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How Should America's Anti-Terrorism Budget Be Allocated? Findings from a National Survey of Attitudes of U.S. Residents about Terrorism

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This is the first of a series of papers describing the results of a national survey on public attitudes toward anti terrorist activity conducted by The Food Industry Center at the University of Minnesota. Other papers to follow will include how these spending allocations are related to public attitudes, preferred media communications, and other consumer characteristics.

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ABSTRACT

U.S. residents are very concerned about future terrorist attacks and they are willing to commit substantial sums to prevent further terrorist acts. Protecting against another 9/11 style incident is important, but U.S. residents are more concerned about protecting the food supply system and preventing release of chemical or biological agents in public areas. On average respondents would allocate 13.3 percent more to protect the food supply chain and 12.0 percent more to protect against release of a toxic chemical or biological agent than they would to protect against another terrorist attack using hijacked aircraft. Approximately \$5 billion is currently spent to protect civil aviation. The 2006 budget provided \$8.6 billion of fiscal authority for programs protecting against all types of catastrophic terrorist incidents, including protection against radiological or nuclear incidents, as well as protecting the food supply and preventing chemical or biological attacks. No one would argue that decisions on the size and internal allocation of the nation's homeland security budget should be made on the basis of a public opinion survey, but this survey indicates that Americans would likely support additional spending to defend the food system and protect against release of a chemical or biological agent. Working Paper 2006-01 The Food Industry Center University of Minnesota

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How Should America's Anti-Terrorism Budget Be Allocated? Findings from a National Survey of Attitudes of U.S. Residents about Terrorism

America's attitude toward terrorism changed forever on September 11, 2001. Dramatic visual images of the collapse of the twin towers and stark pictures documenting damage to the pentagon drove home a lasting message. From that day on Americans would live and work in a different geo-political environment.

For those directly affected the personal losses were catastrophic. The direct economic losses--the value of the lives. income, and business activity lost in the industries and communities directly affected by the attack--were also substantial.² But, even though most were spared from direct, personal losses everyone was seriously In the broadest sense, all affected. Americans were victims of the terrorist attack since each lost some of the sense of security and confidence in the future they once had. The attacks on the World Trade Center and Washington, D.C. made it vividly apparent we had moved into a new era. The impact was nationwide, extending from coast to coast and border to border.

Now, more than four years after al Qaida's attacks, Americans have factored the possibility of another terrorist attack into their everyday lives. Increased security in public buildings and airports, and in places visited every day is an accepted part of twenty-first century living. Americans recognize that another terrorist attack is likely and they are willing to pay to support efforts to combat terrorism. Non-defense homeland security spending by the federal government has more than doubled in the past three years. In fiscal 2006 it totaled \$55 billion, about 2 percent of all federal spending. In fiscal 2002, spending for homeland security was \$21 billion.

Some types of terrorism are of greater concern to the public than others, and the public believes that more should be spent to protect against those types of attacks. Protecting against terrorists once again hijacking an airplane and using it as a supersized suicide bomb continues to be a concern, but Americans think other types of terrorism both more likely and more important to defend against. Programs protecting against those threats should be emphasized and funding for those prevention programs should reflect their higher priority.

U.S. Residents Say Protecting the Food Supply Chain and Preventing Release of Chemical or Biological Agents in Public Areas Most Important

Protecting America's food supply from deliberate contamination and preventing the release of chemical or biological agents in crowded public areas are the nation's highest priority anti-terrorism activities according to results from a national survey of 4260 U.S. residents over the age of 16 conducted in the first week of August, 2005.³ The survey, funded by the National Center for Food Protection and Defense⁴,

² Economists at the New York Federal Reserve Bank estimate that the direct economic losses in the New York metropolitan area could have totaled as much as \$40 billion. Those losses were catastrophic for many affected individuals and firms. "Measuring the Effects of the September 11 Attack on New York City," Jason Bram, James Orr, and Carol Rapaport, *Economic Policy Review*, vol.8, no. 2, (November, 2002), 16pp.

³ The survey was conducted over the internet by TNS-NFO. Responses were weighted by TNS-NFO to reflect national population characteristics on age, race and ethnic origin, sex, region, and income.

⁴The National Center for Food Protection and Defense was established and funded by the

asked respondents how likely they believed different types of terrorist attacks to be. Respondents also were asked to rate how serious they believed such attacks would be to the nation and to them personally. The terrorist acts covered by the survey were another aircraft hijacking, an incident involving some other form of public transportation, destruction of a national monument, deliberate contamination of the food supply, disruption of the power grid, and release of a chemical or biological agent in a public area.⁵

To provide a further indication of the relative concern Americans attach to different types of terrorist attacks and to provide an estimate of how much U.S. residents are willing to pay to defend against different forms of terrorism, respondents also were asked how they believed anti-terrorist spending should be allocated among potential target types.

