



# Surety International

## Critical Infrastructure Security Risk Management

*The challenges of managing and controlling infrastructure security have experienced exponential change in the previous ten years. Globalised crime, international terrorism, national challenges and a growing sophistication in domestic crime have placed an ever-increasing tension on security resources. The challenge for the future then is not so much how to win more resources from governments or corporations, but rather, using the excellent personnel we already have, how do we maximize their potential?*

*This 4-day program incorporates an holistic approach to the application of security resources and infrastructure to potential threats and challenges. A modularised program, it takes the participant through a discussion concerning the criticalities and vulnerabilities of their current structure, an in-depth analysis of risk using the proven US Department of Defence CARVER tool and associated assessments, and finally, looks at specific program management concerns to implement changes to optimize resources.*

### Course Design

Surety International's Critical Infrastructure Security Risk Management Course is designed and developed by security experts with direct operational field experience. The course is comprised of informative presentations supported by discussion as well as full group, small group and individual work sessions to complement the presentation material. The basic format of the course is structured so participants will:

- Learn a process through presentation and discussion.
- Practice using the tools on case study.
- Get constructive feedback.
- Apply the process management process to actual job projects (the "war-game").

Participants are encouraged to identify in advance one or more current or upcoming job projects that can be considered during workshop sessions. This will enable participants to apply the methodology to a project that they can readily identify with which will enable greater confidence for the participants when they return to the workplace.

### The CARVER Approach

Used by the US military forces to analyse strategic and tactical level operations, as well as planning for all contingencies, the CARVER Method also has broad applicability in civilian security and critical infrastructure protection as a risk management tool for identifying facilities and assets that may be targeted by malevolent parties. The CARVER acronym is:

- **Criticality** - how an attack or incident will impair operations
- **Accessibility** - ease of gaining access
- **Recuperability** - ability to regain value through redundancy or repair
- **Vulnerability** - susceptibility of target
- **Effect** - objective of attack or incident and indirect consequences
- **Recognisability** - ability to locate and identify as a target.

The premise is for an independent party to utilize the CARVER Method is to think outside the paradigm of the internal security system - how would someone without your knowledge visualize, identify and threaten your critical infrastructure?

The end point of the CARVER approach is a vulnerability matrix that has a score for each section against each subsystem and process. This enables internal security resources to see where they need to focus attention and thus direct their resources.

### Intended Audience

The organisation as a whole benefits from improved understanding of resource optimisation. This course is designed therefore for teams or individuals with varying exposure to risk and its associated concepts, and thus the program can be tailored to specific needs. Thus the course is ideally suited for

- Mid to senior executives with responsibility for critical infrastructure.
- Mid to senior security officers.
- Government personnel responsible for critical infrastructure policing.
- Experienced government managers who have a requirement to interface with policing and security programs.



***Inclusiveness***

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## Syllabus

This course will cover;

- **Introduction**
  - Identifying Criticalities in Infrastructure Security
  - Risk as a Management Tool
- **Critical Node Evaluation**
  - Defining Infrastructure
  - Establishing Work flows
- **Risk Based Approaches to the Challenges of Security**
  - Module 1—Overview of the CARVER Methodology
    - CARVER Definition
    - Establishing Parameters
    - Assembling Experts
    - Detailing the System/Project under Evaluation
    - Assigning Scores
    - Understanding Attributes and Scales
    - Calculating Values
  - Module 2—Assets
    - Prioritising assets
    - Threats
    - Identifying the threat
    - Types
    - Prioritisation of threats
    - Consequence management
    - Vulnerability
    - Identification
    - The Security Survey
    - Using CARVER
    - Building Vulnerability Matrices
    - Analysing Risk
  - Module 3—The Risk Register
    - Compiling a Risk Matrix
    - Assessing resources
    - Resource Efficiency in the Policing Environment
    - Assigning Resources
    - Budgeting for Future Force Structure
    - Continual reassessment
  - Module 4—Addressing the Threat
    - Security Planning
    - Protection Plans
    - Design & Operations
  - Module 5—Critical Incident Response Planning
    - Access Control
    - Layered Defence
    - Asset Marking
    - Site Planning
  - Module 6—Business Continuity Planning
    - Principles and Purpose
    - Disaster Recovery
    - Planning
    - Implementation

## Flexible Delivery

In addition to promulgated course locations and schedules, Surety International offers the flexibility to present the course at the client's preferred location. Surety International can conduct the course at a range of venues both international and domestic, private or government.



*Integrity, Intelligence, Inclusiveness*

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