

# 1

## INTRODUCTION

The tragic events of September 11 took more than 3,000 lives, caused about \$100 billion in direct and indirect economic losses, plunged the United States and many allies and coalition partners into war, and produced substantial increases in security spending.<sup>1</sup> That date is already among the most important in the nation's history, and its policy implications will reverberate for many years, if not decades. In this book, we ask how vulnerable the United States is to further terrorist attacks and what can realistically be done to protect the nation without unduly impeding its economic prosperity or way of life.

The debate on these issues has advanced significantly since September 11. More important, thanks to the efforts of many Americans at home and abroad, the country has become considerably more secure against terrorist attack. Even so, significant vulnerabilities to terrorist attack remain.

To be sure, a large, free, and open country cannot make itself invulnerable to terrorism. Nonetheless, an effective homeland security strategy can substantially complicate the efforts of any terrorist group attempting to strike at the country, thereby making the most deadly and costly types of terrorist attack less likely

## 2 INTRODUCTION

to succeed. Hence good homeland security is far from hopeless, though efforts to date have not been sufficient.

The Bush administration's budget plan for fiscal year 2003, unveiled in February 2002, includes \$38 billion in proposed federal homeland security spending. This budget would build on accomplishments to date and make the country more secure. However, it has two significant shortcomings, perhaps reflecting the short period of time that the administration has had to develop its proposals, as well as the large number of disparate individuals, agencies, and members of Congress who effectively shared responsibility for its creation. First, the budget focuses more on preventing recurrences of attacks like those in 2001—through airliners or anthrax—than on reducing vulnerability in our society more comprehensively. It thus concentrates on the “last war” rather than the possible next one. Second, it emphasizes protecting targets within the United States against attacks rather than taking domestic steps to prevent those attacks in the first place (for example, by tracking potential terrorists and preventing access to dangerous materials). The difficulty with focusing primarily on protecting targets within the United States is that there is a large number of attractive targets and a wide array of methods of attack. Even if significant resources are dedicated to protect some sites, terrorists can shift their efforts toward less-protected ones (the problem of “displacement”). Preventive activities, on the other hand, tend to reduce the overall level of risk without having to know in advance what the targets are, while also complementing the site defenses. Key to any successful prevention against future attacks will be the effective use of information technology (for the collection, sharing, and deployment of key data), as well as substantial increases in staffing for the government agencies responsible for border enforcement and domestic antiterrorism activities.

Prevention is not a panacea; no matter how well we refine our strategies, we will not succeed in identifying all dangerous people and keeping all lethal materials away from terrorists. We must also work to minimize the consequences of an attack, including through prompt and effective response mechanisms. A successful strategy must therefore combine prevention, protection, and consequences management, as our proposals recommend.

The administration itself recognizes that its current plan is incomplete. Governor Tom Ridge and his Office of Homeland Security continue to work

on a strategic plan for protecting the United States that would tie together the now rather disjointed set of individual initiatives and would presumably include a number of new initiatives not yet contained in the \$38 billion budget request.

The purpose of this study is to provide a framework for thinking about how to address the country's vulnerabilities and to identify key priorities and approaches to eliminate or reduce those vulnerabilities. It also suggests an approach to identifying who should pay for which counterterrorism measures, and proposes ways the government could be more effectively organized to carry out its new set of critical national security tasks.

### **Broadening and Reorienting the Homeland Security Agenda**

The basic thrust of the Bush administration's plan is to prevent recurrences of tragedies similar to those of September 11, as well as the subsequent anthrax attacks, by improving airport and airline security, beginning to link the databases of various law enforcement and intelligence agencies so that information on suspects can be widely shared and promptly used, stockpiling vaccines and antibiotics against biological attack, researching better antidotes to biological attack, improving the public health infrastructure needed to detect biological attacks and treat their victims, better equipping and training local responders for any mass-casualty attack, and making modest improvements in border security. Although many specifics merit scrutiny, these basic priorities are sound, and the funding requested for addressing most of them appears roughly appropriate. But there remain significant unmet needs, and these specific initiatives must be brought within a more comprehensive strategy.

To broaden and reorient the homeland security agenda, we propose a four-tier strategic framework consisting of (1) perimeter security at the country's borders, (2) preventive activities within the country, (3) protection of domestic sites, and (4) consequence management after attacks.<sup>2</sup> The Bush administration's 2003 budget contains initiatives that are broadly similar to what we believe is required in the first and final categories but does not provide an appropriate plan for the other two: domestic prevention and protection. We develop a more systematic and comprehensive agenda in those areas.