Ninety-Eight Percent of Adults Expect Further Terrorist Attacks during Their Lifetime

Nearly 98 percent of U.S. residents over age 16 believe there will be another terrorist attack during their lifetime.⁶ Trains or

subways are thought to be the most likely target for attack, with 96 percent indicating they expect an attack on that portion of the nation's transportation system during their lifetime. (Figure 1) Differences in the expectation of an attack were small, but statistically significant between all pairs of targets except for between the power grid and airplanes, food and the power grid, and food and national monuments.⁷

It is possible that public concern over terrorism, particularly incidents on trains and subways, was temporarily heightened by July's subway bombings in London. As a partial check on potential response bias caused by the London attacks the proportion of the population who believed there would be a terrorist attack on a target other than a subway or railway system was also computed. After excluding other public transportation targets, 96 percent of U.S. residents still expected at least one more terrorist attack in their lifetime, and most expect more than one.

Indeed, 55 percent expect that at least one of each type of incident included in the survey will occur during their lifetime. Nearly 86 percent believe that a chemical or biological agent will be released in their lifetime, and more than 75 percent expect attacks on the power grid, the food supply, and national monuments. Despite the high degree of public visibility given to making air travel secure from terrorism, 78 percent of the population over the age of 16 believes there will be another aircraft hijacking.

Most also believe further terrorist attacks will occur in the relatively near future, with 95 percent expecting at least one act of terrorism during the next four years. (Figure 2) Again, differences in the perceived

Department of Homeland Security in July, 2004. It is located at the University of Minnesota.

⁵ The actual questions are provided in an appendix. The order in which the potential terrorist acts were presented in the questionnaire was randomized with the exception of the "other transportation" category which always followed the questions on another attack using aircraft. It was thought that concerns over a possible "dirty bomb" attack would heavily dominate all other terrorist acts so no questions about how serious that type of act would be were included in the survey. There was also no attempt to elicit a response on spending to prevent a dirty bomb attack, although an open-ended "other" category was listed. Only 1.5 percent listed nuclear weapons in the other category.

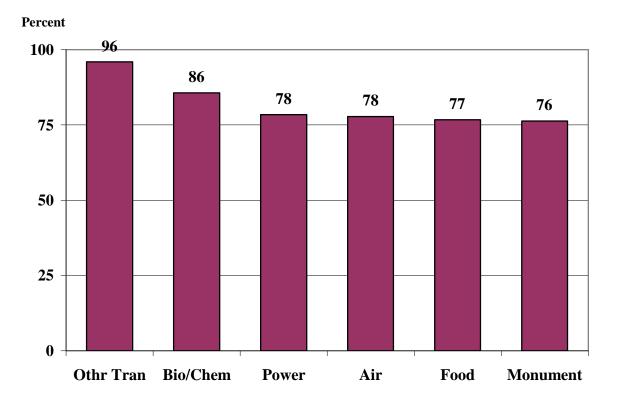
⁶ Standard errors for these estimates are less than 0.8

percent.

⁷ Statistical tests are conducted at the 95% confidence level.

probabilities of the different attacks are small, but the differences between pairs of terrorist acts were all statistically significant except for release of a chemical or biological agent in a public area and disruption of the power grid. When possible attacks on trains or subways are excluded, nearly 81 percent expected at least one terrorist act during the next four years. An attack on the food system was thought least likely, but still 44 percent expect such an act in the next four years.

Figure 1: Almost All U.S. Residents Expect Another Terrorist Event in their Lifetime



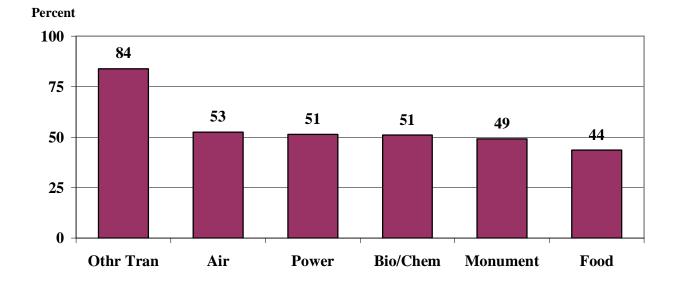


Figure 2: About One Half of U.S. Residents Expect a Serious Terrorist Act within Four Years

U.S. Residents Would Spend More to Protect the Food System than to Provide Aircraft Security

Despite their belief that other types of terrorist attacks are more likely in the near future, the implications of an attack on the food system were seen to be so serious that U.S. residents would allocate a greater percentage of anti-terrorism spending to protecting the food supply than to defending any other potential target among the choices offered.⁸ (Figure 2)

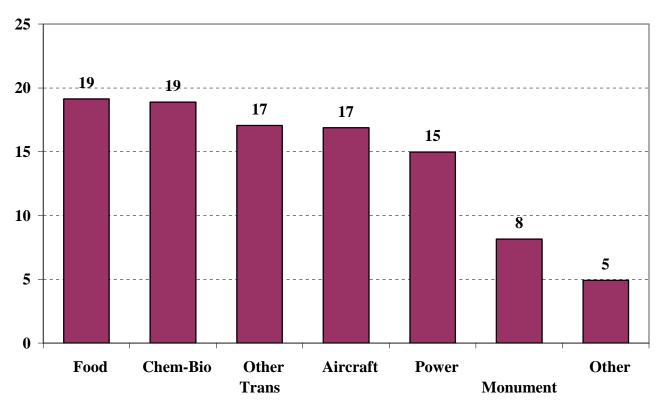
All allocations are significantly different from zero and the allocations to food and to chemical and biological attacks are significantly higher than the allocation to airlines. On average U.S. residents believe that more than 19 percent of the resources that should be spent to protect against terrorism should be spent to defend the food supply chain. Protecting against release of a chemical or biological agent in a public area is also seen as a high priority use of antiterrorist resources. U.S. residents believe that almost the same percentage should be spent for programs to prevent against such an act as to protect the food supply system.

