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Hard Choices

Responsible Defense in an Age of Austerity

By Lieutenant General David W. Barno, USA (Ret.), Nora Bensahel
and Travis Sharp



**Center for a
New American
Security**

About the Report

“Hard Choices” is part of a yearlong project called Responsible Defense at the Center for a New American Security (CNAS). The project examines how the United States should maximize its national security in an era of defense spending reductions. CNAS gratefully acknowledges financial support from the Smith Richardson Foundation, which made the project possible.

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Cover Image

Soldiers with the U.S. Army’s 4th Brigade Combat Team, 101st Airborne Division out of Fort Campbell, Ky., walk along at sunset at the Transit Center in Manas, Kyrgyzstan Aug. 8, 2011.

(DAVID GOLDMAN/The Associated Press)

TABLE OF CONTENTS

I.	Executive Summary	5
II.	Introduction	6
III.	Changes to U.S. Defense Strategy	9
IV.	Guiding Principles	11
V.	Four Budget Scenarios	13
VI.	Reforming Military Pay and Benefits	23
VII.	Conclusion	26
Appendix:	Side-by-Side Comparison of National Defense Budget Scenarios	33

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HARD CHOICES: RESPONSIBLE DEFENSE IN AN AGE OF AUSTERITY

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I. EXECUTIVE SUMMARY

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The United States needs to rethink its defense strategy for an age of fiscal austerity. The Budget Control Act of 2011 requires the government to reduce spending dramatically over the next decade, and a congressional “super committee” is now seeking to cut expenditures by more than \$1 trillion beyond the substantial cuts already enacted this year.

Decisions made by Congress will affect the size, shape and capabilities of the U.S. military and the Department of Defense (DOD) for decades to come. As lawmakers debate their options, they must consider two questions: How much must the U.S. government spend on defense to secure its people and interests, and how much risk is it willing to tolerate?

To help answer these questions, this report – the first in the Center for a New American Security’s *Responsible Defense* series – outlines the ends, ways and means of U.S. defense strategy under a range of budgetary constraints. We acknowledge that these constraints are driving strategy, not the other way around, but accept this as an unavoidable reality in today’s political environment. Therefore, the report seeks to highlight the strategic consequences of these constraints, so that political leaders grasp the risks and trade-offs the cuts portend. We offer four scenarios for defense budget reductions, and identify what we think are the best possible ways to cut military force structure, end strength, procurement and overhead to reach the required levels of savings. We also consider the modified roles and missions, operational approaches and vulnerabilities that might result.

We believe that the United States should continue to pursue the ends of its longstanding global engagement strategy, but should do so using different ways and means than those codified in the Obama administration’s current national security plans. A new version of America’s global engagement strategy remains affordable, even in today’s fiscal environment, and pursuing it will help prevent and deter conflicts in the years ahead.

However, we judge that the U.S. military’s ability to execute America’s global engagement strategy,

We judge that the U.S. military's ability to execute America's global engagement strategy, as it is currently articulated, will be placed at high risk if total national defense cuts exceed \$500-550 billion over 10 years. This judgment could change if policymakers recalibrate America's global engagement strategy and/or generate savings by reforming military pay and benefits for future service members.

as it is currently articulated, will be placed at high risk if total national defense cuts exceed \$500-550 billion over 10 years.* This judgment could change if policymakers recalibrate America's global engagement strategy and/or generate savings by reforming military pay and benefits for future service members. Cutting beyond this range without such reform will force the U.S. military to reduce its force structure in ways that will impair its ability to protect vital American interests worldwide, engage key allies and modernize after a decade of grueling ground wars.

II. INTRODUCTION

The U.S. military faces significant budget cuts in the years ahead. Yet unlike the drawdown after the Cold War, the United States today is involved in major military operations abroad; fields a military force that needs modernizing despite a decade of soaring budgets; and suffers from a strikingly volatile global economy. Most importantly, the United States faces more serious security challenges than it did after the Soviet Union's collapse, with potentially aggressive regimes and transnational terrorism presenting clear threats to America and its allies.

Nonetheless, in the face of soaring budget deficits and ballooning national debt, the desire to cut government spending continues to gain momentum in the United States. The Budget Control Act (BCA), signed into law in August 2011 as part of negotiations over raising the U.S. debt ceiling, imposes discretionary spending caps from Fiscal Year (FY) 2012 to FY 2021. It also establishes a Joint Select Committee on Deficit Reduction to identify at least \$1.5 trillion in additional savings. If this super committee fails to craft a proposal that 1) cuts the deficit by at least \$1.2 trillion and 2) is enacted by Congress by January 15, 2012, a spending reduction process would automatically cut \$1.2 trillion in discretionary and mandatory spending from FY 2013 to 2021. These cuts would be divided evenly between defense and non-defense accounts, and the defense cut would fall almost entirely on DOD's base budget, which totaled \$530 billion in FY 2011.¹

If implemented fully over the next decade,² the BCA's spending caps and automatic spending reduction process could cut national defense (function 050)³ spending by up to \$1 trillion calculated using

* This range is calculated using the Congressional Budget Office's August 2011 baseline (excluding war costs), which sets future budget authority equal to the Fiscal Year (FY) 2011 appropriation adjusted for inflation. The pace of potential cuts also matters; gradual reductions would be easier to absorb than the sudden cuts that would occur under the Budget Control Act's automatic spending reduction process. "National defense" refers to budget function 050, which includes funding for DOD, nuclear weapons activities in the Department of Energy, and miscellaneous national security activities in non-DOD agencies. Function 050 is not the same as the "security" spending category that the Budget Control Act uses for its discretionary spending caps during FY 2012-2013.

If implemented fully over the next decade, the BCA's spending caps and automatic spending reduction process could cut national defense spending by up to \$1 trillion.

the Congressional Budget Office's (CBO) baseline for current plans. The exact amount is impossible to predict because it depends on future economic conditions and decisions by Congress. However, the Office of Management and Budget and the CBO have estimated a potential range from \$350 billion to \$850 billion over 10 years.⁴ Any budget cuts initiated this winter will affect directly the U.S. military's management and planning because the Pentagon must comply with existing law.⁵

For the most part, the debate about budget cuts has downplayed both military strategy and the potential consequences for U.S. national security. The super committee probably will perpetuate this trend, given its short timeline and focus on overall spending reductions.⁶ Yet a more complete examination of America's defense strategy and budget is urgently needed so policymakers understand the risks of cuts and the opportunities to create a more fiscally disciplined defense establishment that can still protect the nation.

This report outlines ends, ways and means for U.S. defense strategy under a range of budgetary constraints. We acknowledge that these constraints are driving strategy, not the other way around, but accept this as an unavoidable reality in today's political environment. Therefore, we seek to identify the strategic consequences of these constraints, so that political leaders grasp the risks and trade-offs that the cuts portend.

We provide four scenarios for defense budget reductions, each of which is consistent with cuts that Congress could implement over the next decade under the BCA's framework.

- Reposition and Reset: \$350-\$400 billion
- Constrained Global Presence: \$500-\$550 billion
- Selective Leverage: \$650-\$700 billion
- Focused Economy of Force: \$800-\$850 billion

The first scenario approximates the potential cuts resulting from the BCA's spending caps, and the fourth scenario approximates the potential cuts resulting from its automatic spending reduction process. We selected the second and third scenarios as incremental points in between. For each scenario, we attempt to present the optimal approach given the specified budgetary constraints. We identify what we believe are the best possible ways to cut military force structure, end strength, procurement and overhead to reach each required level of savings, and consider the modified roles and missions, strategic risks and trade-offs that might result.

Readers should note that the four scenarios exclude possible cost savings from reforming military pay and benefits. Personnel programs are fundamentally different from other types of defense costs, and reforming them can affect in unpredictable ways the choices that service members make about their careers.⁷ Personnel reforms also face enormous political obstacles that make them difficult to achieve in the near term, even though spiking costs will probably make them necessary in the long term.⁸ Policymakers could adopt such reforms to generate savings that would offset cuts in any of the scenarios or to achieve additional deficit reduction savings from DOD. We discuss this issue at the end of the report.

