



Highlights of RAND Research on Terrorism and Homeland Security

For more information, contact Laura Selway, Legislative Analyst, at (703) 413-1100 x5423 or lselway@rand.org.

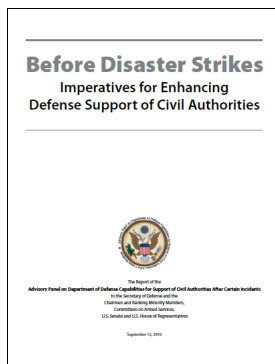
For more than 30 years, RAND has been a world leader in terrorism research and analysis. Research in the RAND Homeland Security and Defense Center supports numerous government agencies at the federal, state, and local levels, and entities in the private sector. Projects in this program cover a wide range of topics, including national preparedness, emergency response and management, critical infrastructure protection, cyber security, terrorism risk management and the economics of security, border security, enhanced capabilities for responders, threat assessments, domestic intelligence, and government performance.

Measuring Illegal Border Crossing Between Ports of Entry

An Assessment of Four Promising Methods

Andrew R. Morral, Henry H. Willis, and Peter Brownell, 2011

The U.S. Department of Homeland Security (DHS) has lead responsibility for securing U.S. land, air, and maritime borders. To evaluate its effectiveness in this role, measures of the total flow of illegal crossings are needed. This report evaluates four novel methods for developing such a measure.



Before Disaster Strikes

Imperatives for Enhancing Defense Support of Civil Authorities

Advisory Panel on Department of Defense Capabilities for Support of Civil Authorities After Certain Incidents, 2010

In 2009–2010, RAND supported a congressionally mandated panel of retired senior U.S. military officers, former members of Congress, National Guard generals, and academics with expertise in responding to domestic disasters. The panel reviewed and made recommendations on how defense officials can better support the nation's response to a major disaster on U.S. soil.

Influences on the Adoption of Multifactor Authentication

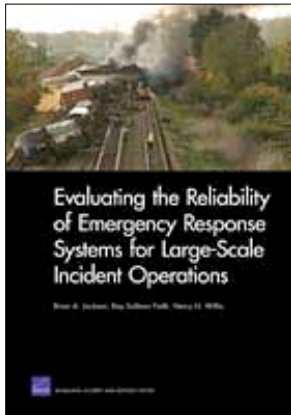
Martin C. Libicki, Edward Balkovich, Brian A. Jackson, Rena Rudavsky, and Katharine Watkins Webb, 2011

Passwords are proving less and less capable of protecting computer systems from abuse. Multifactor authentication (MFA)—which combines something you know (e.g., a PIN), something you have (e.g., a token), and/or something you are (e.g., a fingerprint)—is increasingly required. This report investigates why organizations choose to adopt or not adopt MFA—and where they choose to use it.

Measuring the Effectiveness of Border Security Between Ports-of-Entry

Henry H. Willis, Joel B. Predd, Paul K. Davis, and Wayne P. Brown, 2010

Strategic planning is necessary if the U.S. Department of Homeland Security is to carry out its border-security missions effectively and efficiently. DHS leadership must define concrete and sensible objectives and measures of success. This report offers research and recommendations on ways to measure the overall efforts of the national border-security enterprise between ports of entry.



Evaluating the Reliability of Emergency Response Systems for Large-Scale Incident Operations

Brian A. Jackson, Kay Sullivan Faith, and Henry H. Willis, 2010

The ability to measure emergency preparedness is critical for policy analysis in homeland security. Yet it remains difficult to know how prepared a response system is to deal with large-scale incidents, whether it be a natural disaster, terrorist attack, or industrial or transportation accident. This research draws on the fields of systems analysis and engineering to apply the concept of system reliability to the evaluation of emergency response systems.

Security, At What Cost?

