

Concepts and Challenges in Using Risk Management in a Homeland Security Setting

**Pacific Northwest Intergovernmental Audit
Forum**

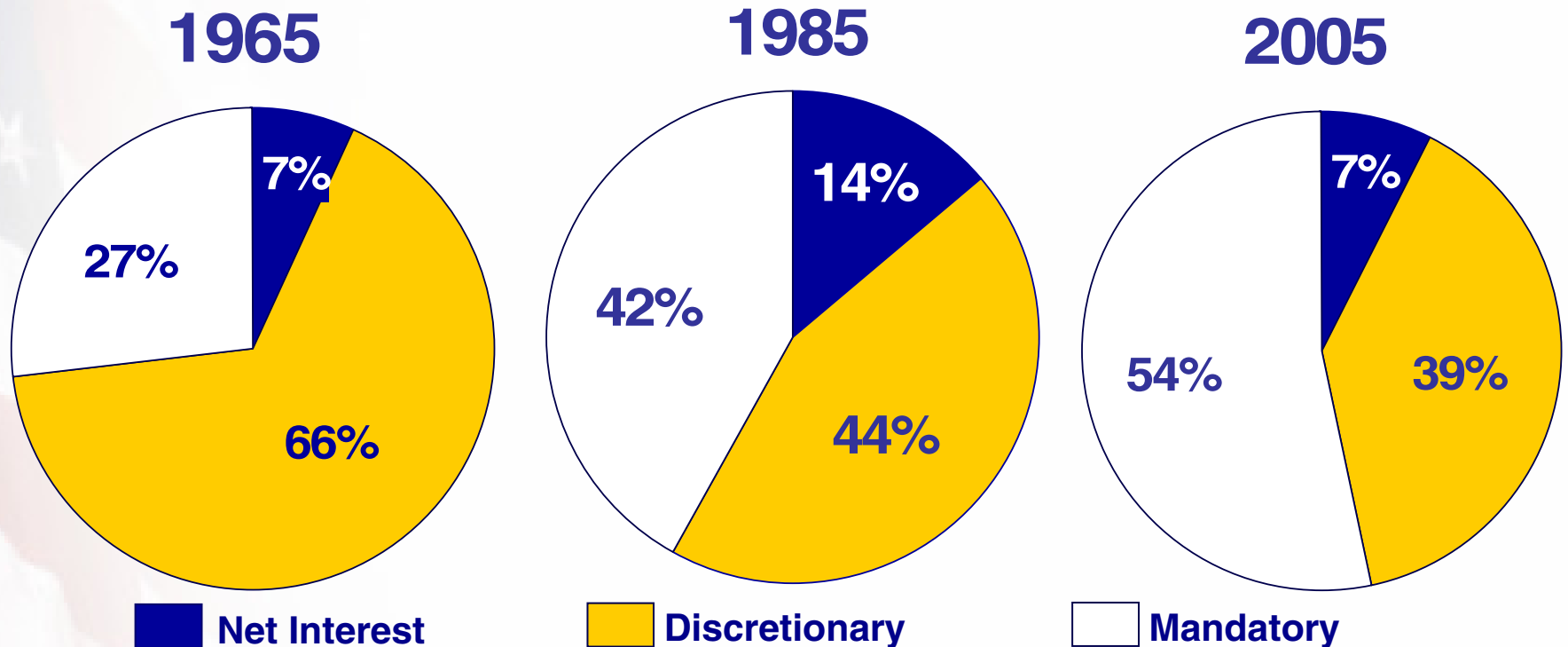
**Neil Asaba
Senior Analyst, Homeland Security and Justice Issues
U.S. Government Accountability Office**

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Overview

- Fiscal challenges and deficits call attention to re-examining policies, programs, and resources
 - Risk management is one tool for informing resource allocation decisions
 - Much more needs to be done in applying risk management in a homeland security setting
 - Future challenges in using risk management are extensive
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Federal Spending for Mandatory and Discretionary Programs



Source: Office of Management and Budget.

Estimated Fiscal Exposures

(\$ trillions)

	2000	2005
• Explicit liabilities	\$6.9	\$9.9
<ul style="list-style-type: none"> • Publicly held debt • Military & civilian pensions & retiree health • Other 		
• Commitments & contingencies	0.5	0.9
<ul style="list-style-type: none"> • E.g., PBGC, undelivered orders 		
• Implicit exposures	13.0	35.6
<ul style="list-style-type: none"> • Future Social Security benefits 	3.8	5.7
<ul style="list-style-type: none"> • Future Medicare Part A benefits 	2.7	8.8
<ul style="list-style-type: none"> • Future Medicare Part B benefits 	6.5	12.4
<ul style="list-style-type: none"> • Future Medicare Part D benefits 	--	8.7
Total	\$20.4	\$46.4

Source: U.S. government's consolidated financial statements (CFS).

