Preparedness for Uncertain Conditions

For purposes of research for the assignment of creating a Probability Matrix for risk threats in the community that my agency serves, I sought direction and guidance from Cincinnati Fire Lieutenant Richard Jones. Lt. Jones has been a sworn member of the Cincinnati Fire Department for 28 years of service; he is currently assigned to the Environmental Crimes Unit (ECU) of the Fire Prevention Bureau. Lt. Jones is a sworn peace officer in the State of Ohio and has been implemental in working closely with the Hamilton County Emergency Management Agency to assess the critical infrastructure of the City of Cincinnati to identify potential hazards and to determine condition readiness in the event of a critical incident the required the need for extra resources and personnel beyond the scope of the Cincinnati Fire Department. Lt. Jones indicated to me that at this point in the assessment phase of critical infrastructure; the determination of high or low probability and high or low consequence would be best left to educated guesses at this point.

The City of Cincinnati has several high life safety hazards that present potential opportunities for risk to public safety; two that immediately draw attention are professional sports teams’ venues; Paul Brown Stadium and Great American Ballpark have seating capacities of over 35,000 people. The City also has several “Special Events” that attract large crowds of people that gather in a specific area that creates potential risk opportunity, like the “Taste of Cincinnati” and “Oktoberfest”.
There are also potential risk opportunities when it comes to the critical infrastructure of utility services that the City provides in providing drinking and waste/sewer management and treatment. Cincinnati Bell telephone provides critical infrastructure for communications in the service and maintenance of landline and cell phone tower communications; yet another potential risk threat in terms of public safety preparedness.

Assessing the Hazards

The City of Cincinnati Emergency Operations Plan (EOP) refers to Cincinnati Administrative Code, Art. XVIII Sect. 2 Definitions, which defines an emergency as such:

Any natural disaster or man-made calamity, or clear and present danger thereof, including but not limited to flood, conflagration, cyclone, tornado, earthquake, or explosion within the corporate limits of the City of Cincinnati which could result in the death or injury of persons or the destruction of property to such an extent that extraordinary measures must be taken to protect the public peace, health, safety, or welfare (BP 3).

Potential hazards lead to emergency situations, the EOC continues on to refer to the Cincinnati Administrative Code points out potential hazards that the City is vulnerable to:
1. Natural Disasters- This includes situations such as floods, 
tornadoes, earthquakes, major landslides, winter storms, 
drought, heat waves, energy and water shortages;

2. Man-made Disasters- this includes situations such as 
hazardous materials, weapons of mass destruction, chemical 
fires or explosions, other serious fires or explosions, and 
transportation incidents; and

3. Civil Disturbances- this includes a variety of situations ranging 
from small crowds to strikes to riots (BP 3).

Clearly there are a multitude of hazardous scenarios that will require emergency 
response to public safety needs on a minor and massive scale. Living in a post 
September 11th, 2001 world mandates that fire and emergency service providers 
assert greater efforts to achieve better preparedness to assure public safety; we 
are on the “front line” of defense, which makes it so much more important for 
departments to do self-assessments in order to identify risks and hazards in the 
community. According to Chief Stewart W. Gary Livermore of the Pleasanton (CA) 
Fire Department, in his Fire Chief Magazine article, “System of Cover”; western 
European countries have developed national standards for fire deployment:

Such deployment policies are based on risk and on community 
expectations regarding outcomes should an emergency occur. Having a
broadly understood and accepted system for determining deployment helps policy-makers at all levels understand deployment resource needs and reduces the differences from community to community that can occur if no common policies exist. (FC 1)

A system of cover or risk/hazard assessment is an astute and forward thinking approach to addressing the community’s safety needs before the “big one” occurs. The diagram located on Appendix A is a Probability Matrix created based on potential risk/threat assessments for the City of Cincinnati and its Emergency Operations Plan deployment.

Preparing for the Uncertain

Risk / Threat Analysis of Response Capabilities for Public Safety Services

I. Paul Brown Stadium- Life Safety/ Place of Assembly

Incident Type: Improvised Explosive Device (Low Probability/ High Consequence)

Preparedness Interventions:

1. Metal/ detection devices at ticket gates.

2. EOD team on site with explosive detection K9 capability.

* Increased presence of security will pose as a deterrent and instill greater sense of safety to the public.
II. Greater Cincinnati Water Works- Critical Infrastructure

Incident Type: Drinking water contamination (High Probability/ High Consequence)

Preparedness Interventions:

1. Multi-agency drills utilizing NIMS/ICS.

2. On site monitoring at pump stations. Routine sample analysis and detection devices installed at distribution facilities.

* Utilize Environmental Protection Agency’s technical expertise and integrate response SOPs.

III. Taste of Cincinnati- Life Safety/ Special Event

Incident Type: Heat Emergency (Low Probability/ Low Consequence)

Preparedness Interventions:

1. Public Service Announcements advising of heat alerts. Cooling stations located in various areas throughout the venue.

2. Modify hours of operation if heat index exceeds threshold as determined by the City Health Commissioner.

* SORTA to provide METRO busses on site to provide air conditioned units for persons in distress.
IV. Cincinnati Bell - Critical Infrastructure

Incident Type: Natural disaster/ Tornado (High Probability/ Low Consequence)

Preparedness Interventions:

1. Cincinnati Bell and City to increase Wi-Fi capability. Create Wi-Fi hub.

2. Cincinnati Bell Corporate Security and CFD to establish an emergency operations plan.

* Implement the Civilian Safety Component to assist with initial recover/ relief efforts.

