The overall objective of the research reported here is to help the Army understand a new mission area called homeland security. To achieve this, the research had the following principal, more instrumental, objectives. They were to (1) characterize the range of threats that need to be considered; (2) provide a methodology for homeland security; (3) delineate Army responsibilities; (4) describe additional force protection requirements that might be necessary; (5) evaluate capabilities, provide options, and highlight risks; and (6) help the Army explain its role in homeland security. A summary of our principal findings with regard to each of these six objectives follows.

CHARACTERIZING THE RANGE OF HOMELAND SECURITY THREATS

A Taxonomy of Threats

Chapters Four through Seven characterize the range of threats facing the nation in the four homeland security task areas and describe the most relevant policy considerations for dealing with these threats. Although most of these threats seem relatively remote now, the Army and DoD should continue its planning and preparations for the following:

- The threat of weapons of mass destruction (WMD), including high explosives, either against the population; critical national infrastructure; elected and appointed leaders at the local, state, or federal level; or U.S. military forces.
The threat of specialty weapons, such as mortars, rocket-propelled grenades (RPGs), and man-portable air defense missiles, against the same targets.

The threat of cyber attacks on mission-critical systems aimed at disrupting the continuity of military operations.

The threat of WMD smuggling into the United States.

The threat of large-scale refugee flows that can create threats to national security.

The threat of the use of ballistic or cruise missiles against the nation.²

Our analysis suggests that most of these threats are relatively modest but possibly growing, as is the risk of surprise. With cyber attacks, it is particularly difficult to establish the degree of threat because of poor data and the somewhat alarmist nature of the debate.³ These “low but possibly growing” threats clearly justify planning and selective enhancement of local, state, federal, and military capabilities, but the Army needs to ensure that it is neither overrating the likelihood or consequence of future attacks nor beguiled by the most advanced threats at the expense of preparing for the most likely ones.

During the course of the study, the study team was asked to address the issue of threat campaigns directed at the continental United States (CONUS). Although such threat campaigns appear to be unlikely at present, they could pose important challenges if mounted by a committed future adversary. In particular, civilian and military leaders could face a dilemma if simultaneous attacks were made against military and civilian targets in the United States. Attacks on the military could disrupt mobilization for a major theater war (MTW), while simultaneous attacks on civilian targets could further tax mobilization capabilities, sapping those “dual-missioned” to warfighting and homeland security. Consequently, planning and capability development should consider the possibility of a sustained

²Because it already is the focus of substantial effort, national missile defense is not addressed in the present report.

³We generally agree with Betts’s (1998) argument that “the probability that some smaller number of WMD will be used is growing.”
campaign that includes multiple attacks separated in space and time, and assigning missions to forces in ways that minimize potential tension between warfighting and homeland security activities. In particular, the Army should perform analysis, planning, and training to field multiple simultaneous Response Task Forces (RTFs).

A Definition of Homeland Security

Because at present no agreed-on definition for homeland security exists, we now provide our working definition:

Homeland [security] consists of all military activities aimed at preparing for, protecting against, or managing the consequences of attacks on American soil, including the CONUS and U.S. territories and possessions. It includes all actions to safeguard the populace and its property, critical infrastructure, the government, and the military, its installations, and deploying forces.⁴

While other definitions are certainly possible, the merit of the definition just presented is that it is clear about homeland security’s focus on military activities (as distinct from the activities of civilian organizations), its geographic specificity, and the potential targets it seeks to protect.

The taxonomy of threats and definition of homeland security suggest five key military task areas:

• WMD domestic preparedness and civil support;
• continuity of government, i.e., operations to ensure or restore civil authority;
• border and coastal defense, including the prevention of WMD smuggling into the United States and management of large-scale refugee flows that can create threats to national security;

⁴We recognize that other departments and agencies have important roles to play in many areas related to homeland security. For example, and most notably, the FBI and FEMA play the key roles in crisis and consequence management. However, we reserve the phrase “homeland security” for the tasks performed by the armed services and the Department of Defense.
• continuity of military operations, including force protection—primarily for deploying units—protection of mission-critical facilities and systems, and protection of higher headquarters operations; and
• national missile defense (not considered in this report).