Quantifying People's Trade-Offs Across Liberty, Privacy and Security

Neil Robinson, Dimitris Potoglou, Chong Woo Kim, Peter Burge, and Richard Warnes, 2010

To help policymakers understand the real privacy, liberty, and security trade-offs individuals are willing to make, RAND examined three real-life case studies where these factors come into play: applying for a passport, traveling on the national rail network, and attending a major public event.

Understanding the Role of Deterrence in Counterterrorism Security

Andrew R. Morral and Brian A. Jackson, 2009

This study develops a framework for understanding how counterterrorism security systems may deter or merely displace attacks, and how to establish the relative deterrence value of alternative security systems or security investments. Because deterrence may be the most important effect of some counterterrorism security programs, this framework may be useful to security policymakers who are trying to optimize the security benefits they can achieve with limited resources.



The Role of Nongovernmental Organizations in Long-Term Human Recovery After Disaster

Reflections from Louisiana Four Years After Hurricane Katrina

Anita Chandra and Joie Acosta, 2009

Volunteers and nongovernmental organizations (NGOs) have been instrumental in supporting community efforts to recover and rebuild from the devastation in the Gulf States region. Here, RAND analysts review ongoing challenges facing NGOs seeking appropriate recovery models and financing, NGO–government coordination, and processes to formalize NGO roles and responsibilities.

Is It Time to Rethink U.S. Entry and Exit Processes?

C. Richard Neu, 2009

This paper outlines a number of questions regarding current entry and exit policies and procedures, the answers to which may lead to helpful modifications. It also looks at questions surrounding the issue of whether pursuing current objectives for entry and exit processing represents the best use of DHS budgetary and managerial resources.

Understanding Why Terrorist Operations Succeed or Fail

Brian A. Jackson and David R. Frelinger, 2009

Understanding why terrorist attacks succeed and fail is important for homeland security and counterterrorism planning. Delving into the literature on the topic, the authors contend that the past success or failure of a terrorist operation can be best understood by thinking about the match or mismatch between three key sets of characteristics: (1) terrorist group capabilities and resources, (2) the requirements of the operation it attempted or is planning to attempt, and (3) the relevance and reliability of security countermeasures.

Emerging Threats and Security Planning

How Should We Decide What Hypothetical Threats to Worry About?

Brian A. Jackson and David R. Frelinger, 2009

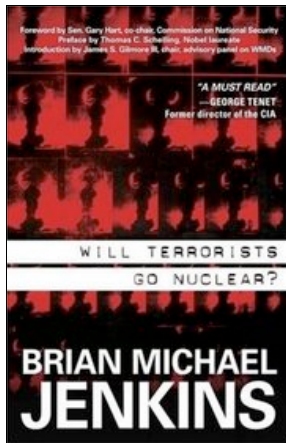
Concerns about how terrorists might attack in the future are central to the design of security efforts to protect both individual targets and the nation overall. In thinking about emerging threats, security planners are confronted by many possible future scenarios coming from a range of sources, including terrorists themselves and red-team brainstorming efforts to explore ways adversaries might attack in the future.

A Strategic Planning Approach

Defining Alternative Counterterrorism Strategies as an Illustration

Lynn E. Davis and Melanie W. Sisson, 2009

While the United States government has historically undertaken strategic reviews and produced numerous strategy documents, these have provided only very general directions for U.S. policymakers. This paper defines an approach to strategic planning and illustrates its application using counterterrorism as an example.



Will Terrorists Go Nuclear?

Brian Michael Jenkins, 2008

According to a British intelligence report leaked to the press in 2007, al Qaeda operatives are planning a large-scale attack “on par with Hiroshima and Nagasaki.” But just how likely is such an attack?

The Maritime Dimension of International Security

Terrorism, Piracy, and Challenges for the United States

Peter Chalk, 2008

This study examines the nature of piracy and maritime terrorism to assess their overall relevance to U.S. security. The United States has taken limited steps to enhance maritime security but broader measures are needed to meet current and future threats.

