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Risk-Based Funding in Homeland Security Grant Legislation: Issues for the 109th Congress

Shawn Reese, Government and Finance Division

October 21, 2005

Abstract. P.L. 109-90, signed by the President on October 18, 2005, appropriates funding for the Department of Homeland Security (DHS) for FY2006. P.L. 109-90 appropriates a total of \$2.97 billion for state and local homeland security grant programs. This is \$645 million less than was appropriated for these programs in FY2005 (\$3.61billion). P.L. 109-90 does not alter the funding formula for SHSGP and LETPP. Conferees are expected, however, to meet in October to resolve differences between the House and Senate versions of H.R. 3199, re-authorization of sunset provisions in the USA PATRIOT Act (P.L. 107-56). The House version of this measure addresses risk-based funding for homeland security grants. The House version of H.R. 3199, passed July 21, 2005, would direct DHS to allocate 100% of funds appropriated for homeland security assistance to states based on risk, and it would establish a mechanism for doing so. The Senate version, passed July 29, 2005, is silent on the matter. This CRS report addresses several policy questions raised by the grant allocation method proposed in the House version of H.R. 3199 and the method in P.L. 109-90. It does not focus on the differences in the amounts appropriated for homeland security grants and re-authorization of USA PATRIOT Act provisions.



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Updated October 21, 2005

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This CRS report addresses the following four policy issues that may confront the conferees as they consider how homeland security funds are to be allocated to the states:

- What is the difference between a guaranteed *base* allocation and a guaranteed *minimum* allocation? What is the conceptual difference, and how would the difference affect the amount of money states would receive?
- What risk factors should be included in a risk-based funding formula?
- Should natural and technical disaster risks be considered as factors?
- Who should determine the risk factors?

This report will be updated as congressional action warrants.

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Risk-Based Funding in Homeland Security Grant Legislation: Issues for the 109th Congress

Introduction

P.L. 109-90, signed by the President on October 18, 2005, appropriates funding for the Department of Homeland Security (DHS) for FY2006. P.L. 109-90 appropriates a total of \$2.97 billion for state and local homeland security grant programs. This is \$645 million less than was appropriated for these programs in FY2005 (\$3.61billion). P.L. 109-90 does not alter the funding formula for SHSGP and LETPP.

Conferees are expected, however, to meet in October to resolve differences between the House and Senate versions of H.R. 3199, re-authorization of sunset provisions in the USA PATRIOT Act (P.L. 107-56). The House version of this measure addresses risk-based funding for homeland security grants.

The House version of H.R. 3199, passed July 21, 2005, would direct DHS to allocate 100% of funds appropriated for homeland security assistance to states based on risk, and it would establish a mechanism for doing so. The Senate version, passed July 29, 2005, is silent on the matter.

This CRS report addresses several policy questions raised by the grant allocation method proposed in the House version of H.R. 3199 and the method in P.L. 109-90. It does not focus on the differences in the amounts appropriated for homeland security grants and re-authorization of USA PATRIOT Act provisions.

Legislative Context

The context within which conferees will consider the two versions of H.R. 3199 includes three elements: first, concern about current DHS practices in allocating homeland security assistance grants to states based on arguably minimal guidance from the USA PATRIOT Act; second, the recommendation of the 9/11 Commission that homeland security assistance supplement state and local resources based on risk and vulnerability; and third, the provisions of H.R. 3199, as passed by the House, which would establish a risk-based method for distributing grants.¹

Current DHS Practice. Since FY2003, DHS has allocated funds based on risk through only one of its state and local homeland security assistance programs —

¹ The House originally passed the grant formula provisions as a separate bill, H.R. 1544, on May 12, 2005.

the Urban Area Security Initiative (UASI) program.² Other grant allocations were based on a statutorily guaranteed share of available funds or on state population. In FY2003 and FY2004, DHS's Office for Domestic Preparedness (ODP) allocated funds from the other programs³ using a formula that guaranteed each state and the District of Columbia a base of 0.75% of total appropriations (0.025% for territories), with the remainder of total appropriations allocated in proportion to the ratio of the recipient jurisdiction's population to the total national population.⁴ In the FY2005 Department of Homeland Security (DHS) appropriations (P.L. 108-334), Congress directed ODP to allocate funding for the State Homeland Security Grant Program (SHSGP), the Law Enforcement Terrorism Prevention Program (LETPP), the Emergency Management Performance Grant Program (EMPG), and Citizen Corps Programs (CCP) in the same manner as the FY2004 allocations.⁵ In the absence of statutory or other congressional guidance, DHS allocated the remaining FY2005 homeland security assistance funding in direct proportion to the ratio of each state's population to the total national population.⁶

9/11 Commission Recommendation. In August 2004, the National Commission on Terrorist Attacks Upon the United States (9/11 Commission) criticized the allocation of federal homeland security assistance and recommended that the distribution not "remain a program for general revenue sharing."⁷ While acknowledging that "every state and city needs to have some minimum infrastructure for emergency response," the 9/11 Commission recommended that state and local homeland security assistance should "supplement state and local resources based on the risks or vulnerabilities that merit additional support." The 9/11 Commission offered two high-risk, vulnerable cities as examples, saying, "Now, in 2004, Washington, D.C., and New York City are certainly at the top of any such list."⁸

H.R. 3199. This bill, as passed by the House, includes provisions directing DHS to allocate 100% of funds appropriated for homeland security assistance to states based on risk, and it would establish a mechanism for doing so. House

² The UASI program includes grants to high-threat, high-risk urban areas, port security grants, rail security grants, intercity bus security grants, trucking industry security grants, and buffer zone protection program grants.