A METHODOLOGY FOR HOMELAND SECURITY

In Chapter Three, the report provides a method for assessing homeland security needs and options. The methodology is organized around a nomogram (Figure S.1) that enables planners to address, in turn, threat and risk assessment, performance levels and needed capabilities, design of cost-effective programs, and budgeting.

The nomogram was designed to address four key questions relating to homeland security:

• What magnitudes of events should the United States plan against for high-explosive, chemical, biological, radiological, nuclear and cyber threats? (Panel I, Threat Analysis)
• What levels of performance will the nation demand in the national (local, state, and federal) responses to these events? (Panel II, Performance Levels and Needed Capabilities)

• What are the most cost-effective options for providing the capabilities that will address these events at the desired performance levels? (Panel III, Programming)

• What resources will be made available, and will they be sufficient to provide the necessary capabilities? (Panel IV, Budgeting).

Answers to each of these questions are needed to ensure that proper resources will be devoted and the right capabilities will be developed for homeland security. The nomogram shows how decisions taken in each panel contribute to the larger analysis. A decision about the magnitude of the events to be planned against (m*) taken in Panel I is refined when a decision is taken in Panel II to provide a high level of capacity, which establishes performance criteria (c*) for assessing alternatives. The planning magnitude and performance criteria then set the stage in Panel III for designing cost-effective programs, and the total cost of these programs ($*) is traded off against other budgetary claimants in Panel IV. To be sure, behind each panel a great deal of policy discussion occurs, as well as analytic effort in the way of studies and analyses and modeling.

Our analyses suggest that despite a great deal of important work to redress shortfalls in local, state, and federal capabilities to address emerging threats to the homeland, the four key questions—one each associated with a panel of the nomogram—remain substantially unanswered. We believe that if national efforts are to be harmonized and made efficient, it is critical for the Army and others (the DoD, federal civilian agencies, and local and state entities) to collectively, and systematically, address these questions.

**DELINEATE ARMY RESPONSIBILITIES**

Chapters Four through Seven also delineate, in some detail, the Army responsibilities and capabilities in each of the four homeland security task areas that are the subject of this study.

In three of the task areas (domestic preparedness, continuity of government, and border and coastal defense), the Army is in a support-
In domestic preparedness, the Army appears to have the leading military role, based on its deep involvement in all aspects of the task area, including nonproliferation and counterproliferation activities; preparedness activities, such as training first responders; and support to consequence management. In continuity of government (COG) activities, the Army could have the leading military role, although it is difficult to say. In border and coastal defense, there are few indications that the Army would play the leading military role.

In the continuity of operations task area, the Army essentially is responsible for the protection of its own forces, mission-critical facilities and systems, and higher headquarters. Protection of other potential targets seems likely to be on an “as assigned” basis.

**General Versus Specialized Forces**

One of the questions posed at the outset of this study involves the role of general and more-specialized units in homeland security. Both play important roles, with the specialized units delivering unique capabilities (e.g., medical care; nuclear, biological, and chemical [NBC] identification and decontamination; explosive ordnance disposal). The general-purpose units provide “deep pockets” and personnel for mass response to provide such services as emergency first aid, food, shelter, communications, clothing, and security. As the Army responds to the mandates of the Nunn-Lugar-Domenici legislation and other directives, both its general and specialized units are undergoing additional training to assist in domestic preparedness. For many of the specialized units, this has been a welcome development, because it has meant more opportunities to train in their main competencies. For example, medical units benefit from practicing treating patients whether the victims are combatants or not. For the general-purpose units, the additional training not only pro-
vides necessary skills but also represents another demand on their training time. The competition for training time needed for both domestic preparedness and units’ other missions requires careful management of mission-essential task lists.

**Active-Duty and Reserve Component Forces**

The Reserve Component Employment Study 2005 notes that eight Army National Guard (ARNG) divisions are available for employment in warfighting and other missions and suggests that some of them might be assigned to homeland security. The study suggests that, in some specific cases, substituting reserve component for active-duty forces would be a cost-effective solution, although it is not at all clear in which other cases this also might be true.

