

# Solutions.

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## ...a Single Source.



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# Are We Good; Or Just Lucky?

1. Couldn't radioactive material be added to a car bomb? **YES**
2. Is our "intelligence" so good that we can prevent the event before it happens? **IF WE ARE LUCKY**
3. Do we have such good control of sealed sources that it is too difficult for terrorists to deploy undetected? **WE NEVER WILL**
4. Do terrorists think that we have so many portals and remote sensors scattered around the country that it would be implausible to move undetected? **IN OUR DREAMS**
5. Is an RDD an effective or dramatic enough terrorist tool? **YES**
6. Is it hard for terrorists to assemble the resources to deploy a "dirty bomb" successfully? **THE SAME AS FOR ANYONE ELSE**



# Fears and Realities

- **“We have nothing to fear but fear itself” - FDR**
- **We are being driven by unreasonable fears and we are oblivious to the real costs.**





# "HYPE TERRORISM"

- **Security Spending (emotional and money) is being driven by unverified Worse Case Scenario (WCS) Standards**
- **The WCS is being used to fuel public fears**
- **Flawed WCS Criteria Security Measures will have devastating economic impacts for the nation**

# The Challenge

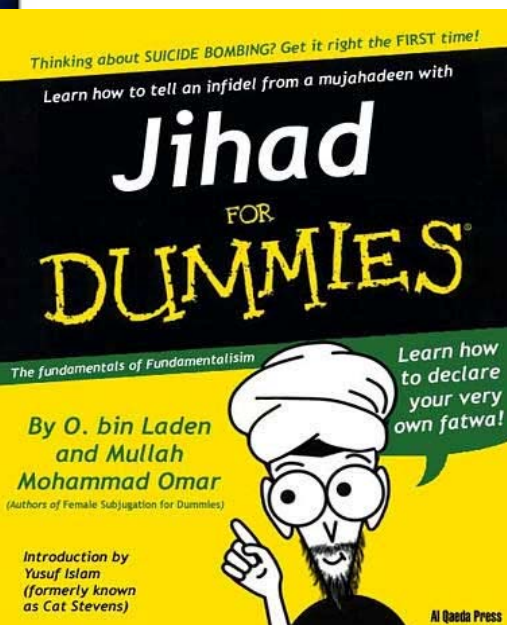


- To validate/debunk the myth that off-the-shelf WCS can harm millions of people?
- To adequately understand the variables that make these scenarios myth or probable realities?