Note: Estimates for Social Security and Medicare are at present value as of January 1 of each year as reported in the CFS and all other data are as of September 30.

How Big is Our Growing Fiscal Burden?

Total fiscal exposures	\$46.4 trillion
Total household net worth¹	\$51.1 trillion
Burden/Net worth ratio	91 percent
Burden²	
Per person	\$156,000
Per full-time worker	\$375,000
Per household	\$411,000
Income	
Median household income³	\$44,389
Disposable personal income per capita⁴	\$30,431

Notes: (1) Federal Reserve Board, Flow of Funds Accounts, Table B.100, 2005:Q3 (Dec. 8, 2005); (2) Burdens are calculated using total U.S. population as of 9/30/05, from the U.S. Census Bureau, full-time workers for 2004, reported by the Bureau of Economic Analysis, in NIPA table 6.5D (Aug. 4, 2005); and households for 2004, reported by the U.S. Census Bureau, in *Income Poverty & Health Insurance Coverage in the US: 2004* (Aug. 2005); (3) U.S. Census Bureau, *Income Poverty & Health Insurance Coverage in the US: 2004* (Aug. 2005); and (4) Bureau of Economic Analysis, *Personal Income and Outlays: October 2005*, table 2, 2005:Q3, (Dec.1, 2005).

Sources: GAO analysis.

America's Fiscal Future: Growing Emphasis on Re-examining Policies and Programs

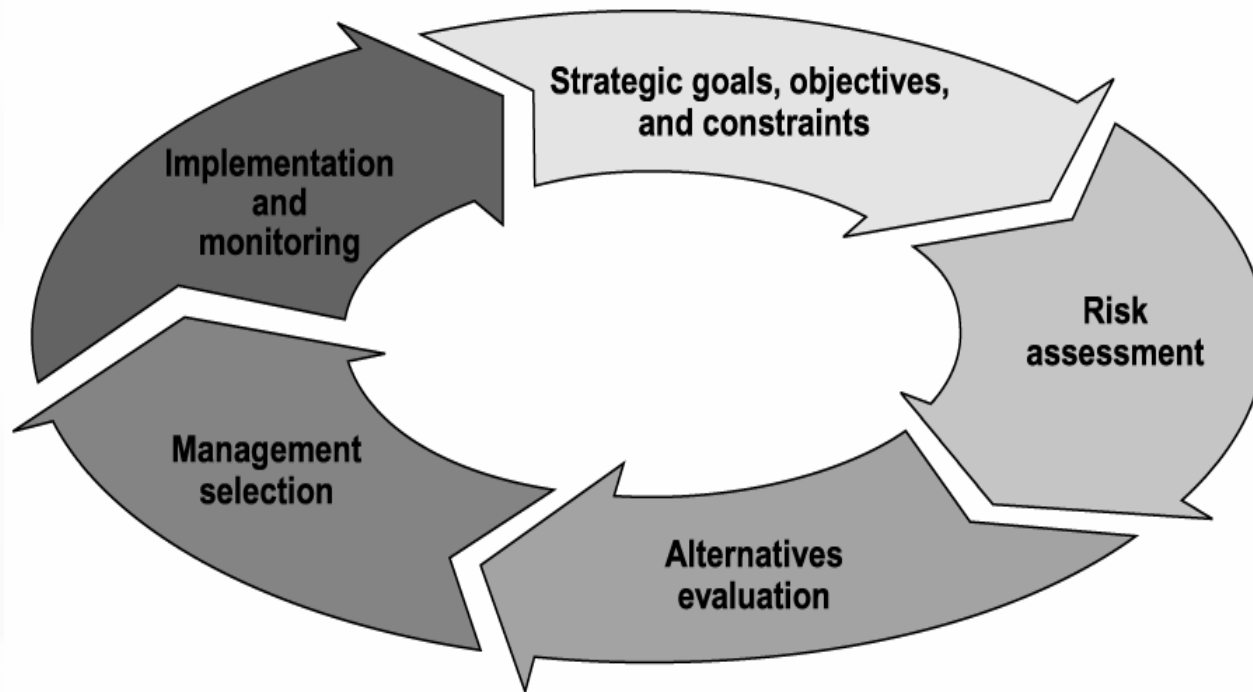
- While DHS has been one of the blessed few, it may not remain that way for long. While substantial gaps in security remain, resources for closing the gaps are limited.
- Growing emphasis on re-examining policies, programs, and budgets
 - Reexamine the base of all discretionary spending programs
 - Expand scrutiny of proposed new programs, policies, or activities
- Risk management is one tool for informing decisions on policies, programs, and resource allocation.