As argued in this report, however, the current threat levels do not appear to justify the assignment of substantial forces to homeland security missions. It also argues that assignment of missions and allocation of additional forces to homeland security should be based on threat and risk assessments that provide a justification for a given level of effort, and cost-effectiveness and tradeoff analyses that establish that the forces being assigned to the mission are the most effective and efficient solution to the problem, in light of the total pool of local, state, federal, and military capabilities available.

Nevertheless, the probability that threats are increasing does suggest that additional Army preparations for homeland security are warranted.

In Chapter Nine we evaluate the adequacy of current Army doctrine, organizations, training, leadership, materiel, and soldier systems (DOTLMS) for the four homeland security task areas and suggest areas in which short-term improvements can be realized at modest cost.

Additionally, given the poor understanding of the cost-effectiveness of alternative homeland security units or organizations, we also recommend that the Army aggressively explore alternative future operational concepts for homeland security that may be more cost-effective than the current ones (e.g., WMD Civil Support Teams). A combination of experiments and exercises to generate lessons
learned, and efforts to design new future operational concepts that can be tested in these exercises and experiments clearly seems warranted.

To accomplish this, the Army might promote the use of joint warfighting experiments to test the likely responsiveness and capacity of the current DoD capabilities to perform homeland security missions. The Army can use the lessons from these experiments to refine its understanding of existing Army capabilities and limitations and thereby refine the WMD CST and other concepts.

The Army also should consider creating a Homeland Security Battle Lab to design and test alternative future Army operational concepts and organizations whose responsiveness and capacity is greater than the present ones. When experimentation and testing have confirmed the cost-effectiveness of these concepts, the Army can begin developing the doctrine, organizational templates, training, and equipment packages needed and, when the threat level warrants, determine the number of units that need to be fielded. Such an approach will improve the Army’s ability to provide the necessary capabilities as the threat changes.

**DESCRIBE ADDITIONAL FORCE PROTECTION REQUIREMENTS**

Although the threats to CONUS-based U.S. forces appear quite low at present, there is reason to remain concerned that adversaries may increasingly plan to use asymmetric attacks to target and disrupt the deployment of U.S. forces. Of particular concern would be a prolonged campaign of such attacks or attacks in numerous locations throughout the United States early in the deployment sequence. Either could severely tax the ability and willingness of commanders to continue the flow of forces to a warfighting theater in the face of threats to deploying forces. Such attacks obviously bring the war to the United States, causing a competition for resources and, essentially, forcing the United States to fight a two-front war.

Planning should focus on additional force protection for early deploying forces (e.g., the Ready Brigade of the 82d Airborne Division), their home stations, fort-to-port movements, and air and sea ports of embarkation. Of particular concern is the potential threat to
deploying airlifters and commercial aircraft, where hundreds of troops’ lives might be lost in a single incident. Capabilities for ensuring the security of fly-out zones should be assessed and, if necessary, augmented.

The Army also should begin planning now, while the threats are still somewhat remote, for ways to resolve a looming, future conundrum it may face. In the event of an asymmetric campaign of attacks on civilian and military targets in the CONUS during a wartime mobilization, not only could mobilization be disrupted, but fierce competition could arise for low-density units that have the dual mission of warfighting abroad and homeland security. Actions taken now can greatly reduce the possibility and consequences of such competition and better ensure force protection from fort to port and in-theater.

**EVALUATE CAPABILITIES, PROVIDE OPTIONS, HIGHLIGHT RISKS**

The Army needs to navigate a difficult course. On the one hand, it must avoid overrating the probability and imminence of the threats it faces and doing far too much at too high a cost. On the other hand, it needs to recognize that while the threats are reasonably low now, they are possibly growing, as is the possibility of surprise. While action is warranted, investments should be made strategically and selectively. The Army also needs to avoid taking actions that heighten public sensitivities about the role of the military in domestic law enforcement and in continuity of government.

**The Risk of Doing Too Much or Too Little**

The best way to negotiate the first two risks is to embrace an adaptive planning framework that bases investments both on an end-to-end analysis of threats and risks, including the potential costs of attacks on high-value targets, and an end-to-end, strategies-to-tasks analysis of what capabilities are needed and the most cost-effective programmatic alternatives for providing those capabilities.