The Problem of Measuring Emergency Preparedness

The Need for Assessing “Response Reliability” as Part of Homeland Security Planning

Brian A. Jackson, 2008

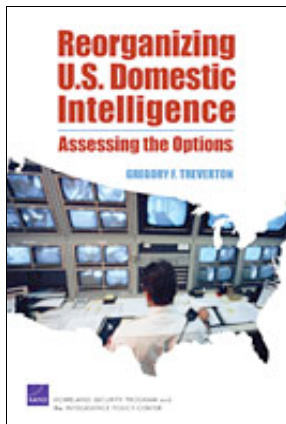
This paper frames a broad set of questions about how preparedness can be meaningfully measured and lays out some of the ingredients needed to answer them. To simplify the discussion, it focuses on response activities—the near-term actions taken by responder organizations when a disaster or terrorist incident is occurring or in its immediate aftermath that are intended to limit its consequences.

Marrying Prevention and Resiliency

Balancing Approaches to an Uncertain Terrorist Threat

Brian A. Jackson, 2008

The uncertain nature of the terrorist threat is a fundamental challenge in the design of counterterrorism policy. To deal with this uncertainty, the author recommends a capabilities-based, portfolio approach to terrorism prevention planning, drawing examples from aviation security policy.



Reorganizing U.S. Domestic Intelligence

Assessing the Options

Gregory F. Treverton, 2008

Congress directed the Department of Homeland Security (DHS), Office of Intelligence and Analysis, to perform “an independent study on the feasibility of creating a counterterrorism intelligence agency.” DHS asked the RAND Corporation to conduct this study, with the objective not of making a specific recommendation but rather of laying out the relevant considerations for, as well as the pros and cons of, creating such an agency.

Comparing Alternative U.S. Counterterrorism Strategies

Can Assumption-Based Planning Help Elevate the Debate?

Robert J. Lempert, Horacio R. Trujillo, David Aaron, James A. Dewar, Sandra H. Berry, and Steven W. Popper, 2008

The United States faces the challenge of countering the terrorism threat. Frequently, both expert decisionmakers and lay citizens have trouble assessing alternative strategies to address such issues because of the emotions and uncertainty involved. An assumption-based planning approach might help.



Securing America's Passenger-Rail Systems

Jeremy M. Wilson, Brian A. Jackson, Mel Eisman, Paul Steinberg, and K. Jack Riley, 2007

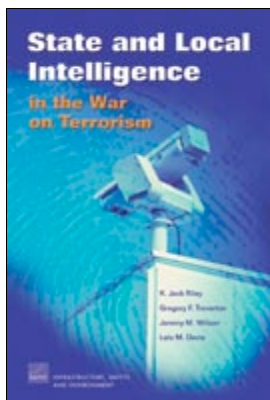
Recent attacks on passenger-rail systems around the world highlight the vulnerability of rail travel and the importance of rail security for passengers. The use of passenger rail and the frequency with which terrorists target it call for a commitment to analyzing and improving rail security in the United States.

Freedom and Information

Assessing Publicly Available Data Regarding U.S. Transportation Infrastructure Security

Eric Landree et al., 2007

How much data regarding U.S. anti- and counterterrorism systems, countermeasures, and defenses is publicly available and how easily could it be found by individuals seeking to harm U.S. domestic interests? The authors developed a framework to guide assessments of the availability of such information for planning attacks on U.S. air, rail, and sea, and applied the framework in an information-gathering exercise that used several attack scenarios.



State and Local Intelligence in the War on Terrorism

K. Jack Riley, Gregory F. Treverton, Jeremy M. Wilson, and Lois M. Davis, 2005

One aspect of combating terrorism that is often discussed but seldom examined in detail concerns the overlap of intelligence and law enforcement and the role of state and local law enforcement agencies as the ultimate “eyes and ears” in the war on terrorism. This report helps fill that gap by examining how state and local law enforcement agencies conducted and supported counterterrorism intelligence activities after 9/11.

Updated 05/10/11