³ The programs include the State Homeland Security Grant Program, the Law Enforcement Terrorism Prevention Program, Citizen Corps Programs, and the Emergency Management Performance Grant Program.

⁴ P.L. 107-56 (USA PATRIOT Act). Section 1014 guarantees each state a base of 0.75% of total appropriations for domestic preparedness; however, it is silent on how the remaining appropriations are to be allocated to states and localities.

⁵ Ibid.

⁶ U.S. Department of Homeland Security, Office for Domestic Preparedness, *Fiscal Year* 2005 Homeland Security Grant Program: Program Guidelines and Application Kit (Washington: Nov. 2004), p. 1.

⁷ National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (Washington: GPO, July 2004), p. 396.

⁸ Ibid.

conferees are likely to take into account these provisions, which were included as well in another House-passed bill, H.R. 1544.

This CRS report addresses the following four policy issues that may confront the conferees as they consider how homeland security funds are to be allocated to the states:

- What is the difference between a guaranteed *base* allocation and a guaranteed *minimum* allocation? What is the conceptual difference, and how would the difference affect the amount of money states would receive?
- What risk factors should be included in a risk-based funding formula?
- Should natural and technical disaster risks be considered as factors?
- Who should determine the risk factors?

Legislation in the 109th Congress

A conference, to resolve the differences between the House and Senate versions of H.R. 3199, could possibly determine a new homeland security assistance distribution formula. Additionally, Congress passed the FY2006 DHS appropriations and the conference on the act addressed the distribution formula. It did not, however, alter the formula.

P.L. 109-90. P.L. 109-90 maintains the current formula in which states, DC, and Puerto Rico are to receive 0.75% of total appropriations, and U.S. insular areas are to receive 0.08% of total appropriations.⁹ It does require, however, states to update their State Homeland Security Strategies in accordance with the Interim National Preparedness Goal to be eligible for federal homeland security assistance. Additionally, the act does not specify what risk factors the Office for Domestic Preparedness (ODP) is to consider in determining the remainder of appropriations following the distribution of state base amounts.

P.L. 109-90 requires the Government Accountability Office (GAO) to review the threats and risk factors used by the DHS Secretary in determining discretionary grant allocations — the Urban Area Security Initiative (UASI) and sub-grants¹⁰ — and report to Congress on the review no later than November 17, 2005.

H.R. 3199. H.R. 3199, as passed by the House, proposes to change the distribution of DHS homeland security assistance to states and localities. The

⁹ P.L. 107-56, Section 1014.

¹⁰ The sub-grants include port security, trucking industry security, intercity bus security, intercity passenger rail transportation security, and buffer zone protection grants.

Senate-passed version is silent on the manner. The House version of H.R. 3199 proposes to allocate total appropriated funds for DHS homeland security assistance based on risk, and proposes to establish a First Responder Grants Board to review state homeland security plans and to assist the DHS Secretary in determining state risk-based allocations.

Grant Allocation Methods

A discussion of the House version of H.R. 3199 and P.L. 109-90 formulas and other grant allocation provisions follows.

House-Passed H.R. 3199. This bill proposes to allocate 100% of appropriations for DHS federal homeland security assistance programs at the discretion of the DHS Secretary (based on risk) and in consultation with a First Responder Grants Board's evaluation and prioritization of state homeland security applications.¹¹ The First Responder Grants Board would be established to evaluate and prioritize state homeland security applications based on the following risk criteria: "the variables of threat, vulnerability, and consequences with respect to the Nation's population (including transient, commuting, and tourist populations) and critical infrastructure."¹²

The bill would guarantee a minimum amount to each state — 0.25% of total appropriated funds for SHSGP, LETPP, and UASI — *without* a significant international border or not adjoining a body of water through which an international boundary line extends.¹³ States *with* a significant international border¹⁴ or adjoining a body of water through which an international boundary line extends would be guaranteed a minimum of 0.45% of total appropriations for SHSGP, LETPP, and UASI.¹⁵ U.S. possessions and territories, and eligible tribes (collectively), would be guaranteed a minimum of no less than 0.08% of total appropriations for SHSGP, LETPP, and UASI.¹⁶

A state would receive the guaranteed minimum if, after DHS allocates funding based on the discretion of the DHS Secretary and the First Responder Grants Board's evaluation and prioritization of applications, the state is not in line to receive 0.25% or 0.45%, respectively, of total appropriations. As an example, if Wyoming received an amount that equaled 0.20% of total appropriations based on the discretion of the DHS Secretary and the evaluation and prioritization by the First Responder Grants Board, Wyoming would be given an additional 0.05% to reach the guaranteed minimum or "floor" of 0.25% (Wyoming does not have an international border or

¹¹ H.R. 3199, Section 128, "Sec. 1803."

¹² H.R. 3199, Section 128, "Sec. 1804(a)."

¹³ H.R. 3199, Section 128, "Sec. 1804(c)(5)(A)."

¹⁴ H.R. 3199 proposes the determination of "significant international border" be at the discretion of the DHS Secretary.

¹⁵ H.R. 3199, Section 128, "Sec. 1804(c)(5)(B)."

¹⁶ H.R. 3199, Section 128, "Sec. 1804(c)(5)(C)-(D)."

adjoin a body of water through which an international boundary extends). Wyoming would not receive any additional funding after receiving the guaranteed minimum.