The Defense Budget Cuts in Context

POLITICAL CONTEXT

Most national security analysts think about how defense cuts will affect military capabilities, but it is important to recognize the broader political and economic considerations that will influence budgetary decisions. The White House and members of Congress, including House Armed Services Committee Chairman Buck McKeon, have announced publicly their opposition to defense cuts of the magnitude that would occur under the Budget Control Act's automatic spending reduction process.⁹ A number of concerns animate this resistance, but one political issue looms largest of all: job losses.

The economy and unemployment will likely be the most important issues in the 2012 election, and major cuts to military personnel and weapons programs will cause many people to lose their jobs (although some studies show that defense expenditures create fewer jobs than other types of government spending).¹⁰ Officials at the Department of Defense (DOD) have said that if automatic reductions are triggered, the resulting defense cuts could increase unemployment nationwide by a full percentage point.¹¹ Depending on how and when the cuts are enacted, the Pentagon – the nation's largest employer – may have to start reducing civilian and military personnel during the 2012 campaign season.¹²

Some observers argued that cutting military pay and benefits carries greater political risk than cutting weapons programs because law-

makers consider veterans to be a more influential constituency than the defense industry.¹³ But as a senior DOD official told us, "Weapons program cuts are no less political than personnel cuts. They're just a different kind of political."¹⁴ The aerospace and defense industry directly employs one million Americans nationwide, and many local economies heavily depend on defense dollars.¹⁵

More importantly, the post-Cold War drawdown and earlier experiences have demonstrated that once parts of the defense industrial base shrivel away, they are extremely difficult to reconstitute even if the nation faces a dire security threat.¹⁶ The U.S. government could promote foreign military sales and reform export controls to help preserve the defense industrial base during a budget drawdown.

DEFENSE PLANNING CONTEXT

The Pentagon's plans consistently outpace available resources.¹⁷ The Congressional Budget Office estimates that for DOD to execute its current base budget program from Fiscal Year (FY) 2012 to FY 2021, it will need \$480 billion, or \$48 billion per year, in additional funding beyond what it would receive over that decade if its FY 2011 budget increased only at the rate of inflation each year.¹⁸ This gap will widen if the defense budget declines in real terms and DOD does not scale back its plans – resulting in a U.S. military establishment that increasingly will struggle to execute its strategies.

Policymakers should not be fooled into thinking that setting defense

spending at the levels sustained in previous eras will support similarly-sized forces. Because of systematic cost growth, the amount of money spent on the U.S. military in 2001 would not be enough to afford the same force today. The Pentagon's operations and maintenance, personnel, military and civilian compensation, military health care and procurement costs have grown significantly on a per person/unit basis since 2001. These costs will continue to grow through the end of the decade if DOD's current plans are implemented.¹⁹ Military health care costs alone have grown by 85 percent in real terms over the past 10 years.²⁰

The ever-growing cost of maintaining the U.S. military during two wars has contributed to DOD's failure to procure large quantities of new aircraft, ships and combat vehicles over the past decade.²¹ These new weapons systems are also quite expensive, making it harder to buy them in sufficient quantities. Compared with the late 1980s, the U.S. Air Force today has approximately 2,500 fewer aircraft, and the U.S. Navy has fewer than half the number of ships.²² Many of the aircraft, ships and vehicles in service are decades old and need upgrades or replacements. The U.S. military also faces considerable costs to refurbish equipment battered in Afghanistan and Iraq.²³ For example, the Army and Marine Corps have estimated that together they will need more than \$30 billion to repair and replace equipment worn out from battle.²⁴ These burgeoning investment needs are growing at a time when the Pentagon's budget is expected to shrink.

III. CHANGES TO U.S. DEFENSE STRATEGY

The United States has pursued a remarkably consistent military strategy over the past 65 years, although different American leaders have adopted varying approaches to national security.²⁵ This strategy, which we refer to as “global engagement,” has involved security cooperation with allies, the maintenance of a military presence in key regions, selective engagement in armed conflicts and the pursuit of American military and economic primacy to protect U.S. interests. This strategy generally has served the United States well and has broadly sought to achieve the following objectives:²⁶

- Guard the U.S. homeland against territorial invasion or attack by another country.
- Deter potential adversaries from attacking the United States and its allies.
- Protect trade routes and access to global energy supplies on which the U.S. and allied economies depend.
- Help secure the global commons of sea, air, space and cyberspace, on which the U.S. and global economic systems rely.
- Defend the United States against transnational security threats, such as nuclear proliferation and international terrorism.
- Support international laws and norms which help bolster peace and security.

Today’s U.S. military continues to pursue these objectives, but it does so in a strategic context that has changed considerably in recent years. American leaders seek dramatic new constraints on U.S. government spending due to concern about deficits that are larger relative to the economy than any time since 1945. National debt held by the public now surpasses \$10 trillion – equal to 67 percent of America’s gross domestic product.²⁷ Additionally, the U.S. withdrawal from Iraq, the

death of Osama bin Laden, the accelerating draw-down in Afghanistan, the so-called Arab Spring and China’s continued rise present an evolving global environment that is different from what the Obama administration faced when it released its National Security Strategy in May 2010.

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In light of the significant budget cuts now being considered, civilian leaders should not ask the military to execute the expansive defense plans codified in the Obama administration’s National Security Strategy, Quadrennial Defense Review (QDR) and National Military Strategy. These documents did not adequately address the possible effects of budgetary constraints. In fact, congressional legislation prohibits the QDR from addressing such constraints.²⁸

Given today’s fiscal constraints, we believe that the United States should continue to pursue the ends of its long-running global engagement strategy, but should do so using different ways and means. We are convinced that a new version

of America's military strategy remains affordable, even in today's fiscal environment. The United States can pursue global engagement in alternate ways, some of which do not require the same forces, bureaucracy,²⁹ infrastructure and expenses³⁰ called for in current plans.

The U.S. military should focus on the Western Pacific and Indian Ocean and broaden engagements along the Pacific Rim, largely through a stronger maritime and air presence as well as the strategic use of ground forces to support key allies.

Constrained resources require U.S. civilian and military decisionmakers to prioritize key geographic regions more effectively. The U.S. military should focus on the Western Pacific and Indian Ocean and broaden engagements along the Pacific Rim, largely through a stronger maritime and air presence as well as the strategic use of ground forces to support key allies.

The Middle East and Mediterranean Basin should remain an area of vital interest, second only to East Asia. In this region, the United States should pursue a defensive strategy designed to contain potentially hostile regimes and dismantle terrorist networks while ensuring an uninterrupted flow of energy supplies.

While the United States should remain engaged with key allies in South and Central Asia, it

should pursue a more limited defensive military posture focused on limiting nuclear proliferation, preventing a major Indo-Pakistani conflict and disrupting terrorists capable of striking the United States.

The U.S. military should consider Europe a tertiary priority as NATO's and its member states' military capabilities decline. Other areas of the world – especially Africa and Latin America – should be the lowest priority, and the U.S. military should focus only on deterring and addressing specific threats to U.S. vital interests in those regions.

IV. GUIDING PRINCIPLES

This report's four budget scenarios reflect these regional priorities in a manner consistent with today's resource constraints. Each scenario presents examples of specific budgetary changes guided by four principles.

First, naval and air forces will grow increasingly important in the future strategic environment.

As a result, the Pentagon should prioritize these forces and not distribute the expected defense cuts evenly across the services, something it has done historically by adhering to the "golden ratio," the near equal division of its budget among the military services.³¹ The U.S. military needs to bolster its influence in the Asia-Pacific region and should do so by engaging more with key allies and by developing long-range and precision weapons, particularly as potential adversaries like China further develop anti-access capabilities. Large active-duty ground forces will be needed less as the United States continues to withdraw from Afghanistan and Iraq, though the nation will still need them to deter aggression by hostile nations and to advise and assist U.S. allies facing regional instability. Cutting the number of ground forces may incur less risk than canceling naval and air modernization programs because the U.S. military can build up additional ground forces more quickly than it can acquire additional naval and air forces once production lines have closed.³²

Second, the U.S. military should strive to increase interdependence across the four services and to strengthen the continuum of service between the active and reserve components.