This survey finds the public believes about 17 percent of the anti-terrorism budget should be spent to protect the subways and railways and just under 17 percent to protecting airline transportation. Survey results indicate 15 percent of the antiterrorism budget should be allocated to

⁸ The exact wording of the question was "For every \$100 that you think should be spent to protect the country from terrorism, how would you divide it across the following types of attacks? Enter a dollar amount for each. The amounts must sum up to 100." The choices given—another attack using a passenger aircraft, attack on other public transportation, destruction of a national monument, deliberate chemical of biological contamination of a common food product, disruption of the electrical power grid, release of a biological or chemical agent in a crowded public area, and other—were randomized with the exception that the passenger aircraft and other public

transportation alternatives were always paired and other was always the last option.

Figure 3: U.S. Residents Believe Protecting Food System and Protecting Against Chemical and Biological Attacks Should Receive Most Funding



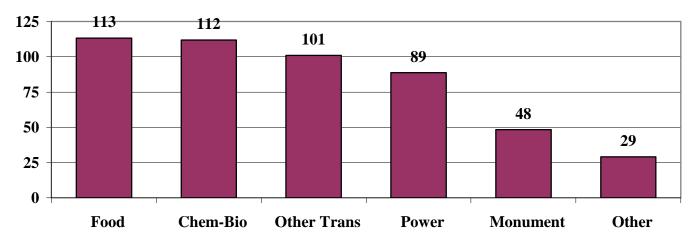
% of All Anti-Terrorism Spending

securing the power grid; 8 percent to preventing destruction or damage to a national monument; and 5 percent to other anti-terrorist activities.

The relative emphasis that U.S. residents believe should be given to protecting against different types of terrorist acts varied depending on demographic and economic characteristics. The ratio of the proportion of spending the public believes appropriate for protecting against a particular type of terrorism to the proportion of spending the public felt appropriate for securing civilian aviation was used as a measure of U.S. residents' relative level of concern about different types of terrorism. That ratio can also be used to assess public attitudes about where public and private sector resources devoted to anti-terrorist activity should be devoted.

When the average spending levels chosen by the public were expressed as percentages of the amount that was believed should be spent to secure the airways, U.S. residents allocated 13.3 percent more for protecting the food supply than for protecting airline travel. Preventing a chemical or biological attack was given 12 percent more, and protecting other transportation activities 1 percent more than preventing an aircraft hijacking.

Figure 4: Public Says Spend More to Protect Food Supply and to Defend Against Chemical/Biological Attack than to Secure Air Travel



Percent of Spending to Protect Air Travel

Differences in Demographic Characteristics Had Only a Small Effect on Opinions about Where Anti-terrorist Spending Should Be Directed

There was broad national agreement that protecting national monuments was not as important as protecting air traffic from No matter what their age, hijacking. education, or income Americans believe that protecting our national treasures should receive no more than one-half as much funding as that devoted to making air travel secure. Hispanics believed that an amount equal to roughly 50 percent of the resources devoted to protecting against another terrorist attack using aircraft should be devoted to protecting national monuments and icons. Non-Hispanic whites would allocate 48 percent as much; Blacks, only 42 percent as much.

There were also modest differences by geographic region. The largest differences

were between individuals living in the Mountain States who believed protecting monuments should receive 53 percent of the amount spent for aircraft protection and individuals in the South Atlantic States who on average would limit spending to protect national icons to 45 percent of the level of aircraft spending.

The public also would allocate fewer resources to protecting the nation's power grid from disruption by terrorists than to preventing air hijackings. On average U.S. residents believe about 89 percent as much should be spent to protect the power grid as should be spent on providing secure air travel.

Here, however, differences in opinion were wider. For example, individuals over the age of 65 would allocate nearly 9 percent more to protecting the electrical power system than to protecting air travel while those under the age of 40 would allocate only 75 percent as much. Blacks and Hispanics believed that about 65 percent as much should be spent to protect the power system as to secure the airways, while non-Hispanic whites would spend about 96 percent as much. Residents of the Mountain States and the South Atlantic States would spend an average of 3 percent more than they would allocate to protecting aircraft, while those in New England and the East South Central States would spend about 80 percent as much.

On average, U.S. residents would spend slightly more protect non-air to the transportation network from terrorist attacks than they would to secure civilian air traffic. Again, there were significant differences in the amounts some segments of the public thought appropriate to spend. Some believe protecting subways and railways from terrorists is a high priority for homeland security spending, while others believe it deserves significantly less funding than does protecting aircraft.

College graduates, for example, would allocate more than 11 percent more for protection of other transportation than aircraft, while those with a high school degree or less, would spend only 92 percent as much as they would to protect air travel. Respondents in the public transportation dependent Mid-Atlantic States would spend more than 10 percent more to protect other transportation networks than on securing the airways, while those in the West South Central States would spend 93 percent as much. There was broad agreement that protecting the food supply chain and preventing the release of a chemical or biological agent in a public area are the anti-terrorist activities deserving the most funding. On average respondents would allocate about 13.3 percent more for food protection and 12 percent more for protecting against release of a chemical or biological agent than they would to protect against another terrorist attack using hijacked aircraft.

