Threat and Vulnerability Assessment

A Holistic Approach for the Collegiate Setting
Introduction

• I am ...
Kennesaw State University

- Founded in 1963
- 25,000+ students
- Football starting in 2015
- Approximately 2,000 staff
- Consolidating with Southern Polytechnic State University in 2015
  – Population will grow to over 30,000

Celebrating Our Past, Igniting Our Future
Kennesaw State University

• Department of Strategic Security & Safety
  – Emergency Management
    • Crisis Coordinator Program
    • CERT
  – Access Control
  – Cameras
  – Fire Safety Programs
  – Enterprise Risk Management
## Vulnerability v. Threat

<table>
<thead>
<tr>
<th>Vulnerability Assessment</th>
<th>Threat Assessment</th>
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</thead>
<tbody>
<tr>
<td>• “needs” assessment</td>
<td>• “hazards” assessment</td>
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<tr>
<td>• Identify gaps</td>
<td>• Identifies hazards that could affect a campus</td>
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<tr>
<td>• Identify areas needing improvement</td>
<td>• Generally used for violent incidents, but applicable to all hazards</td>
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<tr>
<td>• Geographically based</td>
<td>• Identifies probability and impact</td>
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Why do we Assess?

- Identify Planning Initiatives
- Identify Mitigation and Preparedness needs
- Identify critical infrastructure
- Determine the hazards and risks of our campus
  - *What areas are more at risk?*
  - *What hazards and risks should we focus on?*
- Justification
Threats and Hazards

• Step One: Identify your hazards
• Try to look at all angles
• “All-Hazards”: Consider all potential threats
  – Natural
  – Manmade
• Identify the hazards that could affect your campus
Potential Hazards

- Fire
- Bomb Threat
- Severe Weather
  - Tornado
  - Thunderstorm
  - Winter Weather
- Earthquake
- Volcano
- Active Shooter
- Terrorism
- Pandemic
- CBRNE
- Flooding
- Wildfire
- Hurricanes
- Airplane crash
- Etc.
Profile the hazards

- How often will it occur?
- How impactful would it be?
- Where is it likely to occur?
- How large of an area will be affected?
- How long will the impacts last?
Profile the hazards (cont.)

- What time of year is it likely to occur?
- How fast will onset occur?
- Is there a warning system in place?
- How much warning would we get?
Use the threat assessment to determine which hazards your are susceptible to as a college/university and use this assessment as a guiding tool for mitigation and preparedness activities.
More than one way . . .

- Vulnerability assessment
- Geographically based
  - Building by building
  - Campus by campus
- Looking for gaps and improvement needs
What are we looking for?

- Physical ease of access
- Sufficient sheltering areas
- Structural
  - Fire suppression
  - Glass
  - Age
- Inherent dangers
  - Building Contents
What are we looking for? (cont.)

- Resource Storage areas
- Population of the area
- Presence of safety equipment
  - Fire Extinguishers
  - AEDs
  - Sprinklers
Multi-Functional Approach

• By Area
  – Building by building
  – Campus by campus
  – Campus zones/areas
  – Department

• By Hazard
  – Impact
  – Probability
Combine for Greater Use

• Look at all aspects together
  – Physical Vulnerability
  – Academic and Business Operations
  – Building Contents
  – Threat/Hazard Assessment

By combining the elements, We gain situational awareness
How do we make it easily applicable?

• Quantitative Analysis
  – *Take the conjecture out of the equation*
  – *Give a number value to the analysis*
  – *Increases objectivity and makes the analysis more concrete*
Quantitative Analysis

- Incorporates an academic approach to a practitioner’s assessment
- By creating an academic base to your analysis, it helps the analysis stand up to scrutiny – particularly in the higher education setting
Likert Scale

- Places items on a continuum
- Assigning a score 1-5
- Accepted quantitative approach for social sciences as a means of determining what aspects should be focused on
Examples

• Fire Extinguisher coverage
  – Very good, good, acceptable/fair, poor, very poor

• Activity Level/Foot Traffic
  – Very High, High, Medium, Low, Very Low

• Infrastructure Presence
  – Very High, High, Medium, Low, Very Low
Examine all Aspects

• Physical Vulnerability

• Academic and Business Operations
  – Can operations be performed elsewhere?
  – Visibility
  – Symbolic/Historic Nature

• Contents
  – Critical Infrastructure
  – Hazardous Materials
Smith Hall
• Physical Vulnerability – 27
• Academic/Business – 21
• Contents – 11
• Hazard Score (zone/campus) – 34
• Total : 93

Wilson Building
• Physical Vulnerability – 24
• Academic/Business – 32
• Contents – 14
• Hazard Score (zone/campus) – 34
• Total : 104

Wilson Building has a higher vulnerability than Smith Hall because . . .
Build a Team

- Recommend having more than one set of eyes
- We all have our own bias and focus
- Could even use the Likert scale in a survey form to send to faculty, staff, and even students
Build a Team (cont.)

Vulnerability Assessment
- Public Safety
- Building/Area/Zone Occupants
- Department members
- IT
- Environmental Health/Safety
- Facilities
- Others

Threat Assessment
- Public Safety
- IT
- Facilities
- EHS
- Food Services
- Health Services
- Residence Life
- Transportation
- Others
What does it all mean?

• Build a stronger Emergency Management System based on data and analysis

• Use the assessments for . . .
  – Hazard Mitigation Planning and Projects
  – Continuity of Operations Planning
  – Emergency Operations Planning
  – Justification of funds for the above
  – Develop relationship with other departments
Thank You!

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