



UFF Position Statement:

Community Risk Assessment/Threat Assessment Checklist

Attacks by radicals armed with weapons in public areas, like concert halls, schools, shopping malls, churches and other locations where people congregate is a threat to the sense of security in daily lives. Active shooters along with other violent extremists are finding new ways to attack innocent people during mass gathering events or in their everyday life. These new tactics include the use of edged weapons, vehicle ramming, and fire used as a weapon.

Given this reality, it is imperative that fire department leaders conduct threat assessment as part of an overall community risk assessment. Identifying threats should be an early step in risk assessment. Threat identification is the process of collecting information regarding the locations and types of targets within the jurisdiction. Threat assessment (risk assessment) includes an analysis of probabilities, vulnerabilities and impact of an attack.

Threat Identification

Threat identification includes identified locations where hostile incidents are capable of causing death, injury, property or environmental damage, and/or major system disruptions (e.g. transportation, emergency response, electricity, water supply, etc.). At-risk locations that may be considered targets typically have large numbers of people, may be of national significance, have public significance, or are targets based on information from intelligence groups. Other considerations related to a possible target site include the following.

- (1) Population demographics, including vulnerable groups or ethnic groups
- (2) Critical infrastructures and transportation facilities or routes
- (3) Positions that would provide a tactical advantage
- (4) Environmental features or conditions

Threat Assessment

Threat risk assessment is conducted to determine the probability of an attack occurring and consequences of such an attack.

A threat assessment should consider the following.

- Known intelligence
- Facility (or Venue) Location
- Facility (or Venue) Use
- Building construction type
- Availability of building map and/or site plan
- Number of occupants/attendees and maximum capacity
- Age groups of occupants/attendees
- Occupant preparedness measures or lack thereof
- Emergency responder accessibility
- Ingress
- Access Control (e.g. open access venues include marathons, parades, protests, rallies, festivals, fireworks display, farmers markets, and high-profile funerals and vigils or memorials)
- Egress
- Overall Area accessibility
- Security capabilities of venue (cameras, security, alarm systems)
- Existence of fire protection systems
- Distance to and capabilities of nearby medical facilities
- Surrounding structures

Prioritizing Threat Levels

Once a threat identification and assessment are complete, areas, buildings, facilities, and venues can be prioritized by threat level. Factors used to prioritize include community significance, occupancy type, occupancy/population, ease of access, public profile, known target or previous threats, and potential for significant impact. Categories for threat levels may be summarized as very high, high, medium and low.

Very High Threat

- Place of national leadership
- Houses of government
- Houses with specialized equipment or personnel necessary to identify /analyze threats to homeland
- Houses with equipment/ personnel essential to national fiscal/monetary policy/ economic functions,
- Popular tourist destinations greater than 250,000 sq ft with populations greater than 750
- Areas of high crime
- Areas of routine protests
- Significant history of violence

High-Threat

- High-rise buildings
- Hospitals
- Schools

- Nursing homes
- Houses of worship
- Explosive plants
- Refineries
- Structures with irreplaceable materials
- Biological/chemical/radiological/medical research or storage facilities
- Public assembly structures
- High life hazard occupancies between 100,000 – 250,000 sq ft. with population between 250 – 750
- Areas with history of demonstrations
- Moderate crime
- History of violence

Medium-Threat

- Garden Apartment,
- Offices,
- Mercantile and industrial occupancies between 10,000 – 100,000 sq ft with population between 100- 250
- Areas with low crime
- Non-adversarial public activity

Low-Threat

- One-, two- or three-family dwellings
- Scattered small business
- Industrial occupancies up to 10,000 sq ft with population from 1- 100
- Areas with little to no public contact or activity
- No history of demonstrations or violence

Assessing Consequence

Once threat assessment is complete, target hazards can be categorized based by potential consequence. These consequences can be grouped into four categories:

- (1) Human impacts (civilian and responder injuries and deaths)
- (2) Economic impacts (property loss, both direct and indirect effects)
- (3) Psychological impact (public confidence)
- (4) Functional impact (continuity of operations)

