Chapter 31
Public-Private Partnerships in Support of Critical Infrastructure and Key Resources

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ABSTRACT

In the absence of unlimited resources, governments typically face significant challenges in the process of allocating resources to optimize the benefits to the majority of the members of the society. Government officials look for new and creative ways to address the existing and emerging social needs. It is virtually impossible to identify universal solutions, and for that reason, it is essential to understand the implications as well as the risks associated with the use of new governance methods. This chapter describes emerging challenges in the protection of critical government assets as a result of natural and emerging man-made threats and describes the benefits and limitations derived from the use of Public-Private Partnerships (PPP) to proactively plan for the protection of those assets the government considers critical.

BACKGROUND

The government decision-making process consists of a balance between those areas that are characterized by well-defined social needs such as transportation, health care and education, and those areas in which the government plays an adaptive-adjusting role. It is in the latter that we find the concerns and most of the initiatives related to emergency management and disaster recovery. For over three decades, the scope of the United States emergency management initiatives has been growing in order to address emerging threats and conditions by increasing its ability to manage those circumstances on a large scale. A product resulting from that strategy was the National Response System (NRS) based on the National Response

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Plan (NRP) and the National Incident Management System (NIMS), which clearly demonstrated that it needed strengthening as it failed during the response to Hurricane Katrina (Harrald, 2006).

Governments must ensure citizens that they are efficiently managing public resources to guarantee their safety under extreme events or catastrophic incidents. The government top priorities are to protect lives, property, critical infrastructure and to maintain the national security (Department of Homeland Security "Catastrophic Incident Annex", 2008). The National Response Framework (NRF) defines a catastrophic event in as "any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions" and their impacts, including limitations in government response and government operations, which could be present for prolonged periods of time. The impacts of these events are not limited to citizens or government organizations. Since 9/11, the long-term economic and social impacts of "extreme events" on the private sector have been the object of an incredible amount of research.

The insured property losses directly suffered during the September 11, 2001 attacks against the WTC are greater than the combined insured losses resulting from Hurricanes Hugo and Andrew and the Loma Prieta and Northridge earthquakes (Murphy, 2001). The two World Trade Center towers alone housed 435 companies employing 40,000 people. Including the WTC and surrounding area, the attacks displaced over 45,000 workers in the financial industry. An estimate of 108,500 jobs was lost as a direct consequence of the attacks and 13.4 million square feet of office space were destroyed. In October 2001, 3,500 jobs were lost in the hotel industry and Wall Street lost 160 million dollars in commissions. Individual companies were severely impacted: Merrill Lynch had 9,000 workers relocated (Hagg, 2001); Morgan Stanley Dean Witter Co. had 3,700 employees displaced from the WTC (McPhee & O'Shaughnessy, 2001); Marriott lost two hotels in the immediate vicinity of the WTC and saw its occupancy rate plunge to 29% nationwide from an average of 70% before the attacks (Brown, 2001); the aviation industry's business decreased by more than 25% (Barnett, 2001). The attacks also had a significant effect on the financial markets. After closing at 9,605.51 on September 10, the Dow Jones Industrial Average (DJIA) reflected a low of 8,755,46 when the markets reopened on September 17 (McIntyre, 2009).

Companies were most affected by the catastrophic loss of employees and the knowledge and skills that they possessed, i.e. assets critical to the businesses survival and continued operations. In the WTC, Cantor Fitzgerald lost 733 of its 1,000 employees, AON Corp lost 200 of its 1100 employees, and Marsh and McLennan lost 331 employees. Small businesses incurred even higher proportional losses: Fred Alger Management lost 36 of its 55 employees; Carr Futures lost 70 out of 141 employees; (Ballman, 2001). Now, several years after 9/11, this research continued to be relevant to these real-world problems, even without the current economic crisis. For example, as pointed out in the 2003 Research Report of The Conference Board, "Corporate Security Management – Organization and Spending since 9/11, (Cavanagh & Whiting, 2003)" eighty percent of America's critical infrastructure is managed by the private sector. Critical infrastructure includes a variety of assets (physical and cyber-based systems) required for an economy or society to operate, e.g. telecommunication, financial services, security services, electricity generation and water supplies. It is commonly believed that there are many who seek to harm and would exploit vulnerabilities in the critical infrastructure, particularly those in facilities required for the economic activity. In fact, a sizeable portion of the large publicly held firms directly and indirectly impacted by the September 11, 2001, World Trade Center (WTC) attacks were in the financial services industry.