The U.S. military is over-invested in expensive and often redundant capabilities that discourage interdependence among the services. All four military services currently operate their own air forces, with limited sharing of aircraft. Some services have acquired substantial assets beyond the

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requirements of their core mission. For instance, the U.S. Marine Corps – the smallest U.S. service – today boasts more tanks, artillery, fixed-wing aircraft and uniformed personnel than the entire British military.³³ Given the changing operational environment, today's force has too many heavy armored formations, short-range strike fighters, amphibious capabilities and manned aircraft. While some redundancy provides a useful hedge against risk, today's extensive overlap among and within each service is unnecessary and no longer affordable, especially when joint interdependencies – such as Army helicopters flying off Navy carriers or Air Force C-130s supporting Marines – can yield comparable warfighting effectiveness at less expense. The Army and Marines, in particular, should transfer more of their expensive heavy capabilities – such as armor, artillery and fixed-wing aircraft – to their reserve components to save money and maintain a strategic hedge in the event of a large ground war.³⁴ Implementing this change will require DOD and Congress to continue improving the policies that support an operational reserve component.³⁵

Third, the U.S. military should generate requirements for new weapons systems based on realistic assessments of likely threats, not on the pursuit of maximalist capabilities.³⁶ Throughout the Cold War, defense plans were built mostly around specific assumptions about the threat posed by the

Soviet Union. Since the end of the Cold War, however, the military has tried to prepare for a wider range of potential threats and to design capabilities for unknown but presumably potent future adversaries. This uncertainty has encouraged the military services to develop weapons systems requirements that are often unmoored from either technological limits or defined enemy capabilities.³⁷ In 2009, then-Defense Secretary Robert Gates criticized this proliferation of “exquisite” requirements that are tailored for a limited number of niche missions and too often ignore affordability.³⁸ Given that the defense budget is likely to remain constrained for years to come, DOD should return to a more restrictive planning and acquisition system that applies limited resources to the most serious threats to U.S. vital interests.

programs to discover breakthrough technologies, such as stealthy, long-range, combat-capable unmanned aircraft systems (UASs), along with unmanned submersibles. Technological advances deliver capabilities today that were unimaginable 20 years ago, when many of the replacement systems for legacy weapons systems were conceived. Prioritizing research and development will require new funds, which can be generated by limiting or eliminating purchases of expensive, highly specialized weaponry. The default model for many acquisition dilemmas confounding all four military services should be to accept higher risk absent a proximate short-term threat and invest in more targeted threat-focused research and development programs over the long term.

The U.S. military should increase investments in certain research and development programs to discover breakthrough technologies, such as stealthy, long-range, combat-capable unmanned aircraft systems, along with unmanned submersibles.

Fourth, in the absence of major near-term threats, the Pentagon should pursue research and development to build a bridge between current weapons systems and highly capable future systems. The U.S. military should increase investments in certain research and development

V. FOUR BUDGET SCENARIOS

Without considering the specific trade-offs necessitated by defense spending reductions, it is hard for policymakers to grasp the risks incurred. The details of each budget scenario are discussed below, and are described fully in the appendix along with the projected cost savings. Readers should consider these estimates approximate and sometimes conservative, because they do not always capture cascading savings that would result from policy changes.³⁹

All four scenarios share several features. They:

1. Prioritize investment in breakthrough technologies for stealthy, long-range sea- and ground-based combat UASs, along with unmanned submersibles, to ensure American dominance in the next generation of warfare.⁴⁰
2. Preserve current plans for Special Operations Forces, which will play a vital role in future military operations.
3. Retire six CG-47 cruisers and reduce the planned procurement of Littoral Combat Ships (LCS), and, depending on the scenario, reinvest some of the savings into DDG-51 destroyers equipped with Aegis missile defense systems.
4. Reduce the planned procurement of stealthy F-35 short-range strike fighters and, depending on the scenario, reinvest some of the savings into improved F/A-18 E/Fs, F-16s and development of advanced UASs.
5. Trim the U.S. strategic airlift fleet from 316 to 301 aircraft, which would involve retiring 15 C-5As and reducing related infrastructure and personnel.⁴¹
6. Shrink Army and Marine Corps end strength in accordance with the decreasing operational demand for ground forces as the United States transitions out of Afghanistan and Iraq. To hedge against risk, the scenarios make greater

strategic and operational use of the National Guard and Reserves.⁴²

7. Cancel or significantly delay several ground forces programs, including the Army's Ground Combat Vehicle (GCV), the Joint Light Tactical Vehicle (JLTV) and the Joint Tactical Radio System (JTRS).
8. Avoid cutting next-generation nuclear delivery vehicles within DOD's budget because the current procurement schedule offers relatively little savings over the next decade.⁴³ Instead, the scenarios defer several investments within the National Nuclear Security Administration's budget.
9. Reduce personnel and defense overhead, beyond the efficiencies initiative that DOD has already adopted, to preserve more combat capability.
10. Shut down the Joint Improvised Explosive Device Defeat Organization (JIEDDO) in FY 2017. This would give JIEDDO several years after the expected departure of most U.S. combat troops from Afghanistan in which to integrate its most promising technologies into the military services' broader development activities.
11. Prioritize operational activities tied to theater missile defense programs, such as the Aegis sea-based system, and provide less funding for experimental national missile defense programs.

Scenario 1: Reposition and Reset

STRATEGIC OVERVIEW

Scenario 1 preserves current U.S. defense plans to the greatest extent possible in an effort to minimize potential vulnerabilities that could occur by changing those plans too extensively or too rapidly. It enables DOD to pursue a "High-Low-New" modernization plan, in which DOD would purchase high-technology weapons systems to replace older platforms, lower-technology (but still sophisticated) upgrades to existing systems, and innovative new

SCENARIO 1: REPOSITION AND RESET

The details of this budget scenario are fully described in the appendix along with the projected cost savings in billions.

SUMMARY OF PROGRAMMATIC CHANGES (\$350–\$400 BILLION IN TARGET SAVINGS)

PROGRAM	SAVINGS	PROGRAM	SAVINGS
NAVAL FORCES		DEFENSE-WIDE ACTIVITIES	
Aircraft Carrier (CVN)	—	Base Support and Facilities Maintenance	\$19.5
Amphibious Ships	—	Depots	\$6.4
Attack Submarine (Virginia-class SSN-774)	—	DOD Civilians	\$36.7
Cruiser (Ticonderoga-class CG-47)	\$3.3	DOD Retail Activities	\$9.1
Destroyer (Burke-class DDG-51)	-\$10.2	Headquarters (Contractor)	\$10.2
Littoral Combat Ship (LCS)	\$7.0	Intelligence	\$53.1
AIR FORCES		Joint Improvised Explosive Device Defeat Organization	\$1.2
F-35 Joint Strike Fighter	\$9.5	“Leap Ahead” Unmanned Aircraft Systems	-\$15.0
MQ-4C Broad Area Maritime Surveillance Unmanned Aircraft System	—	Missile Defense	\$37.5
Strategic Airlift	\$2.4	Overhead for Commercial Activities	\$40.5
V-22 Osprey	—	Other Procurement	\$23.6
GROUND FORCES		Research and Development	\$56.2
Army and Marine Corps End Strength	\$41.4	NON-DOD ACTIVITIES	
Ground Combat Vehicle (GCV)	\$7.0	Atomic Energy Defense Activities	\$12.6
Joint Light Tactical Vehicle (JLTV)	\$10.9	Other Defense-Related Activities	\$4.6
Joint Tactical Radio System (JTRS)	\$15.0		
Ground Mobile Radio (GMR)			
		TOTAL	\$382.5

 Areas of reinvestment

technologies. Overall, Scenario 1 aims to ensure that the U.S. military remains capable of addressing a wide range of possible threats around the world.⁴⁴

Although Scenario 1 substantially reduces LCS, F-35s, Army modernization and missile defense programs, it reinvests much of the savings into highly capable existing platforms such as DDG-51s, F/A-18s, F-16s, Bradley Fighting Vehicles and trucks. Scenario 1 returns the Army and Marine Corps to end strengths near their 2001 levels.⁴⁵

RISKS OF PROGRAMMATIC CHANGES

The risks accompanying the choices in this scenario are modest and acceptable. While making key adjustments to force structure and programs, this scenario preserves the bulk of current U.S. global defense capabilities and broadly sustains today’s priorities and posture. Scenario 1 allocates less than 1 percent of its total cuts to naval forces, 3 percent to air forces, 19 percent to ground forces, 73 percent to defense-wide activities and 4 percent to non-DOD activities.