Controlling what you can, and adapting to what you cannot...

Preparing for the unknown requires Fire and Emergency Service Administrators to rely on instinct and strategic vision. The scenarios outlined above demand that all efforts to mitigate the emergency be well orchestrated and precisely executed; therefore training before the event will serve as a great asset toward greater preparedness. In the IAFC: Chief Fire Officers’ Desk Reference, Ronny J. Coleman says that, “strategic vision provides direction to both the formulation and execution of strategy. It makes strategy proactive, rather than reactive, about the future (448)”, which we all know the future is uncertain in our industry; being proactive during the crisis serves as a better utilization of resources compared to a reactive approach that might lack the efficiency and effectiveness to mitigate the emergency.
Selling the EOP and Deputizing Risk Managers

In the event that a natural disaster such as a tornado would befall on the City of Cincinnati, it would pose a great threat to disrupting some critical infrastructure such as telephone communications. In the immediate time following the touchdown of the tornado there will be mass panic and chaos among the civilian population that would be impacted. The demand for safety services will mandate a recall of personnel of both the police and fire department. Such an event would certainly qualify as a Level 3 Emergency and therefore the EOC would be initiated because of the severity and magnitude of the situation.

This type of incident would surely require that mutual aid agreements with other local area agencies to be activated; there may also be a need for a response from both the State of Ohio and/or the Hamilton County Emergency Management Agencies as well. During the interim period prior to the arrival of additional resources, there will be a need for non-governmental assistance that could come from disaster relief services like the Red Cross and the Salvation Army. Another key concept of non-governmental intervention could be from a Civil Safety Component (CSC); composed of citizens willing to serve in the communities and neighborhoods that they reside in. The CSC would be inspired from the same willingness to serve that the Civil Defense regimens of the 1950’s had. Instead of the retreat to the backyard bomb shelter mentality that prevailed in the 50’s, the CSC members of today would be charged with the sense that a proactive willingness to serve in the recovery and relief effort demands. The police and fire departments could work at
selling the idea of a CSC by attending community/neighborhood council meetings and block watch meetings. The CSC upon its formation would be given SOPs that would mandate the circumstances and conditions under which they would be activated. The CSC could become a part of the City's EOP. Training and the issuing of equipment such as a radio with police and fire ground radios and disaster kits would be given to the CSC leaders under strict operational procedures. Basic first aid and safety awareness could be rolled out by the public safety professionals; the CSC could participate in drills as well. An adjunct to the training that the police and fire departments would provide could be the information found at ready.gov, a website that has information for concerned citizens that want to be responsible for their own preparedness:

Emergency preparedness is no longer the sole concern of earthquake prone Californians and those who live in the part of the country known as "Tornado Alley." For Americans, preparedness must now account for man-made disasters as well as natural ones. Knowing what to do during an emergency is an important part of being prepared and may make all the difference when seconds count. (www.ready.gov)

There is a potential to create buy-in from the public that could yield a great benefit for the fire department down the road, not only for the extra hands that would be utilized but, for the public relations advantage as well. If there were ever discussions of cutting funding to departments that would affect the CSC, concerned citizens would be in the ears of their politicians for sure.
Foresight is better than No Sight...

The future is untold for all of us; the forward thinking FSA will pay heed to wisdom by, hoping for the best and expecting the worst. In the fire service of today, when our response is beyond just the alarm drop or EMS call; the FSA must maintain a consorted effort to assure preparedness for the continual protection of the public’s safety which is at risk of numerous threats like: HAZMAT, natural disasters, man-made disasters, threats to our homeland security, and the still unforeseen event that is yet to present itself. One thing can be certain though, when the tone drops or the alarm sounds our brave men and women that proudly serve in the fire and emergency services will answer the call just as they always have; as FSAs we have a responsibility to develop safety strategies that are the best practices toward assurance that they make back to the fire station to respond to the next call.
## Probability Matrix for Risks in the City of Cincinnati

<table>
<thead>
<tr>
<th>Life Safety/Place of Assembly Paul Brown Stadium</th>
<th>Critical Infrastructure/Utility (Greater Cincinnati Water Works)</th>
<th>Life Safety/Special Event (Taste of Cincinnati)</th>
<th>Critical Infrastructure/Communications (Cincinnati Bell)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Probability/Low Consequence</strong></td>
<td><strong>Act of bioterrorism/H2O contamination</strong></td>
<td></td>
<td>Tornado disables service</td>
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<tr>
<td><strong>Low Probability/Low Consequence</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Low Probability/High Consequence</strong></td>
<td>Heat Emergency/children and elderly at risk</td>
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</tr>
<tr>
<td><strong>Low Probability/Low Consequence</strong></td>
<td>Act of Domestic terrorism</td>
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Works Cited