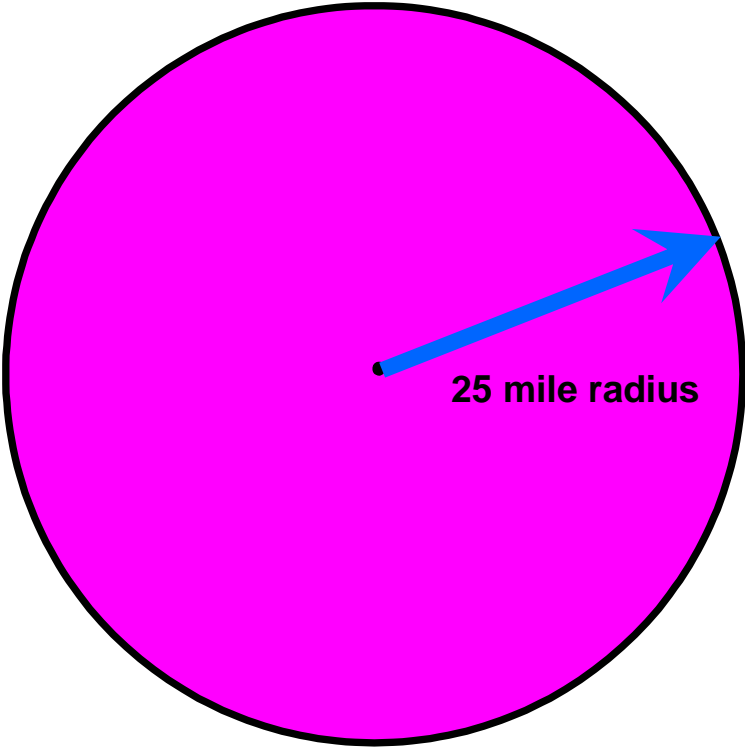
# The Answer



## CONSEQUENCE BASED PLANNING



# OFF-THE-SHELF WCS



Affected Population for WCR Scenario



# Consequence Based Analysis

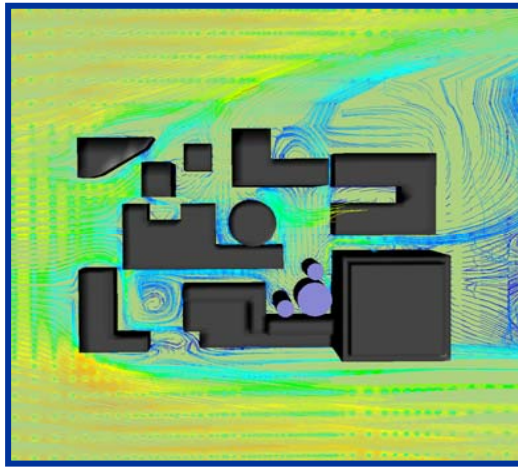
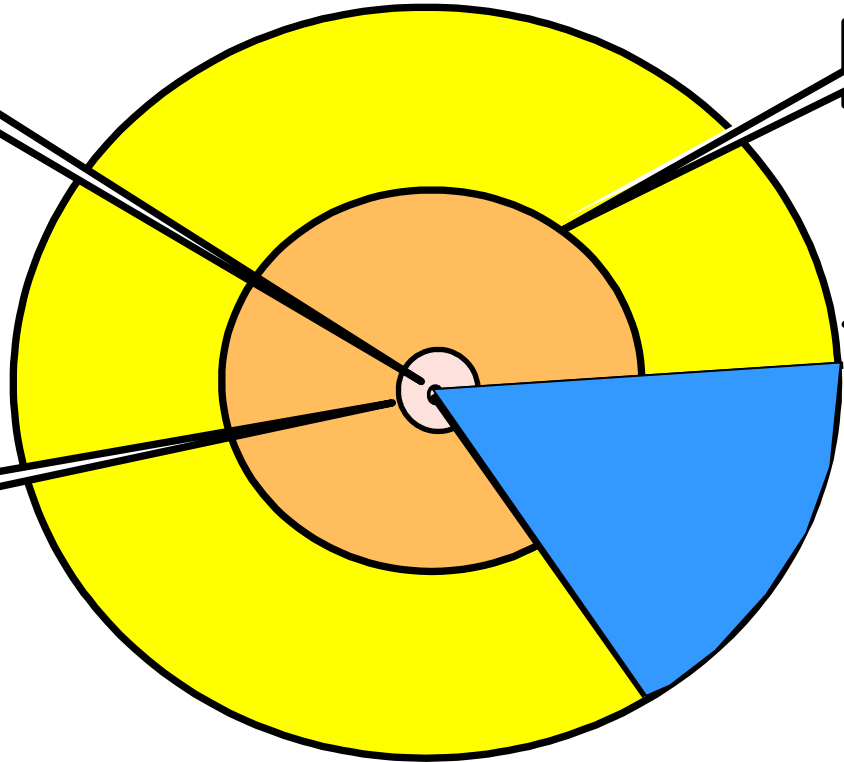


0.2 mile Radius

10 mile Radius

25 mile Radius

2 mile Radius



Population for WCR Scenario



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# Assessing Value/Vulnerabilities

- **Attacks are based on the motivations, capabilities and opportunities of terrorists to carry out specific threats.**
- **These are not random variables, although opportunity has a random component.**
- **Thus *consequence analysis* and *decision theory* based on random variables are essential in establishing an analytic framework of target **value** or **vulnerability**.**



# Advanced Risk/Value Analysis

## Assets

Employees  
Facilities  
Equipment  
Computing & communications  
Reputation  
Iconic Value  
Confidential & proprietary data