Scenario 1 sustains but realigns the naval and air power projection forces required to face future threats. The Navy and Air Force would field fewer planned next-generation systems such as the LCS and F-35, but would retain a potent mix of new platforms – such as the Ford-class carrier, Virginia-class submarine, F-22 and F-35 – and highly capable existing platforms like advanced F/A-18s and DDG-51s. This force mix is capable of deterring or, if necessary, defeating any potential U.S. adversary.

Despite buying additional DDG-51s, Scenario 1's truncation of the LCS program in FY 2017 will result in a smaller overall fleet of surface vessels. Fewer vessels means less forward presence, but alternative forward basing and crew rotation models could mitigate the impact on operations.⁴⁶

Scenario 1's 25 percent cut to each F-35 variant's planned quantity may cause U.S. allies to abandon the jet even though they have invested in its development and plan to buy it. The cuts will assuredly increase unit costs for the remaining buyers. Allies who drop out may buy other, less capable fighters from the United States or overseas, or may simply tolerate risks and expect that the United States will provide support in extremis. They also may be less likely to collaborate with the United States on weapons systems in the future.

Starting in FY 2015, Scenario 1 reduces Army end strength from the planned permanent level of 520,000 to 482,000, and reduces Marine end strength from the planned permanent level of 187,000 to 175,000. These reductions are connected to planned reductions in the ground forces' operational tempo, particularly after 2014, when most U.S. troops are expected to be out of Afghanistan. The need to bolster U.S. influence in the Asia-Pacific and Middle East regions suggests that ground forces will play a less central role in the projection of U.S. military power in the next decade than in the last. That said, the

unpredictable nature of combat over the last 60 years means that future ground threats may arise unexpectedly, which requires more rapid access to reserve forces. A smaller Army and Marine Corps would return both to the active-duty force size and approximate readiness of the 1990s. We judge that this will be adequate for current and anticipated global threat scenarios given today's budgetary constraints.

Scenario 1's cancellations or reductions to the GCV, JLTV and JTRS programs would upend several long-delayed programs designed to modernize Army and Marine Corps ground vehicles and communications assets for 21st-century warfare. The ground forces would be forced to rely on existing systems, which, though capable and numerous, may not perform as well in the complex combat scenarios that planners foresee.⁴⁷ That said, we judge that improving current systems will adequately meet projected needs for the next decade.⁴⁸ However, the Army and Marine Corps should continue to pursue research and development so that they are prepared to meet the challenges that will arise in the 2020s and beyond.

Scenario 2: Constrained Global Presence

STRATEGIC OVERVIEW

In Scenario 2, the United States can use advanced naval and aerial weapons platforms and a sizable expeditionary ground capability to fulfill its global missions. However, it would field fewer platforms and fewer troops to execute its global engagement strategy. Scenario 2 prioritizes protecting U.S. interests in the Western Pacific, Indian Ocean, Middle East, Arabian Gulf and the Mediterranean Basin. It takes greater risk and accepts longer response times in other parts of the world. It emphasizes modernization and upgrades for outdated equipment to ensure that the U.S. military remains capable of deterring or defeating a wide range of security challenges.

Scenario 2 adopts all of the cuts included in Scenario 1, but also reduces the carrier fleet, the

SCENARIO 2: CONSTRAINED GLOBAL PRESENCE

The details of this budget scenario are fully described in the appendix along with the projected cost savings in billions.

SUMMARY OF PROGRAMMATIC CHANGES (\$500-550 BILLION IN TARGET SAVINGS)

PROGRAM	SAVINGS	PROGRAM	SAVINGS
NAVAL FORCES		DEFENSE-WIDE ACTIVITIES	
Aircraft Carrier (CVN)	\$7.0	Base Support and Facilities Maintenance	\$26.0
Amphibious Ships	—	Depots	\$6.4
Attack Submarine (Virginia-class SSN-774)	—	DOD Civilians	\$48.9
Cruiser (Ticonderoga-class CG-47)	\$3.3	DOD Retail Activities	\$9.1
Destroyer (Burke-class DDG-51)	-\$6.8	Headquarters (Contractor)	\$15.3
Littoral Combat Ship (LCS)	\$7.0	Intelligence	\$70.8
AIR FORCES		Joint Improvised Explosive Device Defeat Organization	\$1.2
F-35 Joint Strike Fighter	\$19.0	“Leap Ahead” Unmanned Aircraft	-\$15.0
MQ-4C Broad Area Maritime Surveillance Unmanned Aircraft System	\$4.0	Missile Defense	\$37.5
Strategic Airlift	\$2.4	Overhead for Commercial Activities	\$53.9
V-22 Osprey	\$7.9	Other Procurement	\$31.5
GROUND FORCES		Research and Development	\$75.0
Army and Marine Corps End Strength	\$41.4	NON-DOD ACTIVITIES	
Ground Combat Vehicle (GCV)	\$7.0	Atomic Energy Defense Activities	\$16.8
Joint Light Tactical Vehicle (JLTV)	\$10.9	Other Defense-Related Activities	\$6.2
Joint Tactical Radio System (JTRS)	\$15.0		
Ground Mobile Radio (GMR)			
		TOTAL	\$501.7

Areas of reinvestment

Marine Corps V-22 Osprey, the Navy’s MQ-4C and the F-35 program. Like Scenario 1, however, it reinvests some savings into existing platforms such as DDG-51s. Scenario 2 maintains the same Army and Marine end strength levels as Scenario 1.

RISKS OF PROGRAMMATIC CHANGES

The risks associated with this scenario are significant but acceptable. This scenario prioritizes areas where vital U.S. interests are at stake, and takes risks in other parts of the world. It focuses on sustaining

U.S. military power across the Pacific Rim while protecting U.S. interests in the Middle East, and it maintains substantial power projection and ground force capabilities as a hedge against unexpected threats. Scenario 2 allocates 2 percent of its total cuts to naval forces, 7 percent to air forces, 15 percent to ground forces, 72 percent to defense-wide activities and 4 percent to non-DOD activities.

Scenario 2 permanently reduces the number of aircraft carriers from 11 to 10. The Navy can

partially offset the risks of a reduced carrier presence by altering forward basing models focused on Hawaii and the Western Pacific, and by extending the presence of other naval platforms such as submarines and destroyers. The scenario takes risks by accepting fewer deployments (aside from transits) to the Mediterranean, Africa and South America. The scenario's main effort for naval deployments centers on protecting U.S. interests in the Western Pacific, Indian Ocean, Middle East and Arabian Gulf, along with connecting sea lanes. Policymakers should continue to explore new basing locations, such as in Australia, to support increased forward naval platform availability and to shorten costly transit times.

Scenario 2's reductions in the planned V-22 fleet starting in FY 2016 carry greater risk for the Marine Corps. While Scenario 2 recommends buying additional CH-53Ks in the future to provide rotary lift, these helicopters do not have the V-22's speed and flight ceiling, assets that could prove valuable during an amphibious assault scenario.⁴⁹ Yet when used in concert with V-22s, we judge that CH-53Ks offer more than adequate survivability, range and capacity for the variety of missions that U.S. forces may be asked to undertake.

Scenario 2 significantly reduces F-35 procurement by 50 percent but offers a more cost-effective mix of stealthy and non-stealthy manned strike aircraft while accelerating development of combat UASs. This scenario maintains all three versions of the F-35 (albeit in smaller numbers) and increases purchases of high-end F/A-18s and F-16s to provide a mix of highly capable platforms for the majority of scenarios in which a 100 percent stealthy fleet is not required.

This scenario takes particular risks during the first 72 hours of combat in a highly sophisticated air defense environment in which stealthy capabilities are in great demand. However, we judge that even a reduced number of stealthy F-35s – complemented

by B-2s, next-generation bombers and cruise missiles supported by an advanced intelligence, surveillance and reconnaissance (ISR) network – will provide sufficient capabilities to reduce any potential enemy's air defense capability within days, permitting non-stealthy aircraft to then enter the fight.⁵⁰ Accelerating stealthy unmanned long-range strike capabilities may reduce this risk further in the future.

Scenario 2 reduces the Navy's costly MQ-4C Broad Area Maritime Surveillance (BAMS) UAS platform. But it continues development and procurement of other maritime surveillance capabilities, including the P-8A Poseidon aircraft.