P.L. 109-90. P.L. 109-90 does not alter the funding formula DHS uses in distributing state and local homeland security assistance. It maintains the requirement of 0.75% of total appropriations for domestic preparedness guaranteed to states.¹⁷ The act is silent on which risk factors DHS should use in determining state and local allocations of homeland security assistance. Since population could be considered a risk factor, it is possible that DHS could allocate funding in FY2006 in the same manner as it allocated funding in FY2003, FY2004, and FY2005. DHS Secretary Michael Chertoff testified, however, before the House Homeland Security assistance should be based on specific risks instead of a state's population percentage of the national population.¹⁸ DHS Secretary Chertoff, however, did not specify what risk factors should be used.

Policy Questions

The development and implementation of a risk-based distribution formula, including or excluding a guaranteed base and minimum amounts, raise some policy questions that may confront conferees on H.R. 3199.

Guaranteed Minimum Versus Guaranteed Base

Both H.R. 3199, as passed by the House, and P.L. 109-90 would guarantee to each state a certain percentage of the total appropriation. House-passed H.R. 3199 would guarantee each state a *minimum*; P.L. 109-90 guarantees each state a *base*. On the surface, the two terms may appear to be similar, but they differ in that each is associated with a distinctive allocation method.

A *minimum*, as defined in H.R. 3199, is the smallest amount each state would receive after risk-based state allocations are determined. Were the risk-based calculations to result in any state allocation less that the statutorily defined minimum, the allocations of states receiving more than the minimum would be reduced proportionally so that all states would receive at least the minimum.

A *base*, as defined in P.L. 109-90, is an amount guaranteed to each state without regard to risk. After allocation of base amounts to states, P.L. 109-90 silent on how the remainder of total appropriations is to be allocated.

¹⁷ P.L. 1090-90, Title III.

¹⁸ U.S. Department of Homeland Security, Office of the Press Secretary, "Testimony of DHS Secretary Michael Chertoff Before the House Homeland Security Committee," press release, Apr. 13, 2005, available at [http://www.dhs.gov/dhspublic/display?content=4460], visited Oct. 20, 2005.

The present allocation of federal homeland security assistance (and the allocation method in P.L. 109-90) — which includes a *base* — was criticized by the 9/11 Commission, which referred to the base as revenue sharing without regard to a state's risk of terrorist attacks. Some, however, argue that the *base* allocation is a way to ensure that each state receives some sort of homeland security funding and is prepared at some level for terrorist attacks.

As conferees negotiate to resolve House and Senate differences on H.R. 3199, they may opt to consider whether to legislate the grant allocation method with a guaranteed *base* or guaranteed *minimum*. That is, they may choose to decide whether: (A) to provide every state with the same amount of *base* funding, and then allocate the remainder of total appropriations based on risk; or (B) to allocate total appropriations based on risk; or (B) to allocate total appropriations based on risk, and then if a state does not receive a certain amount or percentage (*minimum*), provide additional funding to the state to meet this amount or percentage, with a proportional reduction of funding to the other states.

Comparison of Funding and Base Amounts. Table 1 compares the actual FY2005 appropriations with the House and Senate versions of H.R. 2360, and P.L. 109-90. Table 2 compares state, DC, and U.S. insular area SHSGP and LETPP base amounts received in FY2005, and estimated base amounts calculated from the recommended P.L. 109-90 allocations for these programs. Table 3 compares base and risk amounts and percentages for FY2005 and P.L. 109-90 allocations for SHSGP, LETPP, and discretionary grants. Table 4 depicts amounts states, DC, Puerto Rico, and U.S. insular areas could receive based on the House version of H.R. 3199.

Table 1. FY2005 Appropriations and FY2006 Appropriations for State and Local Homeland Security Assistance

(all amounts in millions)

			FY2006 DHS Appropriations		
Program	FY2005 Approp.	FY2006 Budget Request	Passed by House	Passed by Senate	P.L. 109-90
State and Local Assistance Grants	_			\$1,518ª	
State Homeland Security Grant Program	\$1,100	\$1,020 ^b	\$750		\$550
Equipment, training, exercises, planning	[\$1,100]	[\$816]	[\$750]	_	[\$550]
Law enforcement terrorism prevention	_	[\$204]		_	_
Targeted Infrastructure Protection	_	\$600°		\$365 ^d	
Discretionary Grants	\$1,200	\$1,020	\$1,215		\$1,155
Urban Area Security Initiative (equipment, training, exercises, planning)	[\$860]	[\$816]	[\$850]		[\$740]

			FY2006 DHS Appropriations		
Program	FY2005 Approp.	FY2006 Budget Request	Passed by House	Passed by Senate	P.L. 109-90
Urban Area Security Initiative (law enforcement terrorism prevention)	_	[\$204]		_	
Port Security	[\$150]	_	[\$150]	_	[\$175]
Rail Security	[\$150]		[\$150]		[\$150]
Trucking Industry Security	[\$5]	_	[\$5]	_	[\$5]
Intercity Bus Security	[\$10]	_	[\$10]	_	[\$10]
Non-governmental Organizations Security	[\$25]				[\$25]
Buffer Zone Protection	_		[\$50]		[\$50]
Law Enforcement Terrorism Prevention	\$400	[\$408] ^e	\$400	\$400	\$400
Assistance to Firefighters	\$715	\$500	\$600	\$615	\$655
Emergency Management Performance Grants	\$180	\$170 ^f	\$180	\$180	\$185
Citizen Corps	\$15	\$50 ^g	\$40	\$25	\$20
State and Local Homeland Security Total	\$3,610	\$3,360	\$3,185	\$3,103	\$2,965

Source: P.L. 108-334 (FY2005 DHS appropriations); U.S. Office of Management and Budget, *Fiscal Year 2006 Budget of the United States Government* (Washington: GPO, Feb. 2005), Appendix, pp. 478-480; and P.L. 109-90 (FY2006 DHS appropriations).

