Engaging Stakeholders to Strengthen Homeland Security: An Opportunity in the Buildings Sector*

Gordon R. Thompson
Research Professor

January 2005

* This discussion paper developed from a roundtable discussion organized by ARUP Risk Consulting that took place on September 21, 2004 at PACE University, New York City, where participants discussed issues on risk and security issues for New York City buildings.

DOCUMENT REPRODUCTION
This document is a discussion paper of the Center for Risk and Security (CRS), The George Perkins Marsh Institute, Clark University. CRS Discussion Papers are works in progress and views expressed in this paper are those of the author. CRS allows reproduction of this paper for personal and educational purposes. Any other reproduction of this paper is not permitted without written permission from CRS or its author.

CONTACT INFORMATION
Primary:
Gordon R. Thompson
Center for Risk and Security
The George Perkins Marsh Institute
Clark University
Phone: (617) 491-5177
Email: gothompson@clarku.edu

Center:
Center for Risk and Security
The George Perkins Marsh Institute
Clark University
950 Main Street
Worcester, MA 01610
Phone: (508) 751-4622
Fax: (508) 751-4600
Email: crs@clarku.edu

SUGGESTED CITATION

ABOUT THE AUTHOR
Gordon R. Thompson, Phil., is a research professor for the Center for Risk and Security and executive director of the Institute for Resource and Security Studies, Cambridge, Massachusetts, an independent organization that he founded in 1984. He was educated in Australia and the UK, in engineering and science, obtaining his doctorate from Oxford University in 1973. Over the past three decades he has acquired wide experience with natural resource and international security issues. One of his major interests has been the environmental and security impacts of nuclear technologies. Dr. Thompson has coordinated multidisciplinary teams, organized international conferences and provided expert testimony in a variety of contexts.
ABSTRACT

This paper describes an opportunity for stakeholders in the buildings sector to strengthen homeland security while also serving their own direct interests. The paper was developed from a roundtable discussion organized by ARUP Risk Consulting that took place on September 21, 2004, at PACE University, New York City, where participants discussed risk and security issues for New York City buildings. The opportunity for stakeholder engagement is to cooperatively develop an archive of information on threats, security options, and related issues that affect decision making in the buildings sector.
"The transportation, energy, information, financial, chemical, food, and logistical networks that underpin US economic power and the American way of life offer the United States' enemies a rich menu of irresistible targets. And most of these remain virtually unprotected. It does not have to be this way."

1. Introduction

This paper describes an opportunity for stakeholders in the buildings sector to strengthen homeland security while also serving their own direct interests. The paper is being distributed initially to stakeholders in New York City (NYC), but it is relevant nationally.

Stephen Flynn and others have pointed out that the United States lacks a balanced strategy of security. Attention and resources are focused on offensive actions abroad that may create more enemies than they eliminate. The resources devoted to homeland security remain small by comparison. More importantly, the creative energies of Americans have not yet been harnessed in a broad-based effort to protect our society. Such an effort could greatly enhance security at potentially modest cost. By preparing to resist blows and to recover quickly when struck, we could rob potential attackers of much of their incentive to strike us, limit damage from attacks that might occur, and preserve the freedoms that are our ultimate source of strength.

The green-buildings movement has shown the power of stakeholder engagement. Diverse private- and public-sector stakeholders have put their energies into this cooperative movement, benefiting themselves and the nation. A similar cooperative effort to strengthen homeland security could be equally beneficial, and the buildings sector would be a natural arena in which the effort could begin. An appropriate opportunity is described here.

2. Security options in the buildings sector

Many options are now available for improving the security of buildings, thereby reducing the risk of attack. New options will undoubtedly be identified. Most options can be categorized into two broad classes. One class consists of options that seek to protect buildings and their occupants against attacks involving factors such as blast, fire, impact, armed intruders, and contamination by radioactive, chemically hazardous or biologically hazardous material. The second class consists of options for post-attack response and recovery, with the objective of limiting the short- and long-term damage from an attack.