Scenario 3: Selective Leverage

STRATEGIC OVERVIEW

Scenario 3 preserves the ability of the U.S. military to deter and defeat adversaries while further reducing redundancy throughout the force, promoting more interdependence among the services, diminishing single service self-reliance, and reducing or eliminating lower-priority capabilities and weapons systems. Yet the additional budget cuts required in this scenario would create substantially more risk than those in the first two scenarios. Scenario 3 still focuses on protecting U.S. interests in the Middle East and Arabian Gulf, as well as in the Indian Ocean and the Western Pacific, but takes greater risks and reduces the U.S. presence in less vital regions.


Scenario 3 adopts all of Scenario 2's cuts, plus it reduces the planned procurement of Virginia-class attack submarines and amphibious ships. It purchases more F-35s than Scenario 2, but it does not replace canceled F-35s with F-16s and F/A-18s on a one-to-one basis, thus resulting in a smaller overall inventory. It also cancels the Navy's MQ-4C. In some cases, the cuts to these next-generation systems are offset by purchases of more cost-effective platforms. Scenario 3 cuts Army and Marine Corps end strength to 460,000 soldiers and 162,500 Marines.

SCENARIO 3: SELECTIVE LEVERAGE

The details of this budget scenario are fully described in the appendix along with the projected cost savings in billions.

SUMMARY OF PROGRAMMATIC CHANGES (\$650-700 BILLION IN TARGET SAVINGS)

PROGRAM	SAVINGS	PROGRAM	SAVINGS
NAVAL FORCES		DEFENSE-WIDE ACTIVITIES	
Aircraft Carrier (CVN)	\$7.0	Base Support and Facilities Maintenance	\$32.5
Amphibious Ships	\$13.0	Depots	\$6.4
Attack Submarine (Virginia-class SSN-774)	\$25.0	DOD Civilians	\$61.1
Cruiser (Ticonderoga-class CG-47)	\$3.3	DOD Retail Activities	\$9.1
Destroyer (Burke-class DDG-51)	-\$3.4	Headquarters (Contractor)	\$20.4
Littoral Combat Ship (LCS)	\$7.0	Intelligence	\$88.5
AIR FORCES		Joint Improvised Explosive Device Defeat Organization	\$1.2
F-35 Joint Strike Fighter	\$25.0	“Leap Ahead” Unmanned Systems	-\$15.0
MQ-4C Broad Area Maritime Surveillance Unmanned Aircraft System	\$10.0	Missile Defense	\$37.5
Strategic Airlift	\$2.4	Overhead for Commercial Activities	\$67.4
V-22 Osprey	\$7.9	Other Procurement	\$39.4
GROUND FORCES		Research and Development	\$93.7
Army and Marine Corps End Strength	\$63.8	NON-DOD ACTIVITIES	
Ground Combat Vehicle (GCV)	\$7.0	Atomic Energy Defense Activities	\$21.0
Joint Light Tactical Vehicle (JLTV)	\$10.9	Other Defense-Related Activities	\$7.7
Joint Tactical Radio System (JTRS)	\$15.0		
Ground Mobile Radio (GMR)			
		TOTAL	\$664.8

 Areas of reinvestment

In sum, Scenario 3 reduces the number of naval vessels central to executing a forward presence strategy across the Pacific and in other maritime areas. It further reduces next-generation manned airpower, thus taking near-term risk while investing in leap-ahead unmanned technologies. It further reduces the number of soldiers and Marines in the active force, using the reserves to hedge against unanticipated ground wars.

RISKS OF PROGRAMMATIC CHANGES

We judge that the risks associated with this approach are high, unless policymakers alter the U.S. global engagement strategy significantly or generate savings by reforming military pay and benefits in order to reverse some of the programmatic cuts described here. This scenario seeks to maintain a strategy focused on the Pacific Rim and Middle East, but it lowers the number of naval and air assets central to that strategy. It also draws

down Army and Marine Corps end strength, reducing the nation's ability to respond quickly and with sufficient force to rapidly defeat adversaries in unexpected contingencies demanding ground forces. Scenario 3 allocates 8 percent of its total cuts to naval forces, 7 percent to air forces, 14 percent to ground forces, 67 percent to defense-wide activities and 4 percent to non-DOD activities.

Scenario 3's budget cuts would force further cuts in the number of naval vessels, reducing U.S. forward maritime presence and making America's global engagement strategy much more difficult to execute. Building two additional destroyers would not overcome the cut to LCS, the decommissioned carrier and a reduced attack submarine fleet illustrated in Scenario 3. Policymakers might partially offset these reductions through forward basing, crew rotation, longer times at sea and redeploying additional assets from lower-priority areas.

Scenario 3 cancels the procurement of several Marine Corps amphibious ships in light of both their expense and the military's current over-investment in amphibious assault capabilities when compared to actual demand for the full complement of ships over the past 60 years. The remaining Expeditionary Strike Group (ESG) capabilities can maximize their reach and forward presence through combinations of forward basing, forward rotation of Marines, and reducing selected ESGs from three amphibious ships to two, complemented by surface combatants, as the full capabilities of San Antonio-class amphibious ships come on line. Despite these operational changes, the reduction in amphibious ships will shrink the U.S. military's ability to conduct humanitarian assistance and disaster relief operations worldwide.

The smaller strike fighter inventory outlined in Scenario 3 would leave the U.S. military less able to conduct combat operations in multiple theaters. Reducing the number of F-35s could increase risks during the opening days of an air campaign

by having fewer stealthy strike fighters available to penetrate a sophisticated enemy air defense network. However, although the overall quantity of aircraft would be lower, the larger weapons-carrying capacity of the F-35 would enable total weapons-delivery capacity of the strike fighter fleet to remain largely what it was in 2009.⁵¹ In many scenarios the remaining F-35s – in conjunction with other strike capabilities – should prove adequate.

Scenario 3 cancels the Navy's MQ-4C UAS. Instead, UASs currently in the Air Force inventory might be converted to maritime ISR specification, but would continue to be operated by the Air Force and deployed to strategically important bases around the world.

Starting in FY 2015 Scenario 3 shrinks the Army and Marine Corps to 460,000 and 162,500 troops, respectively, with elements of the reduced end strength, especially heavy forces, transferring into the reserves. Although this cut in active-duty strength yields considerable savings, it imposes substantial additional risk. This reduction may be acceptable if planned troop withdrawals from Afghanistan are realized by the end of 2014. Still, a smaller Army and Marine Corps, even if supported by a capable reserve component, would be less able to respond promptly and with decisive force should an intense ground war erupt over the next decade. If the United States sought to deploy a large ground force overseas, it might have to implement a large-scale activation of the reserves and other costly measures to expand the active force.

As previously noted, cuts to the ground forces are more easily reversed than cuts to naval and air modernization programs, which take decades to develop and procure. However, because personnel reductions will not occur until FY 2015, there is a significant risk that the BCA's automatic spending reduction process will disproportionately target procurement and research and development before then.

Scenario 4: Focused Economy of Force

STRATEGIC OVERVIEW

Scenario 4 requires the most significant overall cuts across all four services and DOD to reach the required level of savings. It goes beyond Scenario 3's cuts by canceling the Marine Corps F-35B, ending LCS in FY 2013, and further reducing Army and Marine Corps end strength. Scenario 4 aims to maintain a modernized force that can conduct high-intensity warfare against adversaries that directly threaten core U.S. interests, while taking substantially greater risks in all other missions. The programmatic changes therefore aim to preserve air and naval capabilities as much as possible at the expense of ground force structure.

Scenario 4 incurs substantially greater risk than the other three scenarios. It saves money by eliminating redundancy across the joint force, but also greatly diminishes the protection that redundancy provides against single-point failure. If an unexpected technical problem or adversary capability neutralizes the F-35, for example, most of the tactical air fleet would suddenly become ineffective, and too few other types of aircraft would be available to provide a reliable substitute. Reducing the Army's active-component heavy capabilities and eliminating most of the Marines' heavy capabilities makes sense when the greatest threats to U.S. interests lie in the air and on the sea, but ground threats have often arisen unexpectedly. Major ground operations would require significant time for mobilizing reserves. The U.S. military might not be able to respond quickly with enough ground force capacity to prevent an adversary from seizing territory, which could potentially trigger U.S. involvement in a longer, bloodier and more costly fight to regain lost ground than it would have otherwise faced.

Scenario 4 saves a great deal of money, but it also significantly limits the options of U.S. policymakers and forces them to make painful choices. The major cuts to ground forces and strike fighters in this scenario risk sending a message of receding U.S. power in a dangerous world.