- a. Senate-passed H.R. 2360 approves \$1.518 billion for "state and local assistance grants"; it does not, however, specify amounts for the State Homeland Security Grant Program or the Urban Area Security Initiative.
- b. This amount is to be allocated on risks, threats, vulnerabilities, and unmet first responder capabilities as determined by the DHS Secretary, provided that each state and territory receives no less than 0.25% of funds appropriated for this program. Additionally, 20% of this amount is to be used for law enforcement terrorism prevention activities.
- c. This amount is to be allocated at the discretion of the DHS Secretary and is for assistance in securing ports, transit systems, and other infrastructure determined by the DHS Secretary. Additionally, \$50 million is to be used for buffer zone protection plans.
- d. This amount includes: \$200 million for port security grants; \$100 million for rail and transit security grants; \$50 million for buffer zone protection; \$10 million for intercity bus security; and \$5 million for trucking industry security.
- e. This amount constitutes 20% of the \$1.02 billion requested for the State Homeland Security Grant Program and 20% of the \$1.02 billion for the Urban Area Security Initiative for law enforcement terrorism prevention activities.
- f. This amount is to be allocated based on P.L. 107-56, Section 1014, which guarantees each state a minimum of 0.75% of total appropriated funds.

g. Ibid.

Table 2. State Homeland Security Grant Program and LawEnforcement Terrorism Prevention Program Base Allocations:FY2005 and Estimated FY2006

(amounts in millions)

States and U.S. Insular Areas	FY2005 Base Allocations	P.L. 109-90 Allocations
All states, DC, and Puerto Rico	\$11.25	\$7.13
U.S. Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands	\$1.20	\$0.80
Total base amount	\$589.80	\$374.00

Source: Amounts based on CRS calculations of FY2005 SHSGP (\$1.1 billion) and LETPP (\$400 million) appropriation amounts, and, for FY2006, amounts in P.L. 109-90.

Table 3. State Homeland Security Grant Program, LawEnforcement Terrorism Prevention Program, and DiscretionaryBase and Risk Amounts:FY2005 and Estimated FY2006

Program	FY2005 actual appropriation	FY2006 estimated appropriation ^a
SHSGP	\$1,100.0	\$550.0
LETPP	\$400.0	\$400.0
Discretionary Grants ^b	\$1,200.0	\$1,155.0
Total	\$2,700.0	\$2,105.0
Base amount (percentage)	\$589.8 (22%)	\$374.0 (18%)
Risk amount (percentage) ^c	\$2,700.0 (78%)	\$2,500.0 (82%)

(amounts in millions)

a. Appropriation amounts in P.L. 109-90.

b. Includes grant funding for UASI, port security, rail security, trucking security, intercity bus security, and buffer zone protection programs.

c. In FY2005, DHS used a state's percentage of the nation's total population as the only risk factor. In the conference report accompanying H.R. 2360, the determination of risk factors is at the discretion of the DHS Secretary.

Table 4. House-Passed H.R. 3199 Guaranteed Minimum Allocations, Assuming the FY2006 Appropriation of \$2.1 Billion: **by State** (amounts in millions)

	House-passed H.R. 3199 (includes SHSGP, UASI, and LETTP)		
State	0.25%ª	0.45% ^b	
Alabama	\$5.26	_	
Alaska	—	\$9.47	
Arizona	—	\$9.47	
Arkansas	\$5.26		
California	_	\$9.47	
Colorado	\$5.26		
Connecticut	\$5.26		
Delaware	\$5.26		
Florida	\$5.26	_	
Georgia	\$5.26	_	
Hawaii	\$5.26	_	
Idaho		\$9.47	
Illinois	\$5.26	_	
Indiana	\$5.26	_	
Iowa	\$5.26	_	
Kansas	\$5.26	_	
Kentucky	\$5.26	_	
Louisiana	\$5.26	_	
Maine		\$9.47	
Maryland	\$5.26		
Massachusetts	\$5.26		
Michigan		\$9.47	
Minnesota		\$9.47	
Mississippi	\$5.26		
Missouri	\$5.26		
Montana		\$9.47	
Nebraska	\$5.26		
Nevada	\$5.26		
New Hampshire		\$9.47	
New Jersey	\$5.26		
New Mexico		\$9.47	
New York		\$9.47	
North Carolina	\$5.26		
North Dakota		\$9.47	
Ohio		\$9.47	
Oklahoma	\$5.26		
Oregon	\$5.26		
Pennsylvania		\$9.47	
Rhode Island	\$5.26	<i><i></i></i>	
South Carolina	\$5.26		
South Dakota	\$5.26		
Tennessee	\$5.26		

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	House-passed H.R. 3199 (includes SHSGP, UASI, and LETTP)		
State	0.25% ^a	0.45% ^b	
Texas	—	\$9.47	
Utah	\$5.26	_	
Vermont	_	\$9.47	
Virginia	\$5.26	_	
Washington	—	\$9.47	
West Virginia	\$5.26	_	
Wisconsin	_	\$9.47	
Wyoming	\$5.26	_	
Washington, D.C.	\$5.26	_	
Puerto Rico	\$5.26		
Virgin Islands	\$1.68	_	
Guam	\$1.68	_	
American Samoa	\$1.68	—	
North Marianas	\$1.68	—	
Total	185.56	170.46	

a. 0.25% is not a base, but an amount a state is guaranteed if it does not have a "significant international border" or does not border on a body of water through which an international boundary runs. H.R. 3199 authorizes DHS to determine what constitutes a "significant international border."

b. 0.45% is not a base, but an amount a state is guaranteed if it has a "significant international border" or borders on a body of water through which an international boundary runs. H.R. 3199 authorizes DHS to determine what constitutes a "significant international border."