---

1 Relevant stakeholders include: (i) building owners, managers, users and brokers; (ii) financial and insurance firms; (iii) design, architectural and engineering firms; (iv) contractors and builders; (v) professional societies; (vi) equipment vendors; (vii) various agencies of federal, state and local government; and (viii) public-interest groups.
2 The US Green Building Council (www.usgbc.org) has over 4,000 diverse member organizations.
Although many security-enhancing options are available, their implementation is too often inhibited by difficulties in decision-making. Responsible officials must balance conflicting demands, but often lack the technical guidance or societal consensus that can help them to achieve that balance.

3. Issues affecting decision-making on building security

When decision-makers consider the implementation of measures that seek to reduce security risks in buildings, they face issues such as:

- **Estimating current risks**
  In the context of building security, the concept of risk encompasses the probabilities and consequences of potential attacks. Both aspects of risk can be highly uncertain.

- **Objectives of risk reduction**
  Every building cannot be turned into a fortress. The objective must be to reduce the risk of attack to an "acceptable" level at a "reasonable" cost.

- **Secrecy, deterrence and deception**
  Some information about risks and options for risk reduction is not appropriate for general dissemination. Yet, excessive secrecy will weaken our society. Moreover, deterrence of attack requires that the existence of risk-reduction measures is known to potential attackers. There can also be a role for deception (e.g., camouflaging a key potential target) but there are associated risks (e.g., emergency personnel are unaware of the true nature of a camouflaged target).

- **Regulation, cooperation and competition**
  Agencies such as the NYC Department of Buildings are working on rules to protect buildings against attack. There is an important role for this type of regulation, but cooperation among stakeholders is also needed. One expression of cooperation could be agreement on a set of voluntary security standards, perhaps analogous to the LEED ratings for green buildings. Competition and rewards for innovation are also needed, and could lead to better and cheaper measures for risk reduction. Overall, we need a balance of creative tension among regulation, cooperation and competition.

- **Multiple requirements**
  Buildings must satisfy functional, economic and aesthetic requirements, together with building and zoning regulations. There is a growing trend to add green requirements to this list. The further addition of security requirements poses new challenges in design and decision-making. We must seek synergistic options that can satisfy multiple requirements.

3 The Leadership in Energy and Environmental Design (LEED) rating system is a voluntary national standard developed by the US Green Building Council.
4. An opportunity for stakeholder engagement

Development of cooperation among stakeholders requires time and practice. The process can begin by focusing on a discrete task that meets a current need. An appropriate task is the development of an archive of information on risk and security in buildings.

There is an unmet need for this type of information. Evolution of practices and standards for building security will proceed more efficiently if accompanied by the systematic collection and compilation of information on subjects including: (i) the threat environment and its trends; (ii) potential consequences of attacks; (iii) the effectiveness and costs of risk-reduction measures; (iv) the performance of policy instruments; and (v) relevant scientific or technological developments. This information could be contained in multiple databases, but would be most useful if there is a high degree of standardization across the databases. The archive of information would subsume, but not be limited to, a catalogue of "best practices". The bulk of the information should be in the public domain.

Developing an information archive would provide an opportunity for stakeholders to serve their own interests and those of the nation. This task would provide a practical test of the ability of stakeholders to cooperate. Participating stakeholders would be obliged to grapple with issues of secrecy, establishing precedents that could be useful in other contexts. As the information archive took shape, stakeholders could undertake additional tasks that they deem important, perhaps including the development of voluntary security standards for buildings.

To develop an information archive, stakeholders would establish a committee and a temporary secretariat, with a budget to support the secretariat, consultants, and committee expenses. The committee would be composed of representatives of diverse private- and public-sector stakeholders. Funding could be provided from the private and public sectors, in part from participating stakeholders.

5. Next steps

Clark University's Center for Risk and Security is willing to work with stakeholders to capture the opportunity described above. Parties interested in pursuing such an initiative are welcome to contact Dr. Gordon Thompson by email (gothompson@clarku.edu) or phone (617-491-5177).