Again there were distinct differences across racial and ethnic groups. Non-Hispanic whites allocated nearly 19 percent more to protecting the food supply and 14 percent more to protecting against a chemical or biological attack than to securing air travel. Blacks and Hispanics would allocate less than they would to protecting the airways. The spending ratios for defense of the food system and defending against a chemical or biological attack increased with education and age, but there was no distinct pattern with respect to income. Individuals in the East North Central States allocated the largest proportion of the budget to protecting against both an attack on the food supply and release of a chemical or biological agent.

When asked specifically how confident they were that America's food supply is secure against terrorism 15 percent were "not at all confident," while just 2 percent were extremely confident (Figure 5).

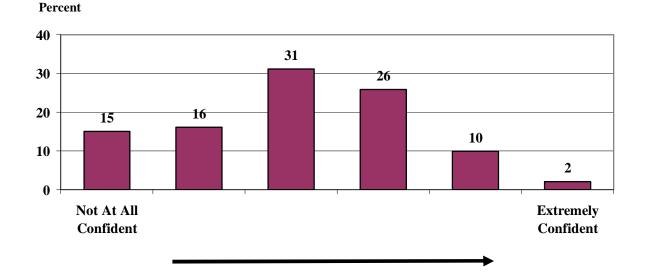


Figure 5: Public Not Confident Food Supply is Secure

After Receiving Information on the Possible Severity of Food Terrorism Incidents Spending for Securing Airways Falls, Spending For Food Protection Increases

After respondents had made an initial distribution of funds for defending against possible terrorist activities a scenario describing the progression of events from a potential food terrorism incident was introduced.⁹ They then were asked once

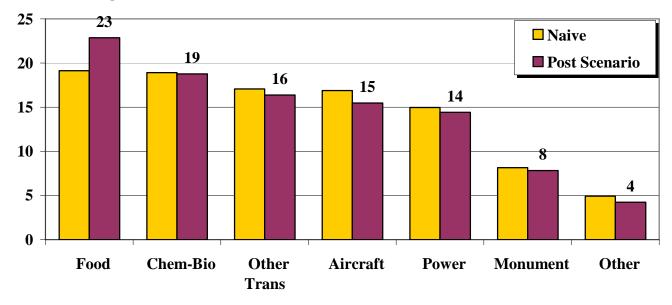
again how resources to combat terrorism should be allocated. Differences between the naïve and post-scenario results are shown in Figure 6.

As anticipated the proportion of antiterrorism spending that respondents believe should go to protect the food supply system increased substantially. Post scenario responses called for programs protecting the food system to receive nearly 23 percent of all spending that should go to protect against terrorism, 3.75 percentage points more than before being informed of the potential consequences of an act of food terrorism.

⁹ In focus groups conducted prior to the survey there was some confusion about how serious a food terrorism event might be. Some individuals thought it to be very serious with a large number of fatalities while others believed that food terrorism would produce nausea and other flu-like symptoms, but no fatalities. Removing some of the ambiguity associated with the likely impact of a terrorist attack on the nations food system was expected to produce a more consistent set of spending allocation decisions. The scenario provided was, "Emergency room visits and hospital admissions suddenly increase in the region where you live. A food borne toxin is suspected to be the cause. The number of individuals affected continues to grow over the next several days and some of those hospitalized die. Similar patterns are seen in other metropolitan areas within the region. The number of fatalities associated with this problem

grows. State and national agencies struggle to identify the source of the problem. Ten days after the first report a statement is issued by a government agency saying that there has been a deliberate attempt to contaminate the food system. By comparing the pattern of affected consumers and the distribution of various types of food products a single commonly used food product has been identified as the source. It is estimated that more than 50,000 units of the contaminated product have already been purchased. Consumers are instructed to bring all unused product to central collection sites for disposal. Ultimately the death toll from this incident reaches 1500."

Figure 6: U.S. Residents Say Spend More to Protect Food Supply, Less to Protect Airways After Receiving More Information about Effects of Food Terrorism



Percent of Budget

Protecting against release of a chemical or biological agent in a crowded public area remained the second highest priority and the proportion of the anti-terrorist budget that should be devoted to that mission remained almost constant, falling by just over 0.1 percentage points.

The proportion believed appropriate to be devoted to protecting against another airline hijacking fell by the largest amount, down 1.4 percentage points from the average of earlier responses. Allocations to protecting transportation systems, other national monuments, the power grid, and other uses also fell, but by smaller amounts. In the post scenario responses, all allocations were significantly different from the airline allocation, and the allocations for each potential terrorist target changed significantly from the naïve responses except for release of a chemical or biological agent in a crowded public area.

Women, Blacks, and individuals with a high school degree or less, all increased the proportion of spending they believed should be devoted to protecting the food supply by more than 4 percentage points after being exposed to additional information as did individuals in the East South Central, West South Central, and Pacific States.