Risk-Based Factors

A fundamental policy question associated with risk-based funding is what risk factors to use in determining the allocation of federal homeland security assistance. Examples of possible risk factors include perceived threats, homeland security capabilities, population size, critical infrastructure assets, and transportation assets. To accurately assess the risk factors, one would need to determine the threat to the population, critical infrastructure, and transportation, and determine the consequences of such a threat. Additionally, the homeland security capabilities needed to prevent, respond to, and recover from terrorist attacks and natural and technical disasters would need to be assessed. The methods of threat and vulnerability assessment suggest a variety of factors that might be used in devising a risk-based funding formula for allocating homeland security capability, population, critical infrastructure, transportation, and other factors that might be considered in a risk assessment.

Natural and Technical Disaster Risks.¹⁹ Recent history highlights the threats posed by natural and technical disasters, as evidenced by the 67 major disaster

¹⁹ Technical disasters are unintentional man-made emergencies such as an accidental chemical spill.

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declarations in 2004, and, most recently, by Hurricanes Katrina and Rita.²⁰ The DHS Office for State and Local Government Coordination and Preparedness (SLGCP) is currently tasked with developing and implementing a national program to enhance the capacity of state and local agencies to respond to incidents of terrorism, particularly those involving weapons of mass destruction (WMD), as well as natural disasters, through coordinated training, exercises, equipment acquisition, and technical assistance.²¹ SLGCP performs these functions through its administration of DHS homeland security assistance programs. The assistance includes the State Homeland Security Grant Program (SHSGP), the Urban Area Security Initiative (UASI), the Local Law Enforcement Terrorism Prevention Program (LETPP), the Assistance to Firefighters Grant Program (FIRE), the Emergency Management Performance Grant Program (EMPG), and Citizen Corps Programs (CCP).²²

As indicated later in this report, some observers acknowledge that since the terrorist attacks of September 11, 2001, DHS has been primarily focused on terrorism, rather than on natural and technical disasters. The majority of DHS's grant programs emphasize preparing for, responding to, and recovering from terrorist attacks.²³ As an example, the Administration's FY2006 budget request proposed that Assistance to Firefighters Grant Program (FIRE) applications that enhance terrorism response capabilities should be given priority.²⁴

As conferees negotiate House and Senate differences on homeland security grant funding, they may be asked to consider not only the grant allocation method, but also the inclusion of specific natural and technical disaster risks in the funding distribution formula. Possible issues in considering this type of change include (a) potential implementation difficulties in adding natural and technical disaster risks to the funding distribution formula; (b) whether DHS should be granted discretion in determining natural and technical disaster risk factors associated with any risk-based formula; and (c) whether it is advisable to change the status quo, or whether the DHS terrorism emphasis should be retained without change.

The following table displays risk factors proposed in H.R. 3199, as passed by the House, and P.L. 109-90. Neither specifically identifies natural and technical disaster risks as funding formula factors, but H.R. 3199 proposes that "other" risks or catastrophic risks be considered after priority is given to specific terrorism risks.

²⁰ See Federal Emergency Management Agency, "2004 Major Disaster Declarations," available at [http://www.fema.gov/news/disasters.fema?year=2004], visited Sept. 28, 2005.

²¹ U.S. Department of Homeland Security, Office for State and Local Government Coordination and Preparedness, *Fiscal Year 2005 Homeland Security Grant Program: Program Guidelines and Application Kit* (Washington: Nov. 2004), p. ii.

²² For a summary of these grant programs, see CRS Report RL32348, *Selected Federal Homeland Security Assistance Programs: A Summary*, by Shawn Reese.

²³ Ibid.

²⁴ U.S. Office of Management and Budget, *Fiscal Year 2006 Budget of the United States Government* (Washington: GPO, Feb. 2005), Appendix, p. 480.

Table 5. House-Passed H.R. 3199 and P.L. 109-90: Risk Factors

House-passed H.R. 3199	P.L. 109-90
Proposes to establish a First Responder Grants Board to evaluate and prioritize state homeland security assistance applications, based on current risk assessment of terrorist threats against critical infrastructure sectors. It also proposes the Board specifically consider the following threats: biological threats, nuclear threats, radiological threats, incendiary threats, chemical threats, explosives, suicide bombers, cyber threats, and any other threats. [Section 1804 (c)(3)]	No risk factors identified.
Proposes the Board take into account any other specific threat to population or critical infrastructure, giving greater weight to threats of terrorism. [Section 1804 $(c)(4)$]	

Federal Homeland Security Assistance Programs. Whether DHS homeland security assistance programs are suitable for addressing natural and technical disasters is another policy question conferees may be asked to consider.

Congress appropriated \$2.97 billion for DHS homeland security assistance in FY2006.²⁵ Three assistance programs — the State Homeland Security Grant Program (SHSGP), the Urban Area Security Initiative (UASI), and the Law Enforcement Terrorism Prevention Program (LETPP) — focus specifically on preparing for, responding to, and recovering from terrorist attacks. These programs were appropriated \$2.11 billion in FY2005 — 71% of total funding for DHS assistance programs. Three assistance programs are considered "all-hazard" focused: the Emergency Management Performance Grant Program (EMPG), Citizen Corps Programs (CCP), and Assistance to Firefighters (FIRE). These grant programs were appropriated \$860 million in FY2005 — 29% of the total funding for DHS assistance programs. SHSGP, UASI, and LETPP specifically identify training and equipment that are developed to respond to terrorist attacks, including WMD incidents.

