

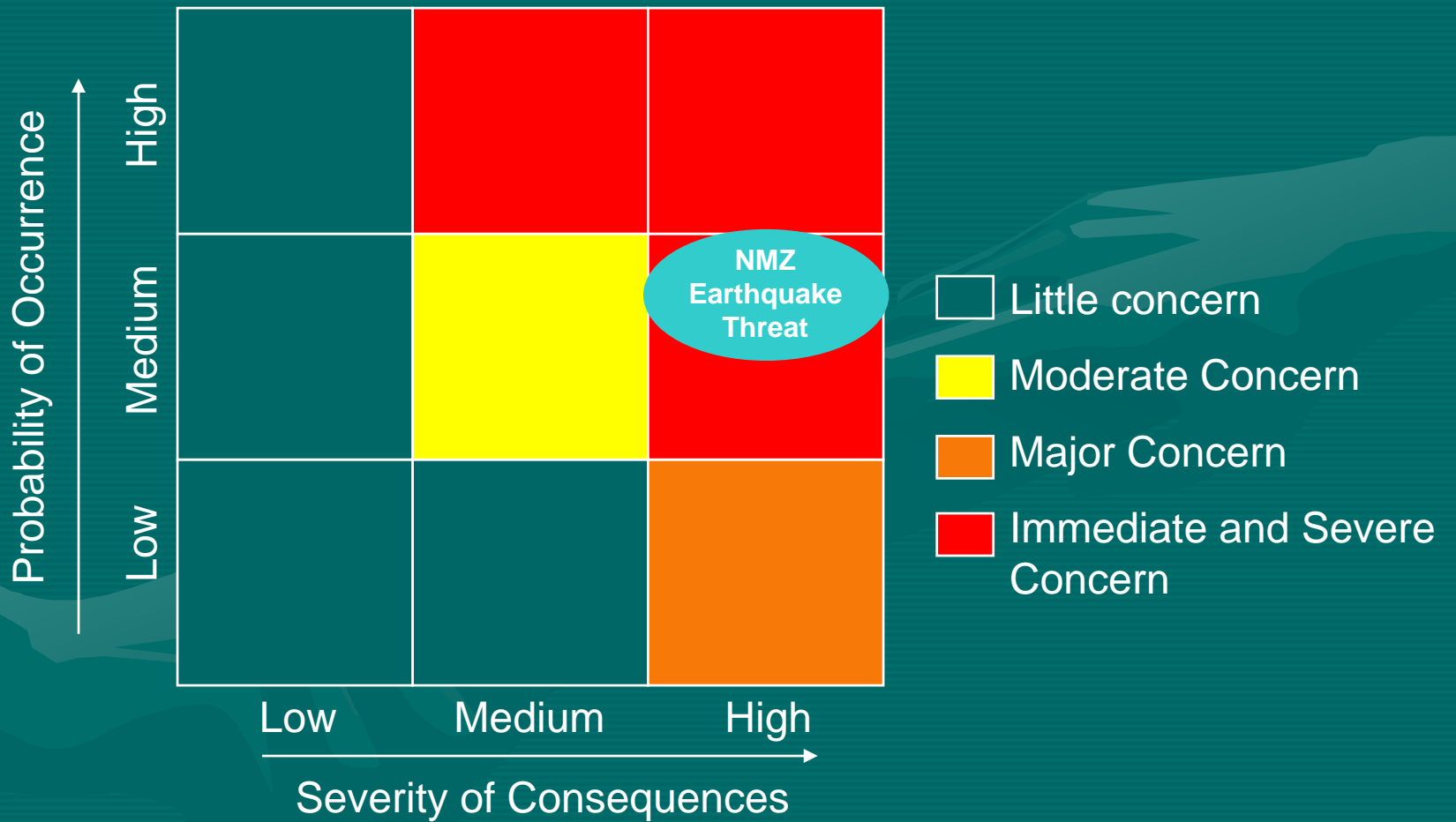
Response and Recovery Resources

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Earthquake Risk in NMZ

Risk = Probability X Severity of Consequences



What should we do about the risk

- What planning and preparation actions are needed?
- How should we plan and prepare?
- What resources are available to us?
 - National level
 - State level
 - Local Level