Blacks and individuals residing in the East and West South Central States reduced the proportion of spending they believed should go to secure the airways by 2 percentage points or more, while men and college graduates reduced their allocation for that activity by less than 1 percentage point. There were relatively small differences in the changes in resources that were thought appropriate for the other anti-terrorist activities.

America's Non-Defense Homeland Security Budget Totaled \$55 Billion in Fiscal 2006

In fiscal 2006, enacted and supplemental appropriations for homeland security by all federal agencies totaled \$55 billion. When spending by the Department of Defense is removed, non-defense homeland security budget authority was \$38 billion.¹⁰ A total of 33 agencies have a direct role in federal security homeland programs. Four agencies-the Departments of Homeland Security, Health and Human Services, Justice, and Energy-account for nearly 90 percent of the non-defense federal homeland security budget in fiscal 2006.

Federal spending for homeland security, including spending by the Department of Defense, is allocated across 6 national strategy missions. Thirty four percent of total spending goes to support the border and transportation security mission and 32 percent to protecting critical infrastructure and key assets. More than 62 percent of the funding for the latter mission came from the Defense Department budget. The Transportation Security Administration (TSA), which provides airport passenger and luggage screening, received about \$5.9 billion in fiscal 2006, about 11 percent of all federal homeland security funding and about 32 percent of funding for the border and transportation security mission.

¹⁰ This total covers the homeland security funding and activities of all Federal agencies, not just those carried out by the Department of Homeland Security (DHS). The cost of some activities of agencies within DHS is not included. The budget allocation going to support Coast Guard Search and Rescue activity, for example, is not included in the total funding going for homeland security activities. *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2006*, pp. 37-52.

The TSA's budget for fiscal 2006 provided more than \$5 billion to protect the nation's airways against terrorism. The Aviation and Transportation Security Act specifically charges the TSA with the responsibility of protecting civil aviation, noting that protecting civil aviation is a matter of therefore national security and а responsibility of the federal government.¹¹ More than 44 percent of TSA's 2006 budget authority came from passenger and air carrier security fees transferred to the agency. The remainder came from general fund appropriations.

TSA funds are used to support airport passenger and baggage screening activities and for technology development and purchases. They also are used to support privatized passenger and baggage screener contracts, airport managerial and support activities, air cargo screening operations, operational testing, and activities to improve flight deck and aircrew safety.

Public Would Spend More than Currently Budgeted to Protect Food Supply and Prevent Chemical and Biological Attacks

Comparing results from this survey of American opinion about terrorism and homeland security spending with current spending levels provides some insights and guidance for future homeland security budget policy.

¹¹ Section 101 specifically directs the TSA to provide for the screening of "all passengers and property, including United States mail, cargo, carry-on and checked baggage, and other articles that will be carried aboard a passenger aircraft." While there may be some costs absorbed by the airlines with respect to screening for private charter flights, the vast majority of the costs of providing security for civilian air traffic are covered within the TSA budget.

Homeland Security Funding by National Strategy Mission

(Budget Authority, \$ Millions)

Mission	Enacted 2006	Percent of Total
Intelligence and Warning	\$428	0.8
Border and Transportation Security	18,508	33.6
Domestic Counterterrorism	4,566	8.5
Protecting Critical Infrastructure and Key	17,852	32.4
Assets		
Defending Against Catastrophic Threats	8,640	15.6
Emergency Preparedness and Response	4,940	8.9
Other	112	0.2
Total Budget Authority	\$55,046	100

Source: Analytical Perspectives, Budget of the United States Government, Fiscal Year 2007, p. 21.

For example, this survey indicates that Americans would be likely to support additional spending to protect against catastrophic attacks. Federal funding for the national Defending Against Catastrophic Threats mission, which includes protecting America's food supply chain from terrorist attack as well as programs to prevent biological, radiological, chemical, and nuclear attacks by terrorists, totaled \$8.6 billion in fiscal 2006, about 72 percent more than was allocated to protecting the airways from terrorism. Yet this survey indicates U.S. residents would spend 113 percent of the amount spent protecting the airways to prevent deliberate contamination of the food supply, and 112 percent of that spent to protect against aircraft hijackings to prevent the release of toxic chemical or biological agents in a public area.

Put another way, this survey indicates that U.S. residents believe that for every \$1 spent

to protect against a terrorist attack using a hijacked aircraft \$1.13 should be spent to protect America's food system¹² and an additional \$1.12 should be spent to protect against an attack using a chemical or biological weapon. If we accept that the current level of spending for protecting against terrorist attacks using hijacked aircraft is appropriate, that means nearly \$5.7 billion should be spent annually to secure America's food system, and an additional \$5.6 billion should be spent each year to protect against a chemical or biological attack.

The \$8.6 billion of fiscal 2006 budget authority for programs protecting against all types of catastrophic terrorist incidents falls short of meeting that standard, even when activities protecting against all other types of

¹² This spending would be in addition to spending for food safety. The questionnaire noted the difference between food safety (protecting against a naturally occurring contaminant) and food defense (protecting against the intentional introduction of a toxin.)

catastrophic attacks including radiological or nuclear incidents are ignored. ¹³.

Similarly, there appears to be public support for spending substantially more to protect our national monuments than was provided for in the 2006 budget. Department of Interior spending for homeland security, which would include National Park Service programs to protect our national monuments, was \$56 million or about 0.1 percent of total non-defense homeland security spending.