It could be argued that the programs currently administered by DHS meet state and local needs in preparing for, responding to, and recovering from natural and technical disasters, because the training, equipment, planning, and exercises could support response to a terrorist attack or to a natural or technical disaster. The following table shows the similarities of natural and technical disasters and terrorist attacks.

²⁵ P.L. 109-90 (FY2005 DHS appropriations).

Natural and technical disasters	Terrorist attacks
Fires	Arson
Explosions	Bombings
Plane/Train Crashes	Aviation/Rail Terrorism
Floods	Dam/Dike Sabotage
Chemical Spills	Chemical Terrorism
Radiological Accidents	Dirty Bombs
Nuclear Accidents	Nuclear Terrorism
Epidemics, Biological Accidents	Biological Terrorism

Table 6. Natural and Technical Disaster and
Terrorist Attack Similarities

Source: GAO, *Homeland Security: DHS' Efforts to Enhance First Responders' All-Hazards Capabilities Continue to Evolve*, GAO-05-652 (Washington: July 2005), p. 27.

One could argue that most first responder capabilities in the areas of protection, response, and recovery are similar across all emergency events. These similar capabilities are reflected in such activities as controlling entry to emergency areas, recovering victims, treating casualties, providing basic living needs for survivors, restoring essential services, and maintaining law and order.²⁶

On the other hand, some might argue that the programs' focus on terrorism inhibits state and local governments' ability to adequately respond to natural and technical disasters. As examples, the State Homeland Security Grant Program (SHSGP) funds are to be used to enhance the capability of state and local governments to prepare for and respond to acts of terrorism, including those involving the use of weapons of mass destruction (WMD); the Urban Area Security Initiative (UASI) funds are to be used to enhance high-threat, high-risk urban area governments' ability to prepare for and respond to threats and terrorist attacks involving WMD; and the Law Enforcement Terrorism Prevention Program (LETPP) funds are available to assist state and local law enforcement agencies in activities to prevent terrorism. States and localities might maintain that they do not receive enough funding to prepare for, respond to, and recover from natural and technical disasters because 71% of DHS homeland security assistance is terrorism-focused.

All-Hazards. Some favor shifting governments' focus to one on all hazards — capabilities, assistance, and funding that support states and localities in preparing for, responding to, and recovering from any emergency, whether a natural and

²⁶ U.S. Government Accountability Office, *Homeland Security: The Department of Homeland Security's Efforts to Enhance First Responders' All-Hazards Capabilities Continue to Evolve*, GAO-05-652 (Washington: July 2005), p. 30.

technical disaster, or terrorism. For example, as stated by the Government Accountability Office (GAO) in a report dated July 2005:

Prior to September 11, 2001, the federal government's role in supporting emergency preparedness and management was limited primarily to providing guidance and grants for planning, mitigation, and equipment before large-scale disasters like floods, hurricanes, and earthquakes, and response and recovery assistance after such disasters. Since September 11, 2001, the federal government has awarded billions of dollars to state and local governments for planning, equipment, and training to enhance the capabilities of first responders to respond to terrorist attacks and, to a lesser extent, natural and accidental disasters.²⁷

The GAO report stated as well that officials from four first responder agencies reported that DHS required too much emphasis on terrorism-related activities in requests for equipment and training. The first responder agencies also reported that they had a greater need for assistance in preparing for natural and technical disasters than for terrorist attacks.²⁸

Also, the National Commission on Terrorist Attacks Upon the United States recommended in *The 9/11 Commission Report* that DHS should make homeland security funding contingent on adoption by emergency response agencies of an all-hazards Incident Command System (ICS).²⁹ On September 14, 2005, the 9/11 Commission issued a status report on its recommendations and stated, "In the event of a terrorist attack or natural disaster, clear lines of command and control for responding authorities are essential to minimize civilian and responder casualties."³⁰

Further, all-hazards emergency planning was emphasized by President Bush in a televised speech on September 15, 2005. He said:

Our cities must have clear and up-to-date plans for responding to natural disasters, and disease outbreaks, or a terrorist attack, for evacuating large numbers of people in an emergency, and for providing the food and water and security they need.³¹

The conferees might be urged to review the purpose and authorized activities of the DHS homeland security assistance programs. Specific proposals that could be put forward might include (A) the authorization of SHSGP and UASI funding for preparing for, responding to, and recovering from natural and technical disasters; or

²⁷ Ibid., p. 43.

²⁸ Ibid., p. 39.

²⁹ The 9/11 Commission Report, p. 397.

³⁰ National Commission on Terrorist Attacks Upon the United States, *Report on the Status of 9/11 Commission Recommendations: Part I: Homeland Security, Emergency Preparedness and Response*, Sept. 14, 2005, p. 2, available at [http://www.9-11pdp.org], visited Sept. 16, 2005.

³¹ Available at [http://www.whitehouse.gov/news/releases/2005/09/20050915-8.html], visited Sept. 16, 2005.

(B) increased funding to EMPG, FIRE, and CCP because these programs provide "all-hazards" protections. On the other hand, the conferees might opt to maintain the current focus of the majority of DHS homeland security assistance programs on terrorism threats.

The inclusion of natural and technical disaster factors in a funding formula might result in states and localities being better prepared for all hazards, not just terrorism. An all-hazards funding approach could allow states and localities to train, conduct exercises, and purchase equipment that is suited equally to natural and technical disasters and terrorist attacks.