## • Events

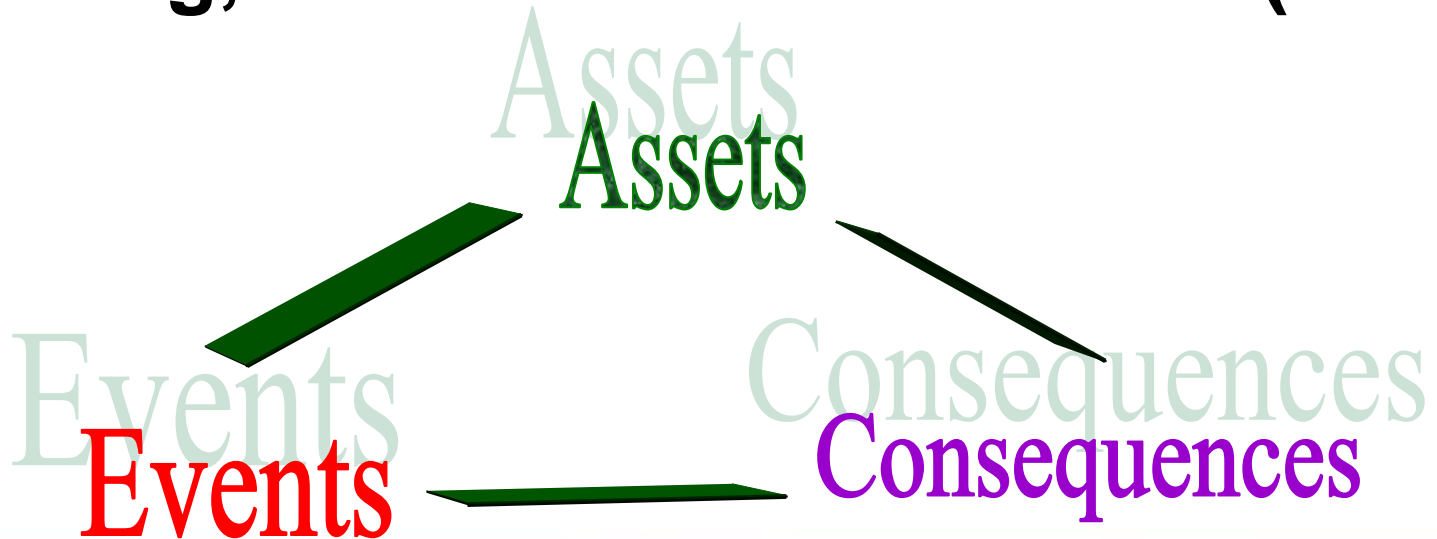
- Accident
- Crime
- Natural disaster
- Pandemic
- Sabotage
- Terrorism
- Workplace violence

## • Consequences

- Death
- Injury
- Economic Loss
- Psychological
- Supply chain disruption
- Pollution

# Probabilistic Risk/Value Assessment

**Consequences must be quantified (casualties, economy, production, other losses) to estimate impact ranking, AGAINST A STANDARD (ROI)**



# Value Classification Structure



# Value/Vulnerability Analysis

Evaluate all  
Positive Motivational  
Profiles Against All  
Asset Profiles and  
Score Each

Match the  
Resource and  
Opportunity Profiles  
as Scoring Filters

Order the Threat/Asset  
Scores by Value

- **Attractiveness Index**

- Measures how well the positive motivations of a terrorist group matches the likely outcome of a threat to a target.
- Low value = High Match                      Open ended at high end

- **Negative Motivation Index**

- Measures the fear factor involved in attacking a target for a given threat
- Low Value = Low Fear                      Open ended at high end



- **Degree of Success**

- Measures how successful the terrorist may be in carrying out an attack
- + 1 = High Success
- 0 = Success/Failure Even
- - 1 = High Failure