This approach would advocate a focus on low-cost, high-payoff actions. These include detailed studies and analyses, modeling, and simulations to illuminate alternatives and refine doctrine and orga-
nizational structures. They also include the design and fielding of prototype units that, once proven to be cost-effective solutions for providing needed capabilities with the desired responsiveness and capacity, can serve as the pattern for fielding additional such units or can be scaled up to larger units providing more substantial capability.

Analysis suggests that although estimating the rate at which the threats might grow is exceedingly difficult, they probably will grow over time, and additional future investments in the homeland security mission accordingly may be necessary. Given that expectation, it would be best for the Army to focus now on refining its concepts, doctrine, organizations, and forces before making additional large-scale investments. For example, on further analysis and reflection, the Army might find that the best concept for its initial response may be a WMD Civil Support Team with a greater emphasis on bringing actual decontamination capabilities to bear than the current concept does. It also may find that the mobility requirements—and costs—associated with making Army contributions responsive enough to affect outcomes could be considerable.

**Risks Attendant in Public Concerns About Domestic Military Operations**

After a prolonged, hard-fought battle, the Army at the end of the 1990s is held in generally high regard by American civil society. The Army faces some risks to this standing, however, as it addresses the many sensitive issues engendered in homeland security. As Pamela Berkowsky, the Assistant to the Secretary of Defense for Civil Support, recently described the task area of WMD civil support:

> We do not call consequence management “Homeland Defense” but refer to it rather as “civil support.” This reflects the fundamental principle that DoD is not in the lead but is there to support the lead federal agency in the event of a domestic contingency. Likewise, we

---

5“WMD Civil Support Teams” previously were called “Rapid Assessment and Initial Detection (RAID)” teams but were recently renamed. See OASD (Public Affairs) (2000); Bacon (2000); and Berkowsky and Cragin (2000).
are sensitive to the concerns of civil libertarians and others regarding DoD’s possible domestic role. (Berkowsky and Cragin, 2000.)

In fact, the role that the Army and the other services play in most of the homeland security task areas is to provide support to civilian authorities, whether local, state, or federal. At the state level, for example, Army National Guard forces work for the governor. At the federal level, the Army works for the National Command Authority (NCA), and, in almost all situations other than civil disturbances when martial law is declared by the President, the Army supports federal departments and agencies.

Although such concerns have not often arisen in disaster responses (perhaps the closest analogy to WMD consequence management activities), using federal military forces in the United States to assist in the maintenance of law and order, for example, is strongly opposed by very vocal segments of the public and their elected representatives. Public concerns about posse comitatus and the military role in continuity of government are likely to remain important for the foreseeable future, insofar as they pose two sorts of risk: first, that such concerns, once activated, may interfere in the accomplishment of homeland security missions, and second, that once activated, they can erode public confidence in the Army as an institution.

While we believe that these risks are relatively modest, they need to be considered by the Army, and in any event they can be managed successfully through minor revisions to doctrine, training, and leadership programs and standing public affairs guidance for homeland security operations. Such revisions would help to sensitize future commanders to these larger issues, provide clear guidance on when and how posse comitatus and other laws do and do not apply, and provide the elements of broad public affairs guidance that emphasizes the Army’s supporting role to civil authority and, whenever it has been disrupted, whether at the local, state, or federal level, Army efforts to effect a speedy restoration of civil authority.

HELPING THE ARMY EXPLAIN ITS ROLE IN HOMELAND SECURITY

Throughout its history, the Army has been involved in homeland security. In other eras, the Army defended the nation’s coasts and
frontiers, for example, and whenever needed, it has supported civil-
ian authorities in responding to disasters, civil disturbances, and
other national emergencies. As the nation’s servant, the Army will
continue to provide for the nation’s defense, both at home and
abroad, and the reemergence of homeland security as a serious mis-
sion finds the Army well-prepared to provide many of the needed
capabilities.

Because the threats seem likely to grow and the missions may turn
out to be challenging, the Army will increasingly need to focus on
deterring or preventing, preparing for, and mitigating the conse-
quences of attacks on the nation, while seeking to ensure civil
authority or assist in its restoration at the earliest opportunity. This
dual focus—on improving its performance in the missions it is
assigned and on burnishing its image as a protector of the larger
constitutional framework—will help ensure the Army’s ability to
meet the challenges it faces.