This all-hazards approach, however, might arguably result in a funding formula that provides a disproportionate amount of funding to states and localities that have a low threat of terrorism, but a high threat of natural and technical disasters. If Congress were to include natural and technical disaster risks in the funding formula, it might consider prioritizing state and local recipients based on risks (natural and terrorist) that threaten highly populated states and cities, economic sectors, and critical infrastructure of national importance. The objective of this prioritization would be to ensure that homeland security funding considers not only natural and terrorism risks, but also the national consequences of the risks.

Evaluating Potential Risk Factors. In considering risk factors, however, Congress is faced with a question of what criteria to use when assessing potential risk-based formula variables. Risk factors include threats, the entity threatened, and the consequences of the threat to the specified entity. The assessment of potential risk factors is appropriately considered against the following criteria: ³²

1. Validity. Do the factors serve as measures or indicators of threats, the vulnerability of the potential target, or potential consequence if catastrophe strikes the target? For example, does higher population density indicate greater vulnerability to an attack involving a weapon of mass destruction? What attributes associated with densely populated areas (such as numbers of law enforcement personnel on duty, the presence of sensors, cameras, and other technology) would reduce the validity of the factor?

2. *Relevance*. What is the relationship between the factors and the identified items or characteristics? Is the relationship straightforward, or is it murky? For example, the total number of vehicles traveling through a mid-city tunnel would probably not be especially pertinent to a consideration of the risk of a hazardous material accident. The number of commercial trucks carrying hazardous material, however, would be more relevant.

³² For a discussion of criteria for evaluating the suitability of quantitative indicators, see, for example, Raymond A. Bauer, *Social Indicators* (Cambridge, MA: MIT Press, 1966). See also Anona Armstrong, "Difficulties of Developing and Using Social Indicators to Evaluate Government Programs: A Critical Review," paper presented at the 2002 Australasian Evaluation Society Conference, Nov. 2002, Wollongong, Australia.

3. *Reliability*. The quality of the source of the information used in a risk assessment process requires consideration. For example, population data from the U.S. Census Bureau are generally regarded as reliable and are used in a variety of formulas for allocating aid grants.

4. *Timeliness*. The currency of the data affects the quality of the discussion on potential risks. For example, daily intelligence reports that provide information on current terrorist threats would be considered more timely than a monthly or quarterly report.

5. *Availability*. Data necessary for the risk factor's use as a formula variable should arguably be readily and publicly available. Intelligence information that has been classified by the federal government and not shared with state and local officials would fail to satisfy this criterion.

Authority to Select Risk Factors

Who should identify the risk factors that will determine funding is another fundamental policy question. House-passed H.R. 3199 proposes risk factors that DHS is to consider, but it proposes to give a large degree of discretion to DHS. Even though the House version of H.R. 3199 proposes a list of risk factors for the First Responders Grants Board to evaluate and prioritize, it proposes that the DHS Secretary use discretion in the final determination of risk-based funding allocations to states and localities. P.L. 109-90 does not identify any risk factors for DHS consider, thus providing DHS with complete discretion in determining what factors to use in allocating homeland security assistance. One might argue that this discretion could result in DHS using population as the only risk factor in determining SHSGP and LETPP state allocations.

Given the importance of data availability and timeliness as criteria, Congress may not be in a position to accurately determine specific risk factors. However, because of its oversight responsibilities, Congress might opt to review DHS's riskbased methodology and risk-based distribution formula. The oversight could address the weight given to risk factors, specific threats to key assets and critical infrastructure, and plausible consequences to identified threats. On the other hand, by allowing a large degree of discretion to DHS in allocating federal homeland security assistance, Congress may not be able to determine, at least in open hearings, the reasoning behind the distribution of funding to states and localities.

Appendix A. Potential Risk Factors — A Discussion

Examples of possible risk factors include perceived threats, homeland security capabilities, population size, critical infrastructure assets, and transportation assets. In order to accurately assess risk, one would need to determine the threat to the population, critical infrastructure assets, and transportation assets, among other factors, and determine the consequences of such a threat. Additionally, the homeland security capabilities needed to prevent, respond to, and recover from terrorist attacks and natural and technical disasters would need to be assessed.

Threats

Homeland security threats facing the nation can be divided into terrorist attacks, and natural and technical (such as an accidental chemical spill) disasters. For a terrorist threat to be valid, intelligence or other indicators would have to show the plausibility of the threat. The risk-assessment criterion of *availability* of data may be crucial here. Restricted access to data due to, for example, security classification of intelligence information, may cause some to question the validity of the threat.

Additionally, DHS is responsible for preparing for, responding to, and recovering from natural and technical disasters. One could argue that recent history has shown the nation is threatened more by natural and technical disasters than by terrorist attacks. The 67 major disaster declarations in 2004, and Hurricanes Katrina and Rita, lend credibility to this argument.³³

Potential terrorist threats include the following:

- biological and chemical agents;
- WMD incidents;
- sniper and shooting incidents; and
- car and suicide bombers.

Potential natural and technical disaster threats include the following:

- hurricanes;
- flooding;
- earthquakes;
- landslides; and
- accidental hazardous material incidents.