RISKS OF PROGRAMMATIC CHANGES

We judge the risks associated with this scenario to be very high, unless policymakers alter the U.S. global engagement strategy significantly or generate savings by reforming military pay and benefits in order to reverse some of the programmatic cuts described here. This scenario includes more cuts to naval and air assets than Scenario 3, which curtails America's ability to protect its interests in Asia and the Middle East. By cutting to 430,000 soldiers and 150,000 Marines, this scenario further reduces the nation's ability to rapidly defeat adversaries in ground combat. Scenario 4 allocates 8 percent of its total cuts to naval forces, 8 percent to air forces, 16 percent to ground forces, 64 percent to defense-wide activities and 4 percent to non-DOD activities.

Scenario 4 cancels the LCS in FY 2013, leaving the Navy without the mine hunting and clearing capabilities it plans to gain from the initial production run of ships. The United States would have to rely on its allies to conduct these critical operations. This scenario also does not procure any additional DDG-51s to offset the cuts to LCS.

Scenario 4 significantly restructures procurement plans for the F-35. It eliminates future procurement of current-generation tactical aircraft (F-16s or F/A-18s), and cancels the short takeoff, vertical landing (STOVL) F-35B as part of the Marine Corps force structure changes.

The loss of the Marine STOVL F-35B effectively eliminates the fixed-wing strike capability for the Marine Corps once the F/A-18 and AV-8B Harrier II are retired. The reduced number of future amphibious ships would carry only helicopters, thereby limiting their role as offshore strike platforms. Amphibious ships would instead provide primary transport for Marine assault forces with a secondary mission to support humanitarian assistance and disaster relief. This would require the Marines to rely on close air support from attack helicopters and

SCENARIO 4: FOCUSED ECONOMY OF FORCE

The details of this budget scenario are fully described in the appendix along with the projected cost savings in billions.

SUMMARY OF PROGRAMMATIC CHANGES (\$800-850 BILLION IN TARGET SAVINGS)					
PROGRAM		SAVINGS	PROGRAM		SAVINGS
NAVAL FORCES			DEFENSE-WIDE ACTIVITIES		
Aircraft Carrier (CVN)		\$7.0	Base Support and Facilities Maintenance		\$39.0
Amphibious Ships		\$13.0	Depots		\$6.4
Attack Submarine (Virginia-class SSN-774)		\$25.0	DOD Civilians		\$73.3
Cruiser (Ticonderoga-class CG-47)		\$3.3	DOD Retail Activities		\$9.1
Destroyer (Burke-class DDG-51)		—	Headquarters (Contractor)		\$25.5
Littoral Combat Ship (LCS)		\$14.2	Intelligence		\$106.2
AIR FORCES			Joint Improvised Explosive Device Defeat Organization		\$1.2
F-35 Joint Strike Fighter		\$42.6	“Leap Ahead” Unmanned Systems		-\$15.0
MQ-4C Broad Area Maritime Surveillance Unmanned Aircraft System		\$10.0	Missile Defense		\$37.5
Strategic Airlift		\$2.4	Overhead for Commercial Activities		\$80.9
V-22 Osprey		\$7.9	Other Procurement		\$47.2
GROUND FORCES			Research and Development		\$112.5
Army and Marine Corps End Strength		\$105.1	NON-DOD ACTIVITIES		
Ground Combat Vehicle (GCV)		\$7.0	Atomic Energy Defense Activities		\$25.2
Joint Light Tactical Vehicle (JLTV)		\$10.9	Other Defense-Related Activities		\$9.3
Joint Tactical Radio System (JTRS)		\$15.0			
Ground Mobile Radio (GMR)					
TOTAL					\$821.7

 Area of reinvestment

armed UASs, or from Navy or Air Force fixed-wing strike aircraft flying from carriers or ground bases. Eliminating fixed-wing STOVL aircraft from big deck amphibious ships would diminish an important, but not vital, component of their current power projection capabilities. Accelerating combat UASs based on big deck amphibious assault ships could make these ships even more capable future strike platforms that could operate at much greater range from their targets.

Scenario 4 reduces active-duty Army end strength to 430,000 personnel, largely by trimming non-combat positions and shrinking the Army’s heavy capabilities, thereby reducing its ability to operate in a high-intensity ground war without accepting high casualties. The Army would need to keep some armor and artillery units on active duty in case of conflict on the Korean Peninsula, but few other threats are likely to require an overwhelming heavy ground

response in the foreseeable future. The bulk of active-duty Army forces would therefore focus on rapid response/forcible entry (airborne and helicopter assault) and on the lower end of the conflict spectrum, such as advising and assisting foreign forces and conducting irregular warfare. The overall lack of manpower would make large protracted commitments much more difficult, and most remaining heavy forces would be moved into the reserve component.

This scenario also reduces the size of the Marine Corps to 150,000 personnel.⁵² The scenario eliminates the heavy capabilities that the Marines have added in the past decade to fight recent wars, and refocuses the Marines on serving as an expeditionary force partnered with the Navy for crisis response and forward engagement. It would be a rapidly deployable force, but one that relies on coordinated air support from the Navy and Air Force.

Scenario 4 would require U.S. policymakers to make much more cautious choices about how and when to use force. Leaders would have to prioritize global missions and objectives far more clearly than they have in the past, and accept that a smaller and less capable U.S. military may be less able to engage in significant combat without high casualties. Moreover, it is unlikely that this force would be able to engage in more than one major conflict simultaneously. Policymakers could, for example, choose to assign most U.S. forces to serve in high-priority areas in the Asia-Pacific and the Middle East, and assign few or even no forces to Africa, Europe, and Latin and South America, perhaps with a commensurate reduction in military headquarters for those regions. Or they might decide not to intervene after a humanitarian disaster or an ethnic conflict, no matter how high the degree of human suffering, because doing so could potentially tie up too many military capabilities for too long.

This scenario could also increase the risks of instability and regional conflict in Asia. The United States currently guarantees the security of many Asian allies and partners, either by treaty or by default. To the extent that U.S. defense cuts lead these countries to question the credibility of that guarantee, they are more likely to build up their militaries in a manner that might destabilize the region, or perhaps forge closer ties with China, which would become the region's dominant power in the wake of reduced American involvement.⁵³

VI. REFORMING MILITARY PAY AND BENEFITS

All four scenarios generate savings by cutting end strength, force structure, procurement and overhead. To the extent that Congress and DOD want to preserve more of these capabilities, they can maintain the same level of overall savings by finding reductions in other areas. The Pentagon could work with Congress to initiate another round of BRAC, for example, which has saved money in the past and will almost certainly be necessary if any of the options for major end strength reductions are selected.⁵⁴ It will be difficult to generate considerable savings without addressing military personnel costs, which include not only salaries but also a range of retirement and health care benefits. Taken together, these expenditures consume about 34 percent of DOD's annual base budget.⁵⁵

If DOD cancels a procurement program, it can usually calculate how much money will be saved and what capabilities will be lost. By contrast, altering personnel benefits involves also altering the incentives and decisionmaking of current and prospective service members. As a result, changing these benefits may affect recruiting, retention, length of service and morale in ways that may be difficult to anticipate. Additionally, the U.S. military remains at war in Afghanistan and American troops will go into battle every day for at least the next few years. Not breaking faith with the men and women who continue to put their lives on the line demands that these Americans retain the benefits that they have signed up for and earned.

Developing specific options for reducing personnel costs and estimating their long-term effects falls beyond the scope of this report. As a result, we do not discuss potential reforms to military compensation, although studies show that such reforms would generate significant cost savings.⁵⁶

However, we do provide examples of reform in two significant areas – health care and retirement benefits – which illustrate the types of cost saving measures that policymakers might consider if they choose to forego cuts to end strength, force structure, procurement and overhead included in the four scenarios.

It will be difficult to generate considerable savings without addressing military personnel costs, which include not only salaries but also a range of retirement and health care benefits. Taken together, these expenditures consume about 34 percent of DOD's annual base budget.