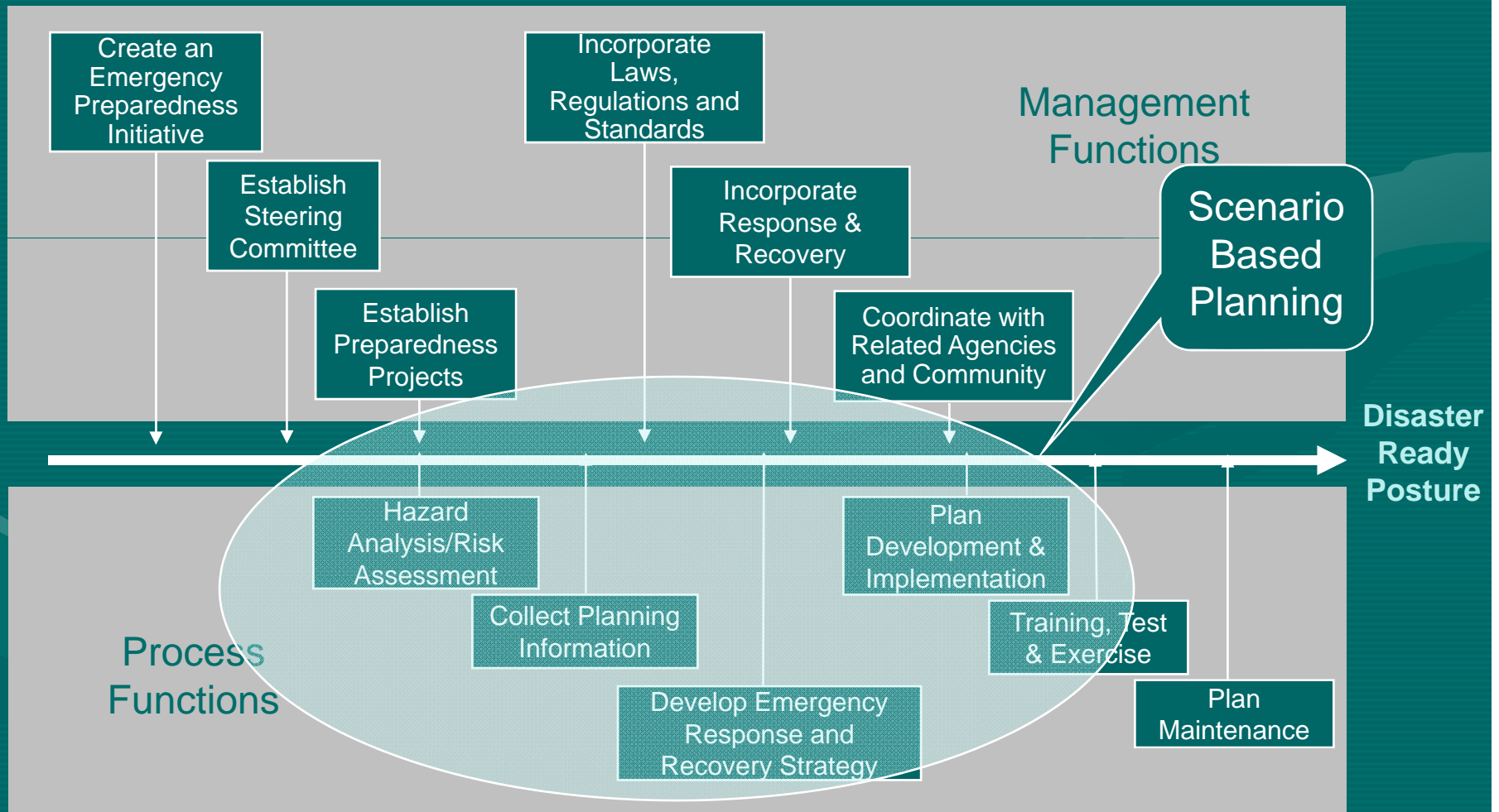
What planning and preparation actions are needed?

- Each organization should have an effective Disaster/Emergency Management and Business Continuity Program ⁽¹⁾
- The program shall follow a planning process that develops plans for the strategy, prevention, mitigation, emergency operations/response, business continuity, and recovery ⁽¹⁾