Homeland Security Capability

Homeland security capabilities are the abilities, plans, training, personnel, and equipment of federal, state, and local government officials, first responders, and other entities to prevent, respond to, and recover from terrorist attacks, and natural and

³³ See Federal Emergency Management Agency, "2004 Major Disaster Declarations," available at [http://www.fema.gov/news/disasters.fema?year=2004], visited Sept. 28, 2005.

technical disasters. In order to assess federal, state, and local homeland security capabilities, one would need to identify perceived threats, key assets and critical infrastructure, vulnerabilities, and the consequences of terrorist attacks and natural and technical disasters. Once the assessments are completed, government officials, first responders, and other key stakeholders can determine the necessary capabilities. Potential homeland security capabilities might include

- emergency management plans;
- homeland security plans;
- identified essential tasks needed for responding to terrorist attacks and disasters;
- counter-terrorism training;
- natural and technical disaster training;
- identified personnel with assigned prevention, response, and recovery tasks;
- personnel protective equipment;
- interoperable communications equipment and plans;
- emergency medical response plans and equipment; and
- hospital mass casualty plans and equipment.

Population

- *Population*. Population referring here to the number of people in each state relative to the nation as a whole is arguably a suitable factor since a relatively larger number of people can be considered a greater risk.
- *Population Density*. Population density here, the average number of persons per square mile in each state can be considered a viable factor since a weapon of mass destruction (WMD) attack in an area with a high population density could result in a greater number of casualties than in an area with a low population density.

Critical Infrastructure

- *Nuclear Power Plants and Non-Power Reactors.* Nuclear power plants have been identified by a number of observers as potential terrorist targets. These include decommissioned nuclear power plants and non-power reactors, which are typically used in research and training facilities.³⁴
- *Seaports.* Given the possibility of WMD smuggling and the consequent potential for disrupting the national economy, many observers have identified seaports as a type of critical infrastructure that should be a risk factor.
- *Chemical Facilities.* Given the probable consequences of terrorist attacks on chemical facilities, or the theft of toxic chemical agents,

³⁴ See Nuclear Regulatory Commission website [http://www.nrc.gov/reactors.htm], visited May 18, 2005.

chemical facilities could be a risk factor, especially due to the location of some chemical facilities in high population density areas.

- *Military Facilities*. Pointing to the September 2001 terrorist attack on the Pentagon in Arlington, Virginia, some observers suggest that military facilities should be included in a risk-based distribution formula. Such facilities may contain large numbers of military personnel, high-value equipment, and volatile chemicals and explosives (such as ammunition).
- *Federal Facilities*. Some observers cite the 1995 bombing of the Alfred P. Murrah Building in Oklahoma City as evidence that civilian federal facilities are potential terrorist targets. The consequences of terrorist attacks on federal facilities would worsen if the attacks disrupted the federal response to attacks or led to the disruption of vital federal government operations.
- *Dams*. Dams could be included in a risk-based distribution formula, since a terrorist-caused explosion could potentially release a high volume of water into populous areas, destroy any electrical energy production at the dam, and cause significant economic damage.
- *Electrical Power Plants (Non-Nuclear)*. The likely economic and psychological consequences of terrorist attacks on electrical power plants might be a consideration in designating power plants as a risk factor.
- *Food and Agricultural Centers*. Terrorist attacks on the nation's food supply and agricultural production might be a risk, considering the possible economic and psychological effects of the attacks.
- *Oil and Natural Gas Refineries and Pipelines*. Even though the majority of oil and natural gas refineries (and pipeline distribution systems) are located in low population density areas, terrorist attacks on them could have severe economic and environmental consequences.
- *Financial Centers*. One could point to the elevation of the Homeland Security Advisory System to "high" in August 2004, when financial institutions were identified as possible targets of terrorist attacks, as reason to consider the centers risk factors. Additionally, an interruption of operations in the nation's financial centers could have possible economic consequences.

Transportation Assets

- *Rail and Mass Transit Systems*. Arguably, the 2004 and 2005 terrorist bombings of trains in Madrid and London could cause some to identify rail and mass transit systems as a risk factor.
- *Bridges and Tunnels*. Given the nation's vast number of bridges and tunnels, considering every one of them a risk factor is not feasible. Major bridges and tunnels, such as the Brooklyn and Golden Gate Bridges and the Holland Tunnel, might be considered risk factors due to their cultural significance. Additionally, bridges and tunnels that are important links in transportation routes for large numbers of persons might qualify as risk factors.

• *Airports*. One could point to the September 2001 terrorist attacks and the use of commercial aircraft as a weapon as a valid argument for considering airports a risk factor. Not only are airports at risk of terrorists boarding aircraft and using them as weapons, but also, some may argue, an attack on a crowded airport or the shooting down of an aircraft while it is landing or taking off further increases the risk and the consequences of an attack.

Other Factors

- *Stadiums and Arenas*. Because they conentrate large number of persons in a relatively small location, stadiums and arenas especially during significant events such as sports championship games could be considered a risk factor.
- *Educational Institutions*. Arguably, the psychological consequences of terrorist attacks would be greatly increased if terrorists were to target educational institutions, at the elementary, secondary, or college level. Given the sense of vulnerability parents would experience following any such attack, educational institutions might be considered a risk factor; however, like bridges and tunnels, the vast number of educational institutions in the nation might hamper the assessment of risk to these institutions.
- *Skyscrapers and Large Commercial Buildings*. As with the attack on the Pentagon in September 2001, the attack on the World Trade Center Towers with its economic and psychological consequences arguably identifies skyscrapers and large commercial buildings as valid risk factors.
- *International Borders and Coastlines*. It can be argued that states with international borders and coastlines face greater risk of terrorist attacks, because terrorists may have greater access to such states.
- *Tourism*. Due to the potential for mass casualty incidents and economic damage from terrorist attacks, tourist locations are a possible risk factor. In addition to the location of tourist destinations, the tourist population could possibly be considered a risk factor.