Risk/Threat Assessment Data Sources

- Assess CAD Data for trends by call type and time of year
- Assess Department Data for trends in first due areas/neighborhoods/venues
- Assess Demographic changes annually in first due areas/neighborhoods
- Assess Structures/ Hazard levels by first due areas or response zones
- Consult Fusion Centers

Location (Address)	Threat	Assessment	Checklist
Factor	Threat Identification	Guidance and Information Sources	Observations
Site	What critical infrastructure, government, military, or recreation facilities are in the local area that impact transportation or utilities?	<p>Telecommunications Infrastructure (Broadcast/cable TV, cellular networks, radio stations, newspaper offices, satellite base stations)</p> <p>Electric power systems (power plants, nuclear plants, fuel distribution and storage)</p> <p>Gas and oil facilities (HazMat facilities, Oil/gas pipelines and storage)</p>	
Site	What major structures surround the site?	<p>Banking or financial institutions, healthcare institutions, academic institutions, religious institutions</p> <p>Transportation networks (airports, flight paths, air traffic control towers, runways)</p> <p>Trains, bus stations, subways, waterways,</p>	
Site	What are the adjacent land uses immediately outside the site?	Pipelines, water supply systems, healthcare, manufacturing, recreational facilities, agricultural, parade routes, theme parks, landmarks	

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Site	Does curb lane parking allow uncontrolled vehicles to park close to a building?	Where distance from the curb provides insufficient setback, restrict parking in the curb lane. (*Note required handicapped parking must be located on the shortest accessible route of travel from adjacent parking to an accessible entrance.)	
Site	Is there a perimeter fence or other limits to access?	Note the access points and obstacles for ingress and egress of emergency personnel (and evacuation of people).	
Site	Is vehicle traffic separated from pedestrian traffic?	Note the areas vulnerable to pedestrian traffic crossing vehicle traffic.	
Site	Are there vehicle anti-ramming devices or buffer zones around the building or pedestrian routes? Can emergency vehicles reach the building?	Note the areas vulnerable ramming and areas vulnerable to pedestrian traffic crossing vehicle traffic. Assure access for emergency vehicles to reach the building	
Site	Are all existing fire hydrants on the site accessible?	Assure that emergency vehicles can reach the building and fire engines can reach hydrants.	

Location (Address)	Threat	Assessment	Checklist
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Site	Has the building been hardened?	Site prohibits general entry or access, has window locks, has deadbolts for doors and interior door hinges. Access control and intrusion detection systems or cameras.	
Site	Do entrances allow queuing? Are public toilets, stairs or elevators in non-secure areas?	Are the areas inside or outside the building?	
Structural	What type of construction?	Type of construction provides an indication of the robustness of a structure for withstanding a blast insult.	
Structural Systems	Are critical elements vulnerable to failure? Is the structure vulnerable to collapse?	Primary structural elements like columns, roof beams and girders provide essential parts of a buildings resistance to catastrophic blast and subsequent collapse. Primary non-structural elements like ceilings or suspended mechanical units that are essential for life safety systems can cause injury if failure occurs.	
Exterior	Does the building contain ballistic glass?		

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Structural	Where are high value assets located in the building?	People and activities are more vulnerable to hazards when on an exterior wall or near uncontrolled public areas.	
Structural	Where are loading docks in relation to utilities, fire detection and alarm systems?	If loading docks are in close proximity to critical equipment, consider hardening the equipment against explosive devices.	
Structural	Where are stairwells located? Are stairwells intended for emergency responders located remotely from high risk areas where blast events might occur? Are doors locked preventing ingress but also preventing egress/evacuation?	Do stairwells empty into areas other than a lobby or parking area? Can positive pressure be maintained from a clean source of air?	
Structural	Are ceiling and lighting systems designed to remain in place during blast events?	Overhead utilities and other fixtures should be mounted to minimize the likelihood they will fall during a blast event.	
Structural	Are there secure areas for shelter in place?	There is a need for lockable doors in offices/classrooms etc. These must also be accessible for search by responders.	