#### 4 INTRODUCTION

By our estimates, even if the entire \$38 billion Bush homeland security budget were implemented, a further \$5 billion to \$10 billion a year in federal funds could be spent effectively beyond the Bush budget to adopt additional measures that promise considerable security benefits for a modest cost. (See chapter 8 and appendix B for a detailed description of the Bush homeland security budget.) Specifically, we recommend the following measures:

- Major improvements and expansions in the Coast Guard and Customs Service, well beyond those already suggested by the Bush administration.

- Substantial expansions in domestic law enforcement agencies (again, well beyond those proposed by the Bush administration) and in the linking together and modernization of their databases.

- Various measures for reducing the odds that biological agents could circulate through the air intake systems of major buildings and other large facilities.

- Changes in the nation's food safety programs.

- Additional measures for protecting buildings against conventional explosives and fires.

- Improved security measures for the nation's nuclear power plants, toxic chemical plants, and biological research facilities.

- A new approach to monitoring and protecting the nation's airspace.

- More background checks for drivers of trucks carrying hazardous materials and other related safety measures.

- Numerous specific protective measures for other types of public and private infrastructure.

For each initiative, we provide a very rough estimate of the likely costs. We also include a detailed analysis of who should pay for these various measures and how the federal government should be organized to ensure their effective implementation.

### **A Framework for Protecting the Homeland**

In theory, one could organize a homeland security strategy by trying to identify specific threats to the United States, with responses to each. This “threat-based” approach would attempt to identify the full range of potential terrorists and to discern their intentions and strategies. While such an analysis might prove a useful supplement to the approach we propose here,

the difficulties of identifying the full range of potential malefactors, and their ability to adjust their strategies and targets opportunistically (rather than pursue a consistent *modus operandi*), suggest that we will be unlikely to predict with high confidence when or where they will attack.

Hence our strategy focuses on preventing attacks that would pose the greatest harm to our national interests—as measured by the lives of citizens, our economy, the functioning of key institutions, and our way of life. Any homeland security strategy must be complemented by a vigorous policy to preempt terrorists abroad, by military, diplomatic, financial, law enforcement, and other means, but those efforts are outside the scope of this study. The most effective way to avoid attacks that would cause serious harm to our homeland would be to identify and thwart the perpetrators from reaching the United States, and from bringing with them the means of destruction, in the first place. That is why the first tier of our strategy focuses on securing our perimeter. This means keeping out dangerous people and dangerous objects—notably, weapons of mass destruction, threatening aircraft and cruise missiles, high explosives, antiaircraft missiles such as the Stinger, and certain other weapons—before attacks can be planned and launched. Because no perimeter strategy can ever be foolproof, and because some attacks may come from individuals within the United States using dangerous materials available domestically, the second tier of our strategy is domestic prevention—identifying would-be terrorists in the United States and securing dangerous materials so that they cannot be misappropriated by terrorists. Since both forms of prevention will inevitably be imperfect, the third task is protection of key potential targets. This is a particularly daunting policy challenge, since there is a virtually unlimited number of targets. We therefore need a framework to prioritize our effort at protection.

To implement this approach we have developed a rough rank ordering of attacks we wish to prevent or mitigate—based on key variables of national interest (number of casualties, extent of economic damage, harm to key institutions and sites of high symbolic significance). Although there are inevitably issues of comparability (is a modest loss of lives more serious than a major hit against our economy?), we believe it is possible to develop a rough “ordinal” ranking of vulnerabilities that can guide policymakers in prioritizing our goals and our expenditures.

## 6 INTRODUCTION

It is impossible to specify analytically how much risk we as a society should be prepared to run, and how much security is “enough”—that is a political decision, to be made by the political process. But this approach should lead to a cost-effective homeland security agenda, so that each additional dollar of spending is directed to achieving the greatest benefit in lives saved, costs averted, and so forth.

Tables 1-1 through 1-3 illustrate this general approach. Table 1-1 ranks attacks by the level of potential casualties. Table 1-2 shows the potential impact of different kinds of attacks on the economy. Table 1-3 gives a rough estimate of the key institutions and symbolic sites whose destruction would not only entail casualties and economic losses, but also have high intangible value. Some attacks will rank high on all three scales—the World Trade Center attack is a clear example. Others may largely figure in just one or another.