Example 1: Health Care Benefits

TRICARE is the military health care program for active-duty and retired personnel, as well as their dependents and survivors. TRICARE spending more than doubled from 1999 to 2009 in real terms, in part because retirees under age 65 have increasingly chosen to stay on TRICARE rather than pay for civilian health care plans that can be far more expensive.⁵⁷ In 1999, 55 percent of military retirees and their dependents enrolled in other health insurance plans, but by 2009, that figure was only 29 percent.⁵⁸

A recent CBO report examined four ways to save money by reforming TRICARE, which

TABLE 1: CONGRESSIONAL BUDGET OFFICE OPTIONS FOR REFORMING TRICARE

OPTION	DETAILS	10-YEAR COST SAVINGS
Increase costs of prescription drugs	<ul style="list-style-type: none"> • Active-duty beneficiaries pay nothing at military pharmacies. • Other beneficiaries pay \$3 for generic drugs and \$9 for other drugs at military pharmacies. • Copayments for drugs purchases from retail or mail-order pharmacies increase for all beneficiaries. 	\$25.8 billion ⁶⁰
Increase fees and deductibles for retirees not yet eligible for Medicare	<ul style="list-style-type: none"> • Annual enrollment fees for TRICARE Prime increase from \$230 to \$550 for individual coverage, and from \$460 to \$1,100 for family coverage. • TRICARE Prime copayments at civilian providers increase from \$12 to \$30. • Annual fees for TRICARE Extra or Standard established and deductibles increase. 	\$28.1 billion
Introduce minimum deductibles for TRICARE for Life (TFL)	<ul style="list-style-type: none"> • In Fiscal Year (FY) 2013, TFL would not cover the first \$550 of Medicare copayments, and would cover 50 percent of the next \$4,950 of Medicare copayments – a total maximum of \$3,025. • In FY14 and beyond, the annual maximum would be indexed to growth in average Medicare costs. 	\$43 billion
Limit TRICARE benefits for retirees and their beneficiaries	<ul style="list-style-type: none"> • Retirees and their dependents would no longer be eligible for TRICARE Prime. • Those who enroll in TRICARE Extra or Standard would pay a monthly fee set at 28% of the average costs of covering that group the previous year. • In FY13, annual maximum out-of-pocket limits revert to the 2010 limit of \$7,500 per family. • In FY14 and beyond, the annual maximum would be indexed to growth in average Medicare costs. 	\$105.2 billion

Source: Congressional Budget Office, *Reducing the Deficit* (March 2011): 19, 78–83.

Defense Business Board Conclusions About Military Retirement

The Defense Business Board (DBB) reached several conclusions about the military retirement system. According to the DBB, the system:

- Has not changed significantly for more than 100 years – well before the adoption of the all-volunteer force – even though life spans have grown longer, military pay is more competitive with civilian pay and many retirees now pursue second careers in the private sector.
- Provides benefits that are more generous and more costly than private sector benefits.
- Is unfair, because 83 percent of all service members serve for fewer than 20 years and therefore receive no retirement benefit at all.
- Is unaffordable, because costs are rising steeply. The current system will be liable for \$2.7 trillion by Fiscal Year (FY) 2034

and could be liable for almost \$12 trillion by FY 2076.⁶³

The DBB recommends adopting a defined contribution plan, where the U.S. government contribution “would be funded at a percentage level comparable to the highest end of a private sector pension plan.”⁶⁴ This contribution would double during years that the service member served in a combat zone or in another high-risk position, and would also increase (by an unspecified amount) during hardship tours. Individual contributions would be limited to \$16,500 per year and an additional \$5,500 “catch-up” contribution per year for personnel aged 50 and older, which are roughly comparable to the civilian limits on IRA contributions. It would also allow members of the armed forces serving in a designated war zone to contribute tax-exempt earn-

ings up to an annual maximum of \$49,000. The plan would vest after three to five years of service, and would be payable at age 60 to 65 or the Social Security age, if that were to increase.⁶⁵

The DBB estimates that if all current active-duty personnel remain on the current plan and all new recruits participate in the revised plan, the retirement trust fund will be liable for \$1.8 trillion by FY 2034 – saving \$900 billion over 25 years. If all current military personnel immediately transition to the new system without losing any accrued benefits, the retirement trust fund would be liable for \$1.2 trillion by FY 2034 – saving \$1.5 trillion over 25 years. In either case, the trust fund liability would drop below the total cost to the government sometime around FY 2065.⁶⁶

are summarized in the table on the previous page. These options are not mutually exclusive. Policymakers could choose to adopt any combination of them, or all of them at the same time.⁵⁹ The cost savings for each option range from \$26.1 billion to \$105.2 billion over the next 10 years.

Example 2: Retirement Benefits

The Defense Business Board recently sponsored a task force that reviewed the current structure and function of the military retirement system. It found that the costs of military retirement are “rising at an alarming rate,” and that “[a]ction must be taken to contain these spiraling costs or they will undermine future warfighting

capabilities.”⁶¹ As discussed in the text box above, it then recommended a mandatory defined contribution plan, based on the current Thrift Savings Plan, which could save \$900 billion to \$1.5 trillion over the next 25 years.⁶²

VII. CONCLUSION

Based on extensive analysis and interviews with leading defense officials, we judge that the U.S. military's ability to execute America's global engagement strategy, as it is currently articulated, will be placed at high risk if total national defense cuts exceed \$500-550 billion over 10 years. This judgment could change if policymakers recalibrate America's global engagement strategy and/or generate savings by reforming military pay and benefits for future service members. Reductions beyond this range would cut too many air and naval assets and risk America's ability to protect its vital interests in Asia and the Middle East, while the cuts in Army and Marine Corps end strength would jeopardize the ability of the United States to prevail against determined adversaries in unexpected ground force contingencies without potentially incurring heavy casualties.

Determining "how much is enough" for defense requires both art and science, subjective judgment and objective analysis. Such a calculus is difficult in today's world of unprecedented technological change, economic dislocation and rapidly evolving threats. Yet the U.S. government's fundamental responsibility is to provide security to its citizens.

Any cuts to the defense budget should be made with a clear view of the strategic risks they entail. This report suggests specific, strategically grounded ways to achieve significant savings while protecting U.S. vital interests. A different set of choices would produce a much different blueprint, potentially taking greater risk in any scenario. Policymakers planning defense cuts should carefully weigh trade-offs, judge both confidence and risk, and ultimately choose what is necessary to ensure that the American people and the global priorities they value remain safe and secure.