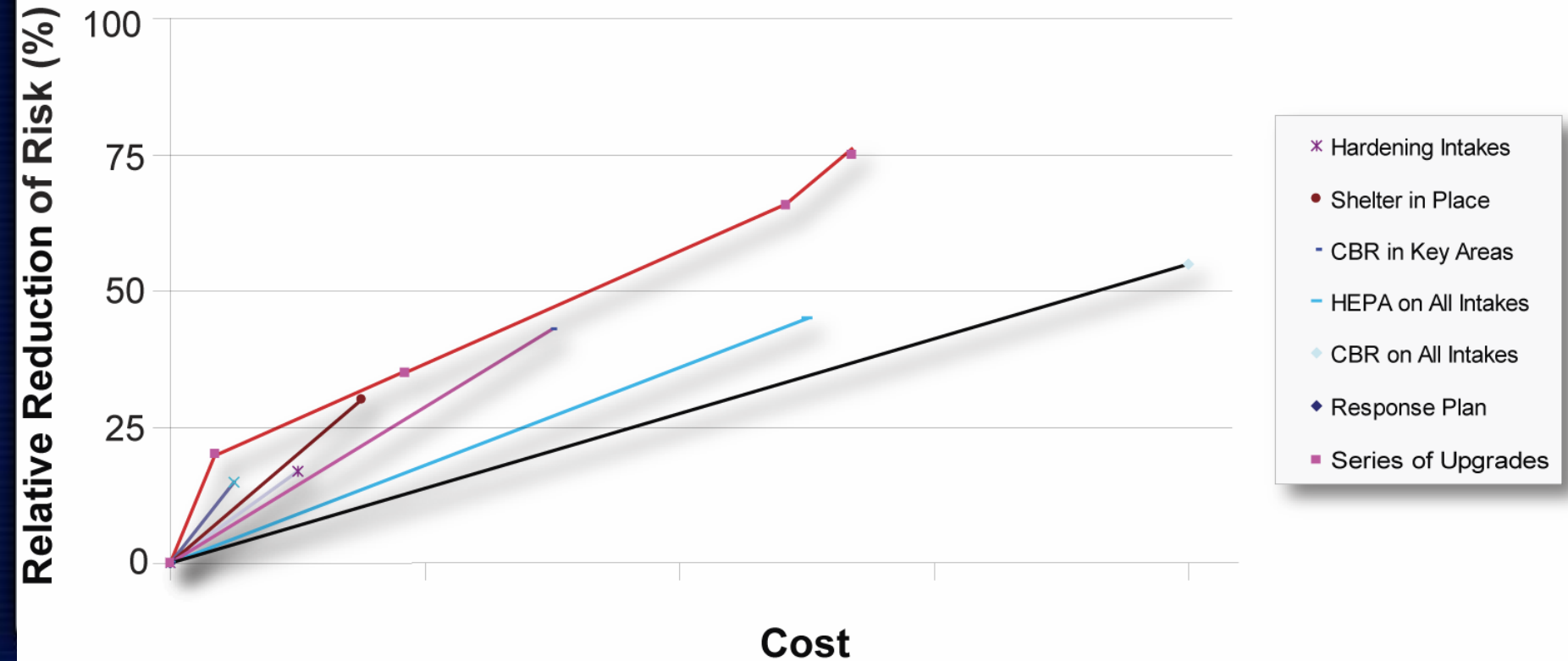
- **Aggregate (Composite) Index**

- Measures the combination of attractiveness, negative motivation and degree of success
- Low = High Potential Target Value Open ended at high end