Changes in the allocation of homeland security spending after respondents received additional information about the potential impacts of a food terrorism incident also were revealing. An increase in the proportion of spending dedicated to protecting America's food supply was anticipated due to a heightened awareness of the adverse impacts of food terrorism, although the size of the increase was larger than expected. The surprise was how robust the amounts the respondents allocated to spending for prevention of a chemical or biological attack and to the protection of the subway and railway transportation system were. Finding that the public was willing to reduce the proportion of anti-terrorism spending directed toward protecting against another airline hijacking by 8 percent to add to the amount spent to protect the food system may indicate that the public sees another airline terrorist incident as less damaging than some alternatives.

No one would argue that decisions on the size and internal allocation of the nation's homeland security budget should be made solely on the basis of a public opinion poll. Good budget policy requires allocating

sufficient resources to provide the level of security against terrorism demanded by the public given the costs of providing that protection. If that level of security can be provided at a very low cost, there is no need to spend additional amounts to protect against that particular type of terrorist act and those funds should be devoted to other uses or used to reduce the budget deficit. Balancing expected outcomes with costs is the key to all public budget decisions, even though those decisions are particularly difficult when they involve determining the appropriate level of spending to protect America against low probability events with catastrophically high costs.

This report on Americans' concerns about future terrorist activity and their priorities for spending to prevent terrorism are the initial key findings from a nationwide consumer survey conducted by The Food Industry Center at the University of Minnesota and funded by the National Center for Food Protection and Defense. Additional reports will follow with findings about how these spending allocations are related to public attitudes, preferred media communications, and other consumer characteristics.

¹³ The 2007 Budget indicates a small amount (\$93 million) was also spent on protecting the food system under the protecting critical infrastructure mission.

Q-1	How concerned are you about eac	ch of the fo	ollowing	potentia		e e ventes		
	Potential Events	Level of Concern - Please Select <u>One</u> for Each						
			Not at A Concern				Extrem Concer	
	Another attack using a passenge	r aircraft	1	2	3	4 5	6	
	Attack on other public transport	ation	1	2	3	4 5	6	
	Destruction of a national monun	nent	1	2	3	4 5	6	
	Deliberate chemical or biologica contamination of a common foo		1	2	3	4 5	6	
	Disruption of the electrical power	1	2	3	4 5	6		
	Release of a biological or chemi in a crowded public area	1	2	3	4 5	6		
		• , ,	1'1 1		_			
Q-2	Do you think the following terror indicate when you think the next		ild be like or Not	in your ly to occ	lifetime [°] cur. hood of	? If you	answer yes ing - Pleas	-
Q-2	Do you think the following terror	event wou Likely In Y Lifeti Please	ild be like or Not our ime? Select	in your ly to occ	lifetime cur. hood of <u>(</u> In Next 2-4	? If you Occurr <u>One</u> for	answer yes ing - Pleas Each t In Next 11-25	-
Q-2	Do you think the following terror indicate when you think the next	event wou Likely In Y Lifeti Please <u>One</u> for	ild be like or Not our ime? Select	in your ly to occ Likeli In Next 1 Year	lifetime cur. hood of <u>(</u> In Next 2-4 Years	? If you Occurr <u>Dne</u> for In Nex 5-10	answer yes ing - Pleas Each t In Next 11-25 Years	e Select Longer than 25
Q-2	Do you think the following terror indicate when you think the next Potential Events Another attack using a	event wou Likely In Y Lifeti Please <u>One</u> for	ild be like or Not our ime? Select r Each	in your ly to occ Likeli In Next 1 Year	lifetime cur. hood of <u>(</u> In Next 2-4 Years	? If you Occurr <u>)ne</u> for In Nex 5-10 Years	answer yes ing - Pleas Each t In Next 11-25 Years	e Select Longer than 25 Years
Q-2	Do you think the following terror indicate when you think the next Potential Events Another attack using a passenger aircraft Attack on other public transportation Destruction of a national monument	event wou Likely In Y Lifeti Please <u>One</u> for No	ild be like or Not our ime? Select r Each Yes à	in your ly to occ Likeli In Next 1 Year 1	lifetime cur. hood of <u>(</u> In Next 2-4 Years 2	? If you Occurr <u>One</u> for In Nex 5-10 Years 3	answer yes ing - Pleas Each t In Next 11-25 Years 4	e Select Longer than 25 Years 5
Q-2	Do you think the following terror indicate when you think the next of Potential Events Another attack using a passenger aircraft Attack on other public transportation Destruction of a national monument Deliberate chemical or biological contamination of a	event wou Likely In Y Lifeti Please <u>One</u> for No No	ild be like or Not our ime? Select r Each Yes à Yes à	in your ly to occ Likeli In Next 1 Year 1 1	lifetime cur. hood of <u>(</u> In Next 2-4 Years 2 2	? If you Occurr <u>One</u> for In Nex 5-10 Years 3 3	answer yes ing - Pleas Each t In Next 11-25 Years 4 4	e Select Longer than 25 Years 5 5
Q-2	Do you think the following terror indicate when you think the next of Potential Events Another attack using a passenger aircraft Attack on other public transportation Destruction of a national monument Deliberate chemical or	event wou Likely In Y Lifeti Please <u>One</u> for No No	Ild be like or Not our ime? Select r Each Yes à Yes à Yes à	in your ly to occ Likeli In Next 1 Year 1 1 1	lifetime cur. hood of In Next 2-4 Years 2 2 2 2	P If you Occurr One for In Nex 5-10 Years 3 3 3	answer yes ing - Pleas Each t In Next 11-25 Years 4 4 4	e Select Longer than 25 Years 5 5 5