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Utility Systems	<p>What is the source of water for fire-suppression system?</p> <p>Are there alternate water supplies?</p>	Local utility, storage tanks, lakes or rivers	
Utility Systems	Is the fire suppression system adequate/code compliant and protected?	Standpipes, water supply control valves and other system components should be secured.	
Utility Systems	<p>Do the sprinklers/standpipe interior controls (risers) have blast resistant protection?</p> <p>Are water supply connections nearby?</p> <p>Are there redundant fire water pumps?</p>	Standpipes, water supply control valves and other system components should be secured.	
Utility Systems	<p>Is fuel stored on site?</p> <p>Are there other hazardous materials stored on site?</p> <p>How is it stored?</p> <p>Is it secured?</p>	Fuel storage protection is essential. Fuel storage should be located away from loading docks, egress/evacuation points and parking. Access should be restricted.	
Utility Systems	Is the incoming electric service to the building secure?	Service entrance should not be accessible to the public.	

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Mechanical Systems (HVAC)	<p>Where are the air intakes and exhaust louvers for the building?</p> <p>Are there multiple air intake locations?</p> <p>Are there large central air units or multiple units serving separate zones?</p> <p>Are supply, return, and exhaust air systems secure?</p>	<p>Air intakes should be located on the roof or as high as possible. Otherwise they should be secured.</p> <p>Single air intakes may feed several air handling units.</p>	
Mechanical Systems (HVAC)	<p>Are there air monitors or sensors for chemical /biological agents?</p> <p>Does air handling system support shelter in place?</p> <p>Are there smoke evacuation systems?</p> <p>Are fire walls and doors tight (no cracks in seals)?</p>	<p>During CBRNE situations, the intent is to keep contamination localized and prevent entry into public areas.</p>	
Fire Alarm System	<p>Can the system warn building occupants and alert responding agency?</p> <p>Is there a mass notification system that reaches all building occupants?</p>	<p>Depending on building size, a mass notification system will provide warning and alert information to occupants.</p>	

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Fire Alarm System	Where are fire alarm panels located? Are key alarm system components fire/blast resistant?		
Security Systems	Do stairwells have functional exit signs lights?		
Security Systems	Are cameras in place to monitor perimeter building events? Are cameras equipped with motion detectors?	Security technology is constantly changing and is to be supplementary to security personnel to provide wider area of coverage in deterring, detecting, and responding to threats.	
Population	Are occupants/attendees vulnerable population groups?	Children, elderly, disabled those not familiar with the property (e.g. hotel guest) Know the demographics —staff vs. visitors <ul style="list-style-type: none"> • Religious groups • Ethnic groups 	
Population	How Many people are in the building/area? How will everyone escape? Are doors locked preventing egress/evacuation? Can everyone shelter in place if needed?	Assess evacuation routes for mass gathering or vulnerable groups. Assess areas for shelter in place. Shelter areas should have lockable doors but also be accessible for search/rescue.	

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Population	<p>Are occupants prepared/trained for hostile attack?</p> <p>Do they know exits and places to hide?</p> <p>Do they know first aid skills?</p>	<p>National campaign materials and local training resources are available for preparing the public for active shooter and other hostile events.</p> <p>Consider lack of population orientation particularly in hotels and convention centers.</p>	
Intelligence	Is there information from the Fusion Center?	Information on known threats may be available in regional fusion center.	

References:

NFPA 3000 Standard for Standard for an Active Shooter/Hostile Event Response (ASHER) Program, May 2018.

Planning and Response to and Active Shooter: An Interagency Security Committee Policy and Best Practices Guide. November 2015

Active Shooter Threat Assessment Checklist: K-12 Education Facilities. Smart Edge Solutions for Better Buildings. August 2018
https://www.smartedgeusa.com/uploads/Active_Shooter_Checklist_K12_final2.pdf

FEMA 154 and Physical Security Assessment for the Department of Veterans Affairs Facilities: Recommendations of the National Institute of Building Sciences Task Group, September 2002.

Centers for Disease Control and Prevention/ NIOSH. Publication No. 2002-139, Guidance for Protecting Building Environments from Airborne Chemical, Biological, or Radiological Attacks.