The definition and taxonomy of threats described earlier also leads to
“bumper stickers” the Army can use to explain its role in the four
homeland security task areas that are the focus of this report (the
“bumper stickers” are in quotation marks):

- “Protecting Americans at Home” (WMD domestic preparedness
  and civil support);
- “Ensuring Constitutional Authority” (continuity of government);
- “Protecting Sovereignty” (border and coastal defense); and
- “Ensuring Military Capability” (continuity of military opera-
tions).

CONCLUSIONS

Homeland security is a complex, sprawling subject sure to become
an increasing topic of deliberation and debate both within govern-
ment and outside.

Our work suggests that the principal unresolved issues in homeland
security can be answered through DoD-wide deliberation over the
four core questions of homeland security:
For what types and magnitudes of events will the defense establishment plan?

What levels of performance will be demanded of DoD and local, state, and federal actors in their responses to these events?

What are the most cost-effective options—within DoD and across the entire “layer cake” of local, state, and federal actors—for providing the capabilities that will address these events at the desired performance levels?

What resources will be made available, will they be sufficient to provide the necessary capabilities, and what opportunity costs or risks will be incurred as a result?

To properly answer these questions and to develop this new mission area, a great deal of analytic, experimental, and planning work clearly needs to be done on each of these questions. Studies and analyses are needed to understand better the risks and cost implications of various “planning magnitudes”; what constitute realistic performance goals for preventing, managing, and responding to various types of threat; what the most cost-effective mix of military and federal, state, and local civilian capabilities to achieve desired performance levels is; and what the opportunity costs and levels of risk incurred with any given set of capabilities and budgets are.

These questions can be explored through the development and use of macro-level simulation, optimization, and other models, and the development of such models should be a priority for the Army and DoD. They could assist in understanding such issues as the optimal number and locations of stockpiles and mobility assets to ensure the desired level of responsiveness and the optimal allocation of resources among military, federal, state, and local entities to ensure the desired level of capacity to deter, prevent, or minimize the consequences of various threats.

It also will be important for the Army and DoD to engage in field experimentation and research and development (R&D). For example, before fielding large numbers of new units, it will be critical to experiment with alternative concepts and organizations—the current proliferation of WMD Civil Support Teams (formerly RAIDs), for example, offers the Army an excellent opportunity to learn lessons
and identify best practices that can be used for further refinement of response concepts and organizations. Continued efforts should be directed at identifying the most responsive, most capable, most cost-effective, and most robust contributions that can be made to the larger federal, state, and local response system, and these efforts should include consideration of needed stockpiles and mobility.

Another high priority for Army and DoD-wide R&D will be efforts that aim to reduce the unit costs of advanced capabilities, such as detection and assessment of chemical and biological agents, thereby allowing them to be inexpensively distributed to the local first responders who are likely to be the earliest to arrive at the scene.

As suggested above, Army leaders’ efforts would best be directed at ensuring that the capabilities developed by the Army for homeland security are grounded in a solid understanding of the threat (both the likelihood and potential magnitude of different types of attack), the cost-effectiveness of alternative concepts and programs, and the risks and opportunity costs associated with different levels and types of Army preparedness. In particular, although they seem unlikely to be faced with such a dilemma in the near future, Army leaders should begin considering the possibility that in a future mobilization for MTWs, active-duty or reserve component units that have dual missions of warfighting and homeland security could be faced with simultaneous taskings, posing a risk to the accomplishment of both the warfighting and the homeland security missions. To avoid such dilemmas, it will be necessary to organize homeland security capabilities in ways that minimize this possibility and to have a robust doctrine for ensuring that both missions receive the appropriate levels and types of forces.

Beyond stating the obvious point that homeland security is likely to grow in importance, it is difficult to say how the issue might evolve in the future. Nevertheless, the Army and DoD will be well-prepared to wrestle with the core issues if they embrace a long-term adaptive approach that ties resources to an understanding of both threat and cost-effectiveness and thereby efficiently provides the capabilities needed to prepare the nation for the emerging threats.