Appendix A: Survey Questions

Not at All Serious ceraft					Extreme
1					Serious
1	2 2	3 3	4 4	5 5	6 6
1 1	2 2	3 3	4 4 4 4	5 5	6 6
1 1	2 2	3 3	4 4	5 5	6 6
1 1	2 2	3 3	4 4	5 5	6 6
ntamination of a c	ommo	n food	l prod	uct	
1 1	2 2	3 3	4 4	5 5	6 6
1 1	2 2	3 3	4 4	5 5	6 6
id					
1 1	2 2	3 3	4 4	5 5	6 6
1 1	2 2	3 3	4 4	5 5	6 6
gent in a crowded	public	area			
1	2	3	4	5	6 6
1	2 2 2				0 6
	1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 id 1 1 2	1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 id 2 3 3 id 2 3 3 id 2 3 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1234512345123451234512345123451234512345123451234512345123451234512345

Potential Events	Seriousness of Attack On You Personally Please Select <u>One</u> for Each							
I otential Events	Not At All Serious					Extreme Seriou		
Another attack using a passenger aircr	aft							
Loss of Life / Fatalities	1	2	3 3 3	4	5	6		
Psychological & Emotional Stress	1	2 2 2	3	4	5	6		
Economic Impact	1	2	3	4	5	6		
Destruction of a national monument								
Loss of Life / Fatalities	1	2	3	4	5	6		
Psychological & Emotional Stress	1	2	3 3	4		6		
Economic Impact	1	2	3	4	5	6		
Deliberate chemical or biological conta	mination of a c	ommo	on foo	d prod	uct			
Loss of Life / Fatalities	1	2	3	4	5	6		
Psychological & Emotional Stress	1	2	3	4		6		
Economic Impact	1	2	3	4	5	6		
Disruption of the electrical power grid								
Loss of Life / Fatalities	1	2	3	4	5	6		
Psychological & Emotional Stress	1	2	3	4	5	6		
Economic Impact	1	2	3	4	5	6		
Release of a biological or chemical ager	nt in a crowded	public	e area					
Loss of Life / Fatalities	1	2	3	4	5	6		
Psychological & Emotional Stress	1	2	3	4		6		
Economic Impact		2	3	4	5	6		

Q-5	Of every \$100 currently should be divided acros					prism, how do yo	ou think it		
	(Fill in the \$ amount in \$100 in each box, but th		• •		-		veen \$0 and \$ Amount		
	1 An attack on a p	assenger air	craft						
	<u>2</u> Attack on other	public trans	portation						
	$\underline{3}$ Destruction of a	national mo	onument						
	<u>4</u> Deliberate chemical or biological contamination of a common food product								
	<u>5</u> Disruption of the electrical power grid								
	4Deliberate chemical or biological contamination of a common food produc5Disruption of the electrical power grid6Release of a biological or chemical agent in a crowded public area7Others (please specify)								
	$1 \frac{7}{2}$ Others (please spectrum)	Others (please specify)							
					Tota	ıl	= \$100		
Q-7	How confident are you	that our foo	d supply is	secure ag	ainst terroris	m?			
	Level of	Confidence	e about Fo	ood Secur	ity - Please S	Select <u>One</u>			
	Not At All Extremely Co Confident								
	1	2	3	4	5	6			

Appendix B: Percentage Allocation of Anti-Terrorist Spending by Type of Event and Socioeconomic Characteristics, Pre- Scenario, Post-Scenario

PRE-SCENARIO									
Types of Attacks	All	All Gender		Race					
		Male	Female	White, Non- Hispanic	African American	Hispanic			
Aircraft	16.9	16.2	17.2	17.0	19.4	18.5			
Other Transportation	17.1	17.2	17.0	17.2	17.8	17.5			
Monument	8.2	7.9	8.3	8.2	8.1	9.4			
Food	19.1	18.5	19.5	19.1	17.9	17.9			
Power Grid	15.0	15.1	15.0	15.5	12.6	12.1			
Chemical-Biological	18.9	18.9	18.9	18.6	19.0	19.2			
Other	4.9	6.3	4.3	4.3	5.2	5.5			
	I	POST-S	SCENAI	RIO					
Types of Attacks	All	Ge	nder		Race				
		Male	Female	White, Non- Hispanic	African American	Hispanic			
Aircraft	15.5	15.3	15.6	15.8	16.9	16.6			
Other Transportation	16.4	16.9	16.2	16.7	16.4	16.2			
Monument	7.8	7.8	7.9	7.9	7.9	9.1			
Food	22.9	20.8	23.9	22.7	22.5	21.3			
Power Grid	14.4	14.9	14.2	14.7	12.9	12.5			
Chemical-Biological	18.8	18.8	18.7	18.4	18.6	19.5			
Other	4.2	5.6	3.6	3.7	4.8	4.7			