The specific areas of major American vulnerability could even change over time.<sup>3</sup> That is why a key component of any homeland security agenda should be to create a “red team” within the U.S. government that would

**Table 1-1. Possible Scale of Terrorist Attacks**

<i>Type of attack</i>	<i>Possible fatalities</i>	<i>Estimated likelihood</i>
Efficient biological attack (for example, clandestine wide dispersal of a contagious agent such as ebola, smallpox, or anthrax)	1,000,000	Extremely low
Atomic bomb detonated in major U.S. city	100,000	Very low
Successful attack on nuclear or toxic chemical plant	10,000	Very low
Simple, relatively inefficient biological or chemical attack in one skyscraper or stadium	1,000	Low
Conventional attack on a single train, airplane	250–500	Low
Suicide attack with explosives or firearms in a mall or crowded street	50–100	Modest

Source: Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction: Assessing the Risks* (U.S. Congress, 1993).

**Table 1-2. Economic Disruption as a Result of Terrorism**

<i>Nature of attack</i>	<i>Nature of economic disruption</i>	<i>Potential costs</i>
Weapons of mass destruction shipped via containers, mail	Extended shutdown in deliveries; physical destruction and lost production in contaminated area; massive loss of life; medical treatment for survivors	Up to \$1 trillion
Efficient release of biological agent through much of a major urban area	Disruption to economic activity in affected area; threat to confidence and economic operations in other areas; massive loss of life; medical expenses	\$750 billion
Widespread terror against key elements of public economy across nation (malls, restaurants, movie theaters, etc.)	Significant and sustained decline in economic activity in public spaces; associated drop in consumer confidence	\$250 billion
Attack on interstate natural gas pipelines in Southeast United States	Natural gas shortages in Northeast and Midwest; significant reduction in economic activity in Northeast; loss of life from direct attacks and from heat/cold; destruction of physical capital	\$150 billion
Large attacks that expose a finite and repairable vulnerability (like 9/11)	Substantial but temporary weakening of economy due to direct (loss of human life and physical capital) and indirect effects (decline in confidence and network failures)	\$100 billion
Cyberattack on computer systems regulating regional electric power, combined with physical attacks on transmission and distribution network	Regional electricity shortages that persist for a week; health risks from heat/cold; interruption of production schedules; destruction of physical capital	\$25 billion
Bombings or bomb scares	Effective shutting down of several major cities for a day	\$10 billion

Note: The attacks postulated in this table, and even their relative rankings, are illustrative and speculative. In addition to other economic costs, the estimates above assume an economic value for human life in the range proposed in Richard Layard and Stephen Glaister, *Cost-Benefit Analysis* (Cambridge University Press, 1994).

**Table 1-3. *Estimated Political Costs of Attacks against U.S. Icons, Assuming Few if Any Casualties***

<i>Type of target</i>	<i>Examples of specific targets</i>	<i>Hypothesized effects</i>
Core national structures	White House, Capitol, Supreme Court	Greater confidence for terrorists, less confidence for U.S. citizens, impression of government weakness at home and abroad, inability to protect core political institutions, enormous global publicity, greater U.S. resolve to act
Other key U.S. monuments, assets	Statue of Liberty, Washington Monument, Lincoln Memorial, Mount Rushmore, Liberty Bell	Similar to above but possibly fewer implications for image of government
Other important political structures	Pentagon, state capitols, State Department, Treasury building, FBI building, foreign embassies and consulates in the U.S.	Similar to first category but slightly less important, though hard to quantify
Other icons	Cape Canaveral, St. Louis Gate to West, Empire State Building, Sears Tower, Space Needle, presidential libraries, cathedrals, and so on	Limited impact on domestic and global impressions about U.S. and its ability to defend itself, moderate global publicity

identify vulnerabilities as they evolve and design mock attacks to exploit them. Many of its efforts would be classified, though some public debate would be needed to formulate budget allocations or other significant policy decisions to address the risks.<sup>4</sup>

One consequence of this strategy may be to displace the potential targets of terrorists from attacks with large consequences to those with lesser ones. On the margin, this is clearly preferable, but it also illustrates why prevention must be the highest priority (since it stops all attacks, large and small),

and why the list of vulnerabilities must be continuously reviewed, so that the displacement effect does not uncover heretofore unthought-of targets with large consequences.<sup>5</sup>

None of this is to deny that even a number of small attacks might have a broad impact on our way of life, creating fear disproportionate to the level of exposure. But since resources are finite, and there are costs associated with both protection and prevention (financial, civil liberties, and so on), we believe this approach is the soundest strategy and will substantially reduce the odds of extremely costly and harmful terrorist attacks.