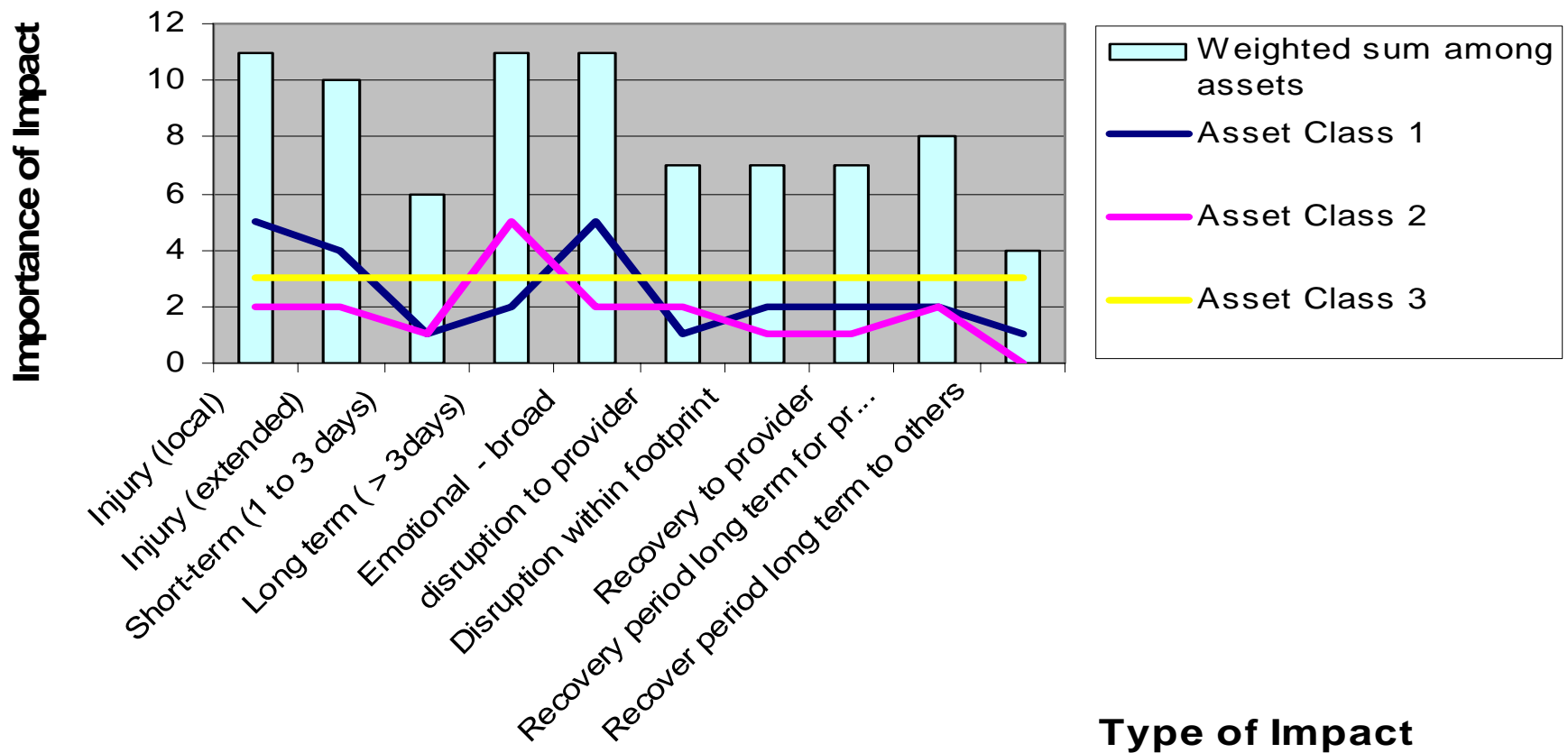
# Relative Risk Graph

## Relative Reduction In Risk As A Funtion Of Cost



for illustrative purposes only

# What can be Real?







# Risk Conclusion

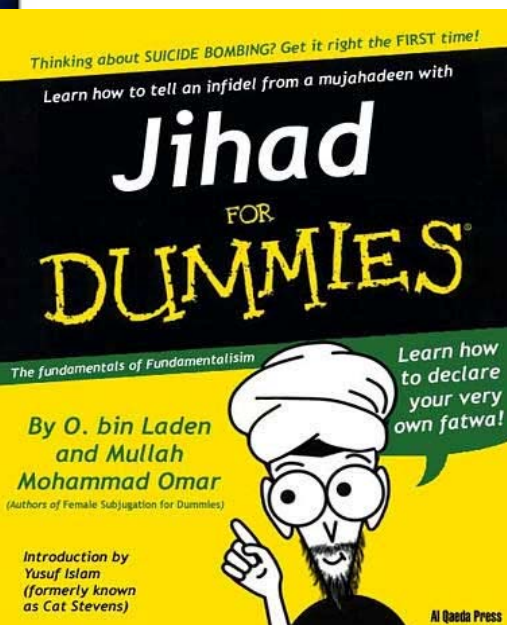
**We are lucky**



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# Value Conclusion

ROI not worth the effort



# Fear Driven Conclusion

**The misuse of resources on phantom fears makes us even more vulnerable.**



# YOU CAN'T PROTECT AGAINST EVERYTHING



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