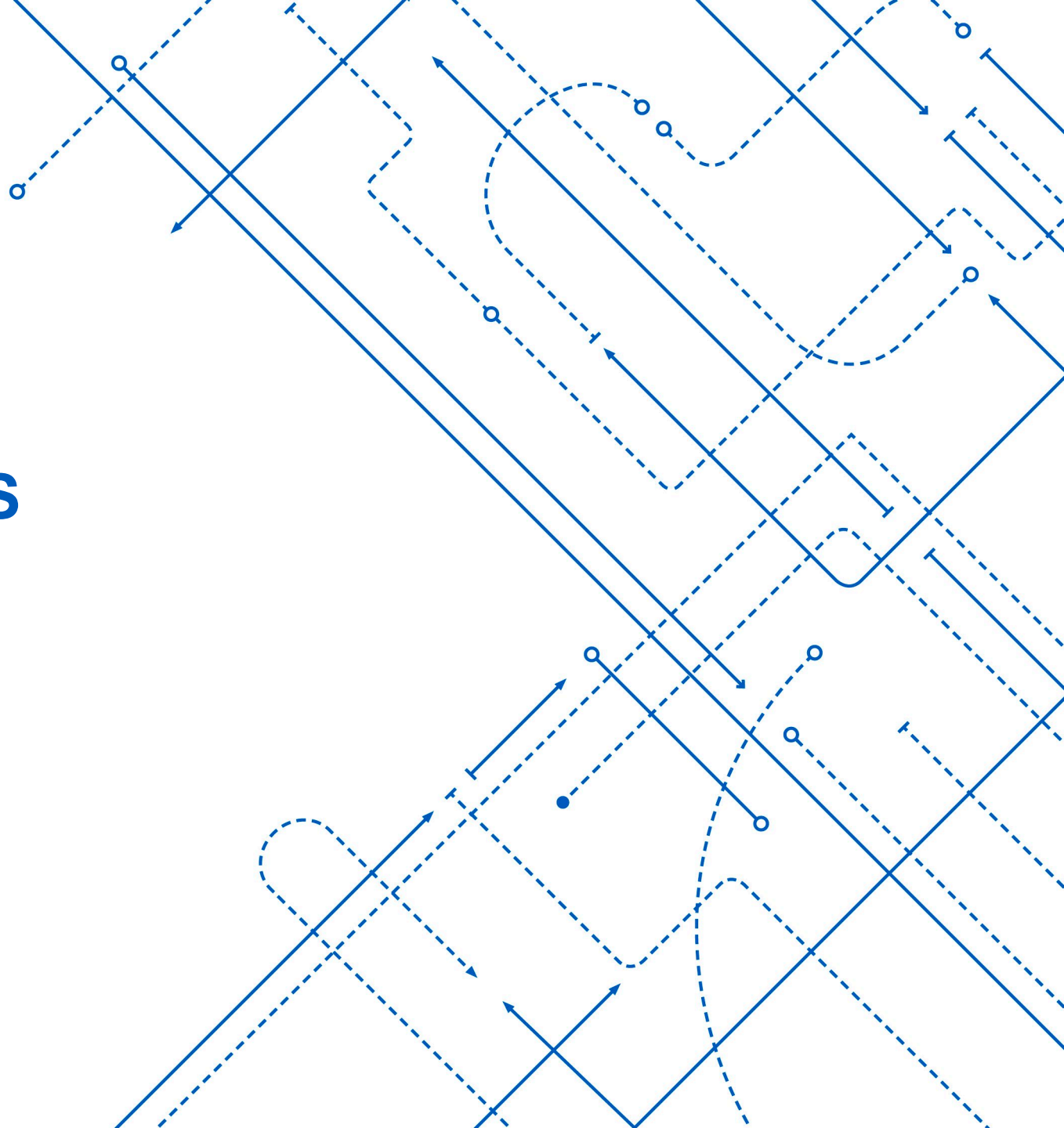


WHY RESILIENCE MATTERS



University at Buffalo

Emergency Management

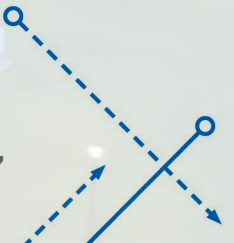




In the face of unpredictable events and growing uncertainties, **RESILIENCE** is not merely an option, but a necessity.

RESILIENCE is the driving force that empowers individuals, communities, and entire systems to not only withstand adversity but to emerge stronger and more adaptable.

Through *communication, coordination, and planning*, we cultivate a culture of **RESILIENCE** that preserves our mission, safeguards lives, protects livelihoods, and fosters a future where we can confidently face whatever challenges lie ahead.





HOW DID WE/I DO?

**TAKE THE *SESSION SURVEY* ON
YOUR SMART DEVICE USING
THE QR CODE ON YOUR SCHEDULE.**

THANK YOU!



*Special thanks to Alex Dog who
assisted with this presentation.*