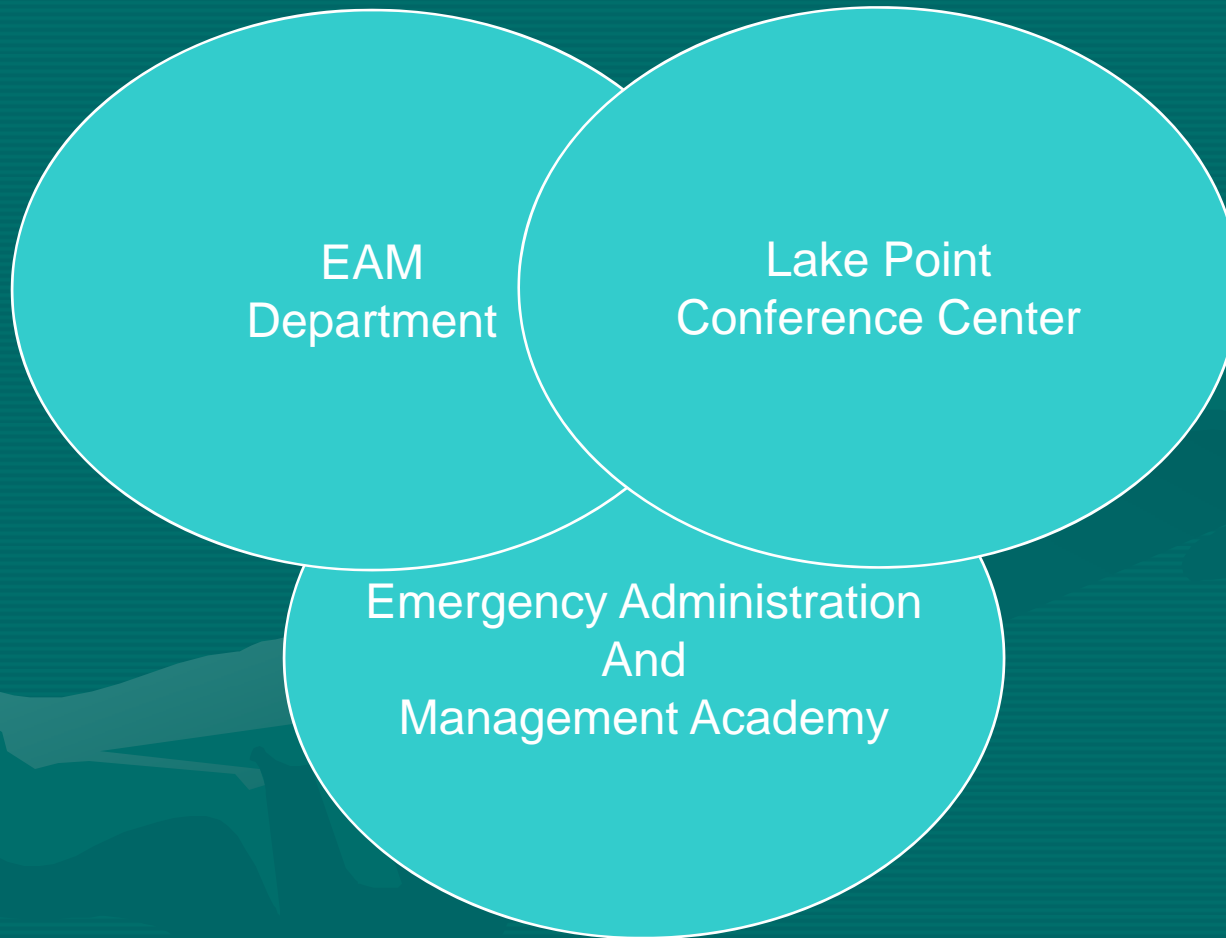


(1) From NFPA 1600

Preparedness Planning Process



Resources Available at Arkansas Tech



EAM
Department

Lake Point
Conference Center

Emergency Administration
And
Management Academy



Emergency Administration and Management Academy

The EAMA was established in 2004 under a 3-year Congressional Grant with a mandate to:

- Establish an Emergency Operations Center that includes advanced modeling and simulation capabilities
- Integrate this capability into the EAM academic program
- Develop and implement a Campus Emergency Preparedness Program
- Improve effectiveness of emergency professionals
- Provide specialized education, research, and training
- Pursue collaborative projects with government and industry

EAMA Facility

- Two Servers
- Real-time Weather Station
- Data Storage Array
- Network Switch
- Wireless Access Device
- Communications Cable Access Points