PRE-SCENARIO									
Types of Attacks	All		Age			ion			
		<40	40 TO 64	65+	High School or Less	Some College	College Graduate		
Aircraft	16.9	17.8	16.4	15.8	17.5	17.2	16.1		
Other Transportation	17.1	16.7	17.2	17.1	16.1	16.8	18.0		
Monument	8.2	8.9	7.8	7.2	8.7	8.4	7.6		
Food	19.1	18.6	19.3	19.8	19.1	19.2	19.1		
Power Grid	15.0	13.3	15.7	17.2	15.1	14.6	15.4		
Chemical-Biological	18.9	19.5	18.7	18.1	18.6	18.9	19.0		
Other	4.9	5.2	4.8	4.8	5.0	5.0	4.8		
		P	OST-SCEN	NARIC					
Types of Attacks	All		Age			Educat	ion		
		<40	40 TO 64	65+	High School or Less	Some College	College Graduate		
Aircraft	15.5	16.2	15.2	14.6	15.8	15.6	15.2		
Other Transportation	16.4	16.0	16.7	16.1	15.3	16.2	17.3		
Monument	7.8	8.7	7.4	6.9	8.4	8.0	7.4		
Food	22.9	22.5	23.0	23.2	24.1	23.1	21.9		
Power Grid	14.4	13.3	14.8	16.3	14.2	14.2	14.8		
Chemical-Biological	18.8	19.1	18.7	18.5	18.1	18.8	19.2		
Other	4.2	4.3	4.2	4.5	4.2	4.2	4.3		

PRE-SCENARIO									
Types of Attacks	All	All Income							
•		<\$20,000	\$20,000- \$39,999	\$40,000- \$59,999	\$60,000- \$79,999	\$80,000- \$99,999	>\$99,999		
	1.5.0	16.0	16.6	17.4	17.1	1.6.5	17.1		
Aircraft	16.9	16.8	16.6	17.4	17.1	16.5	17.1		
Other Transportation	17.1	15.4	16.0	18.4	17.6	17.8	18.4		
Monument	8.2	8.8	8.3	7.9	8.0	8.3	7.7		
Food	19.1	19.5	19.2	18.4	19.8	19.7	18.5		
Power Grid	15.0	15.0	15.0	15.0	14.3	15.1	14.8		
Chemical-Biological Other	18.9 4.9	18.6 5.8	19.4 5.4	18.5 4.3	19.1 4.1	19.0 3.7	19.3 4.3		
		PO	ST-SCE	NARIO					
Types of Attacks	All]	Income				
		<\$20,000	\$20,000- \$39,999	\$40,000- \$59,999	\$60,000- \$79,999	\$80,000- \$99,999	>\$99,999		
Aircraft	15.5	15.5	15.1	15.6	15.9	15.5	15.6		
Other Transportation	16.4	15.3	15.9	17.2	17.0	17.4	17.7		
Monument	7.8	8.7	8.0	7.8	7.8	7.8	7.3		
Food	22.9	23.3	23.4	22.0	23.2	23.3	21.8		
Power Grid	14.4	14.6	14.1	14.9	13.9	14.3	14.1		
Chemical-Biological	18.8	18.1	19.1	18.8	19.0	18.8	19.7		
Other	4.2	4.5	5.2	3.8	3.3	2.9	3.7		

PRE-SCENARIO											
Types of Attacks	All	Geographic Regions									
		New England	Mid Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	
Aircraft	16.9	17.4	16.7	16.1	17.1	17.1	17.7	17.2	16.1	17.1	
Other Transportation	17.1	18.2	18.4	16.2	16.4	17.4	16.4	15.7	17.5	17.3	
Monument	8.2	8.2	8.1	7.9	7.7	8.1	8.1	8.6	8.5	8.4	
Food	19.1	19.3	18.4	19.5	20.2	18.6	20.4	19.3	18.2	19.4	
Power Grid	15.0	13.9	14.9	16.6	15.3	14.8	14.0	14.8	16.6	13.5	
Chemical-Biological	18.9	18.6	18.8	18.7	18.7	19.1	18.8	18.8	18.0	19.7	
Other	4.9	4.4	4.7	5.0	4.6	4.9	4.7	5.8	5.2	4.6	

POST-SCENARIO

Types of Attacks	All	Geographic Regions								
		New England	Mid Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Aircraft	15.5	15.9	15.8	14.8	15.6	15.7	15.6	14.9	15.1	15.9
Other Transportation	16.4	17.2	17.6	15.7	15.4	17.0	16.2	15.5	16.4	16.2
Monument	7.8	8.0	7.8	7.8	7.2	7.8	7.8	8.0	8.5	8.0
Food	22.9	23.2	22.0	23.2	23.7	22.1	24.6	23.3	21.6	23.5
Power Grid	14.4	13.2	14.4	15.7	14.7	14.2	13.8	14.9	15.2	13.2
Chemical-Biological	18.8	18.8	18.7	18.8	19.0	18.9	17.7	18.6	18.4	19.3
Other	4.2	3.7	3.7	4.1	4.4	4.4	4.4	4.8	5.0	4.1