Risk Management: A Tool for Informing Resource Allocation in Homeland Security

- Congress, the President, and the Secretary of DHS have endorsed risk management as a way to inform resource allocation decisions.
 - Homeland Security Act of 2002 calls for assessing risks and vulnerabilities of critical infrastructure and key resources
 - Presidential Directives 7 (Critical Infrastructure Protection) and 8 (National Preparedness endorsed risk management as a way to allocate scarce resources.
 - Secretary Chertoff has said that operations and budgets will be viewed through the prism of risk.

Little Guidance on Applying Risk Management in a Homeland Security Setting

- Applying risk management in anti-terrorism programs is relatively new and historical data on domestic terrorism is relatively scarce.
- Applying risk management in preparing for and responding to natural disasters has a longer history, especially as used by the insurance industry.
- Overall, there is little guidance on the application of risk management in a homeland security setting.
- Given that there were no generally agreed upon requirements or processes for risk management, GAO developed a framework that could be applied to homeland security and other settings.



Source: GAO.

Risk Management is Evolving

- The risk management framework is intended to be a starting point for risk management activities and will likely evolve as processes mature and lessons are learned.
- After the events of 9/11, GAO's work construed risk management as an evaluation of threat, vulnerability, and criticality, that is, as activities mainly associated with risk assessment.

Much More Needs to Be Done In Applying Risk Management to Homeland Security

- GAO has examined DHS risk management efforts in protecting key infrastructure and in responding to natural disasters:
 - Risk management efforts at the Coast Guard (maritime security), ODP (port security grant program), and IAIP (infrastructure protection)
 - DHS' efforts regarding preparedness, response, and recovery to Hurricane Katrina

Much More Needs to Be Done In Applying Risk Management to Homeland Security

- Key findings on DHS risk management efforts in protecting critical infrastructure include:
 - Relative probability of various terrorist scenarios is key to carrying out risk assessments.
 - Methodology for comparing and prioritizing risks of assets within and across sectors has experienced setbacks and contains information on vulnerabilities, but has little information on the relative probability of various threat scenarios.

Much More Needs to Be Done In Applying Risk Management to Homeland Security

- Uniform policies, guidelines, and methodologies for integrating federal infrastructure protection and risk management activities within and across sectors is key.
- Multiple departments and agencies as well as the private sector are involved in assessing infrastructure protection. DHS is challenged because it must depend on others to follow risk management principles for programs and budgets. Whether agencies will implement risk management in a way that informs program and budget review processes remains uncertain.

Much More Needs to Be Done In Applying Risk Management to Homeland Security

- In examining lessons learned from Hurricane Katrina, we called attention to the importance of using risk management when developing the nation's capabilities in responding to a catastrophic natural disaster.
 - Developing data on the likelihood of a catastrophic disaster occurring is key.
 - Understanding vulnerabilities of geographic areas where catastrophic disasters could occur and examining the costs and benefits of possible actions that could be taken could be improved.

Moving Forward: Future Challenges in Using Risk Management Are Extensive

- Integrating a concern for risk into management components involving strategic mission, alternatives evaluation, management selection, and implementation and monitoring will take time, attention, and leadership.
 - Coordinating risk assessment efforts with the intelligence community will help risk managers assess the relative probability of various threat scenarios.
 - Comparing and prioritizing critical infrastructure across different sectors (e.g. transportation, nuclear reactors, oil refineries) across the country present challenges and call attention to the need for uniform guidance, along with metrics and criteria, for agencies involved in homeland security programs.

Moving Forward: Future Challenges in Using Risk Management Are Extensive

- Several Federal Departments or agencies are involved in homeland security activities and DHS is challenged in holding other federal agencies accountable for carrying out risk management principles. It is unclear how risk management will be applied by these agencies in a way that informs program and budget review processes.
- A systematic and coordinated approach to risk management offers the best assurance of informing decisionmakers on what the relative priorities should be and what strategies and approaches do the most good

Moving Forward: Future Challenges in Using Risk Management Are Extensive

- The final hurdle is the Congress
 - Members and committees may agree with risk management principles, but may be reluctant to apply them to specific programs and appropriations decisions
 - DHS should take on education role

GAO Reports on Risk Management

- GAO reports (www.gao.gov) that discuss risk management include:
 - **RISK MANAGEMENT: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure (GAO-06-91).**
 - **CATASTROPHIC DISASTERS: Enhanced Leadership, Capabilities, and Accountability Controls Will Improve the Effectiveness of the Nation's Preparedness, Response, and Recovery System (GAO-06-618).**
- I can be reached at asaban@gao.gov or at 206-287-4774.