Finally, since even a well-designed strategy of prevention and protection will not always be successful, the fourth task is to manage the consequences of any attacks that still may occur, or to reduce their toll and their indirect consequences.

As chapters 2–5 explain in more detail, our proposals would expand annual federal spending on homeland security to about \$45 billion, or some \$25 billion above the amount originally planned for 2002 and more than \$10 billion above final 2002 levels. (These costs include many homeland security expenditures within the Department of Defense but not efforts to defeat terrorism overseas, such as intelligence or military operations in Afghanistan, or missile defense.)<sup>6</sup> Up to another \$10 billion would be borne by the private sector. The federal government's resulting homeland security budget would represent an increase of between \$5 billion and \$10 billion above the Bush administration's proposed 2003 budget for homeland security. The total federal budget costs, while substantial, would represent no more than 0.5 percent of GDP, in contrast to military spending of more than 3 percent of GDP. To finance this expansion without causing a further deterioration in the nation's longer-term fiscal outlook, we support freezing at least part of the tax cuts passed as part of the Economic Growth and Tax Relief and Reconciliation Act of 2001 that have not yet taken effect.<sup>7</sup>

### **The Role of Government in Homeland Security**

Another critical issue is who should implement and pay for the various new security measures? For perimeter security, identification of terrorists within the United States, and consequence mitigation, it seems apparent that this

will largely be a government function, although the locus of government responsibility will vary. For protection of dangerous materials and targets, the answer is less obvious. In chapter 6 we argue that there is a role for government in protecting against terrorist attacks on private property within the United States, since such attacks often have societal and national security implications that transcend the immediate private damage they cause. But the government should not always foot the bill. In many private sector settings, the various users, providers, and owners of the property or activity should pay for at least some of the antiterrorism costs. In other words, those who benefit most directly from a given property or activity should pay to protect it as a general rule.

In most cases, government intervention should take the form of mandates on the private sector rather than through direct subsidies or tax incentives. Over the longer term, the most auspicious approach involves regulation coupled with requirements or incentives for terrorism insurance. The mandates should be set at relatively low levels at first, especially given the uncertainties involved and the high costs that could result, for example, from retrofitting existing buildings and other property to meet very high safety standards.

Furthermore, to reduce the costs involved and provide incentives for additional, cost-effective security measures, the government should offer an “EZ-pass” approach whenever possible. That is, individuals or firms willing to undergo additional security background checks or willing to undertake additional security measures should receive some benefit in exchange, for example, in the form of expedited clearance through Immigration or Customs or lower insurance premiums.

Within the public sector, the federal government should finance those steps that specifically and primarily address terrorist threats. But state and local governments should finance those antiterrorism measures that provide substantial benefits to their own jurisdictions (in addition to affecting their ability to prevent or address terrorist attacks). The larger the local benefit of a specific antiterrorism measure, the larger the local and state share of the costs should be. For example, the federal government should finance specialized antiterrorism training and equipment for police and fire departments but should not finance the hiring of additional police or firefighters.<sup>8</sup>

## Organizing the Homeland Security Effort

In chapter 7, we examine how to structure the government to address homeland security issues. Most proposals today seek to consolidate widely dispersed authorities and agencies into one or more new, central structures. Although some consolidation may make sense—particularly of agencies responsible for securing the nation's borders—centralization cannot be the main answer to this formidable challenge. The responsibility for preparing for, preventing, and, if necessary, responding to a terrorist incident is widely dispersed across the executive branch; it is also shared by state and local authorities. The private sector has a critical role to play as well. By its very nature, homeland security is a highly decentralized activity, with widely dispersed functions that simply cannot be brought under a single roof. What is needed instead is leadership, coordination, and mobilization of the responsible agencies and their leaders, at the federal, state, and local levels. That is precisely the task President Bush has handed Governor Ridge. Given the number of agencies, interests, and people involved, it is a task of truly mammoth proportions. But the job is doable, and past experiences in parallel coordinating efforts—for national security and economic policy—provide valuable lessons on how to go about the task.

Within such a coordinating context, some consolidation of functionally similar activities (such as dealing with border security, law enforcement, and Defense Department activities in support of civilian efforts) makes sense, as would enhancing Ridge's authority over budgetary matters and making his position subject to Senate confirmation. But on their own, the structural reforms championed by many critics of the current arrangement will be of little help and could well undercut Ridge's ability to influence the broad range of government activity, which he can never control directly in any event.