- Plasma Display
- DVD/VCR Player
- Phone

- Two Workstations
- Laser Printer
- FAX
- Phone

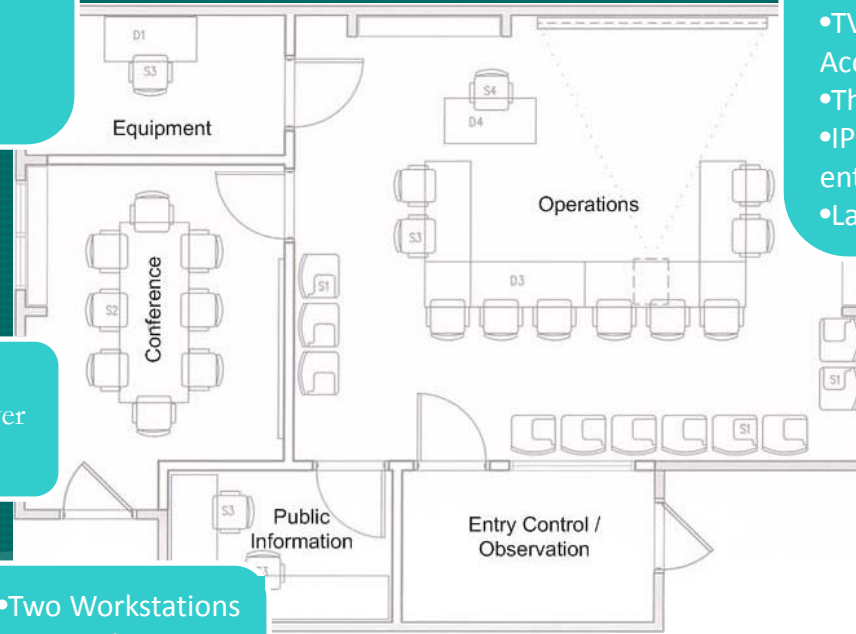
Dean 205 EOC Extension

- 25 Workstations
- Laser Printer

- Eight Workstations
- Smart Board with LCD Projector
- TV/DVD /VCR w/Cable Access
- Three Phones
- IP Security Cameras for entire EOC
- Large Format Printer

Incident Response Equipment

- Four UHF/VHF Portable Radios
- Four Walk-Talkies
- Six two-way radios w/GPS
- Four Hand-held GPS Receivers
- Four Tablet PCs
- Five Laptop PCs
- Two USB Cameras
- Two USB GPS Receivers
- Hand-held Sub-meter GPS Receiver
- Satellite Phone



EAMA Software Architecture

- Planning and Management
 - **Microsoft Word**
 - **Microsoft Project**
 - **Living Disaster Recovery Planning System**
- Crisis Management/ Collaboration
 - WebEOC
 - eRED – Disaster Response
- Security/ Access Control
 - ITRAK
- Geospatial/Location Based Applications Support
 - **ESRI ArcGIS**
 - **Trimble TerraSync & Pathfinder**
- Weather station data analysis
- Modeling and Simulation
 - Consequence Assessment Tool Set
 - Hurricane Tracking Storm Surge Model
 - **Earthquake Analysis**
 - Rapid Analysis of Chemical, Biological, High Explosives, Nuclear Weapons, and Radiobiological Hazards
 - **Manual Hazard Definition**
 - **Roadblocks**
 - **Hazardous Chemical Release (ALOHA)**
 - FARSITE
 - Wildfire modeling and assessment
 - GRLevel2Analyst
 - **Weather analysis using real-time radar data**
 - HAZUS MH
 - **Earthquake, Flood, Hurricane Damage assessments**
 - Hurrevac
 - Hurricane tracking and evacuation planning

Outreach Personnel Resources

- Undergraduate Interns
 - Emergency operations/response and Continuity of operations planning
 - Exercise design, conduct, and evaluation
- Undergraduate Externships
 - Exercise operational support and evaluation
 - Short-term planning and plan evaluation
- Graduate Student Research/Support
 - HAZUS disaster modeling and analysis
 - Design of emergency management systems
 - Business Impact Analysis and design and develop continuity of operations plans
 - Application of GIS and GPS to emergency management issues
- Faculty-directed Research/Support
 - HAZUS disaster modeling and analysis
 - Emergency response/recovery and continuity of operations planning
 - GIS application to emergency management issues
 - Exercise design, coordination, conduct, and evaluation
- Response operations support
 - Highly trained campus CERT , members of SAR teams
 - Katrina evacuee support in Russellville
 - Virtual EOC support for remote incidents

Arkansas HAZUS Users Group

- HAZUS is the FEMA advanced risk assessment tool for modeling earthquakes, flooding and hurricanes
- HAZUS is used for the NMZ scenario development
- A users group is being established for individuals who have an interest in assessing the potential losses from earthquakes and flooding in Arkansas. The benefits of this users group include:
 - Offers a collaborative forum for understanding how to effectively use HAZUS and for resolving immediate use issues
 - Access to success stories and lessons learned that may be used in subsequent analysis
 - Facilitates joint projects where information, technology, and resources are shared
 - Provides a direct link to FEMA for the latest available information on HAZUS training and new developments
 - Provides Arkansas with a consolidated voice into FEMA regarding priorities for HAZUS enhancements
- To obtain more information email eleachman@atu.edu or complete the sign-in sheet provided at registration. Phone 479-356-2092

Resources Summary

Pre-event Support

- Hazard analysis – data collection and refinement and micro analysis using HAZUS and other EAMA modeling tools
- Collaboration with other users and experts on scenario development through HAZUS User Groups
- Create Common Operational Pictures of areas of interest using geospatial technology toolsets
- Scenario-based
 - Response and recovery planning
 - Continuity of operations planning
 - Exercise planning and support

Post-event Support

- CERT trained to support response and recovery
- Technology support from virtual EOC