ENDNOTES

1. The Budget Control Act does not constrain funding for Overseas Contingency Operations (OCO). The defense portion of its automatic cuts would fall on national defense (function 050), not the “security” spending category that the act uses for its discretionary spending caps during FY 2012–2013. For thorough analysis, see Todd Harrison, *Defense Funding in the Budget Control Act of 2011* (Washington: Center for Strategic and Budgetary Assessments, August 4, 2011).
2. The Budget Control Act does not affect Congress’s constitutional power to appropriate funds or change laws. In the future, Congress could revoke the act’s framework for deficit reduction – something it has done in the past. See Heidi Przybyla, “Debt Plan Includes Spending-Cut ‘Trigger’ With a Long History of Failure,” *Bloomberg* (July 29, 2011).
3. Budget function 050 includes funding for the Department of Defense (DOD), nuclear weapons activities in the Department of Energy, and miscellaneous national security activities in non-DOD agencies.
4. The spending caps would cut about \$350 billion (White House estimate) and the automatic spending reduction process would cut an additional \$492 billion (Congressional Budget Office estimate) from national defense (function 050) budget authority, totaling a potential reduction of approximately \$842 billion through FY 2021 compared to Congressional Budget Office baselines. As noted, these estimates are sensitive to future economic conditions and decisions by Congress, and therefore may not come to fruition as projected. See Jack Lew, “Security Spending in the Deficit Agreement,” *OMBlog* (August 4, 2011); Congressional Budget Office, *Estimated Impact of Automatic Budget Enforcement Procedures Specified in the Budget Control Act* (September 12, 2011): 3; Bill Heniff Jr., Elizabeth Rybicki and Shannon M. Mahan, *The Budget Control Act of 2011* (Washington: Congressional Research Service, August 19, 2011); and Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2011).
5. Authors’ meeting with DOD officials (August 2011). Of course, DOD does prepare contingency plans as a hedge against uncertainty. It undoubtedly has some ideas about what it would do if the super committee fails.
6. Charles Riley, “Pentagon Sweats Out Budget Upheaval,” *CNN Money* (September 9, 2011).
7. For an older but still useful overview of the possible unintended consequences of military health care reform, for example, see Congressional Budget Office, *Reforming the Military Health Care System* (January 1988): 29–34.
8. Off-the-record meeting at the Center for a New American Security, “Changes to the DOD: Revisiting Roles and Missions” (August 3, 2011).
9. The White House, “Press Briefing by Press Secretary Jay Carney” (August 1, 2011); Nathan Hodge and Adam Entous, “Panetta Sounds Alarm on Defense-Cut Trigger,” *The Wall Street Journal* (August 5, 2011); and House Armed Services Committee, “McKeon Statement on the Debt Ceiling Compromise” (August 1, 2011).
10. Robert Pollin and Heidi Garrett-Peltier, “The U.S. Employment Effects of Military and Domestic Spending Priorities: An Updated Analysis,” Political Economy Research Institute, University of Massachusetts, Amherst (October 2009).
11. Phil Stewart, “Defense Cuts Could Worsen Unemployment: Pentagon,” *Reuters* (September 15, 2011).
12. Hodge and Entous, “Panetta Sounds Alarm on Defense-Cut Trigger.”
13. Off-the-record meeting at the Center for a New American Security, “Changes to the DOD: Revisiting Roles and Missions” (August 3, 2011).
14. Authors’ meeting with DOD officials (August 2011).
15. See Jeremy Lemer, “US Defence Sector Attacks Further Cuts,” *Financial Times* (September 14, 2011); and Rebecca U. Thorpe, “The Role of Economic Reliance in Defense Procurement Contracting,” *American Politics Research* 38 (June 2010): 636–675.
16. M. Thomas Davis and Nathaniel C. Fick, “America’s Endangered Arsenal of Democracy,” *Joint Force Quarterly* 62 (3rd Quarter 2011): 89–95.
17. As the Congressional Budget Office noted last year, “the projections in the [Future Years Defense Program] are problematic in assuming that the administration’s defense plans can be conducted at the costs or prices that DOD has assumed.” See Congressional Budget Office, *Long-Term Implications of the Fiscal Year 2010 Defense Budget* (January 2010): 6–7.
18. Congressional Budget Office, *The Budget and Economic Outlook: An Update*: 17.
19. Congressional Budget Office, *Long-Term Implications of the 2012 Future Years Defense Program* (June 2011): vii, 7. For charts that show growing defense costs on a per troop basis, see Stephen Daggett, submitted testimony before the House Armed Services Committee (November 18, 2009): 2, 4, 5, 7.
20. Todd Harrison, *Analysis of the FY 2012 Defense Budget* (Washington: Center for Strategic and Budgetary Assessments, July 15, 2011): 19.
21. Stephen Daggett, submitted testimony before the House Armed Services Committee: 10.
22. Kim Holmes and Mackenzie Eaglen, “Avoiding a Hollow Force,” *Washington Times* (December 28, 2007).
23. Readers should note that the nature of these costs is a matter of ongoing dispute. For an overview, see Amy Belasco, *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11* (Washington: Congressional Research Service, March 29, 2011): 50–55.
24. Nathan Hodge, “‘Geriatric’ U.S. Arsenal Needs Expensive Face-Lift,” *The Wall Street Journal* (September 15, 2011).
25. For similar assessments, see G. John Ikenberry, “An Agenda for Liberal International Renewal,” in *Finding Our Way: Debating American Grand Strategy*, eds. Michèle A. Flournoy and Shawn Brimley (Washington: Center for a New American Security, June 2008); and Christopher Layne, *The Peace of Illusions*:

American Grand Strategy from 1940 to the Present (Ithaca, NY: Cornell University Press, 2006).

26. For similar assessments, see Niall Ferguson, *Colossus: The Price of America's Empire* (New York: Penguin Press, 2004): 169-199; and Michael Mandelbaum, *The Case for Goliath: How America Acts as the World's Government in the 21st Century* (New York: PublicAffairs, 2005): xiv-xxii, 187-226.

27. Congressional Budget Office, *The Budget and Economic Outlook: An Update*: 1, 24.

28. Pursuant to 10 U.S.C. 118b, each Quadrennial Defense Review (QDR) shall be conducted so as "to make recommendations that are not constrained to comply with the budget submitted to Congress by the President." This stipulation was added in the FY 2007 National Defense Authorization Act. An internal Pentagon "red team" led by General James Mattis, now commander of U.S. Central Command, and Andrew Marshall, director of the Office of Net Assessment, told Pentagon leaders that the 2010 QDR's budgetary assumptions were too optimistic, but their critique could not be addressed because of the congressional restriction. See Sebastian Sprenger, "'Red Team' Found 2010 QDR Had Too-Rosy Economic Assumptions," *Inside the Army* (April 25, 2011); and Stephen Daggett, *Quadrennial Defense Review 2010: Overview and Implications for National Security Planning* (Washington: Congressional Research Service, May 17, 2010): 34-38.

29. The Defense Business Board identified an explosion of overhead work typified by a lack of regulation and an immense increase in the number of contractors and uniformed military working in non-combat positions. See Arnold Punaro, "Reducing Overhead and Improving DoD's Business Operations" (July 22, 2010), <http://dbb.defense.gov/pdf/Arnold'sScriptAsDeliveredat07-22BoardMeeting.pdf>.

30. Travis Sharp, *The Sacrifice Ahead: The 2012 Defense Budget* (Washington: Center for a New American Security, 2011): 6.

31. Raymond Pritchett, "Rep. Paul Ryan's Budget Sets Stage for Much Needed Defense Reforms," *Information Dissemination* (April 7, 2011).

32. Restarting production lines that have closed is also expensive. For example, RAND found that "Shutdown and Restart" was the most expensive of four options for maintaining a future F-22A industrial capability. See Obaid Younossi et al., *Ending F-22A Production: Costs and Industrial Base Implications of Alternative Options* (Santa Monica, CA: RAND Corporation, 2010): xv.

33. International Institute for Strategic Studies, *The Military Balance 2011* (London: Routledge, 2011): 61-63, 157-161.

34. The 2010 QDR concluded that effective use of the National Guard and Reserves "will lower overall personnel and operating costs, better ensure the right mix and availability of equipment, provide more efficient and effective use of defense assets, and contribute to the sustainability of both the Active and Reserve components." See Department of Defense, *Quadrennial Defense Review Report* (February 2010): 53.

35. John D. Winkler, "Developing an Operational Reserve: A Policy and Historical Context and the Way Forward," *Joint Force Quarterly* 59 (4th Quarter 2010).

36. Off-the-record meeting at the Center for a New American Security, "Changes to the DOD: Revisiting Roles and Missions" (August 3, 2011).

37. Ibid.

38. See, for example, Secretary of Defense Robert M. Gates, remarks at the Army War College in Carlisle, Pennsylvania (April 16, 2009), <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4404>.

39. This problem exists in many types of policy analysis. For example, researchers have struggled to identify the relationship between the readiness of military units and DOD's operation and maintenance budget. See Congressional Budget Office, *Linking the Readiness of the Armed Forces to DoD's Operation and Maintenance Spending* (April 2011).

40. While the U.S. military is already making such investments, defense industry representatives suggest that the demand signal coming from DOD is not as strong as one might hope. Off-the-record meeting at the Center for a New American Security, "Scalpel or Chainsaw? Defense Budget Options for the 'Super Committee'" (September 14, 2011).

41. Congress currently requires the Air Force to maintain at least 316 aircraft, and it has procured 43 more C-17s than the Air Force said it needed. This over-procurement has created excess capacity, and DOD has formally requested that the requirement be lowered based on the results of its revised Mobility Capabilities and Requirements Study released in 2011. See General Duncan McNabb, testimony before the Senate Armed Services Committee, Subcommittee on Seapower (July 13, 2011).

42. Although most experts agree that making greater use of the reserve component will save money overall, they continue to debate the precise savings involved. As a result, this report's illustrative scenarios do not include any savings generated from transferring forces to the reserve component. For an overview of the debate, see John Nagl and Travis Sharp, *An Indispensable Force: Investing in America's National Guard and Reserves* (Washington: Center for a New American Security, September 2010): 26-27.

43. The authors acknowledge that the costs of maintaining the current and future nuclear triad are enormous; for a rough estimate of expected 10-year costs, see Ploughshares Fund, "What We Spend on Nuclear Weapons" (September 14, 2011). However, most of DOD's expenditures to procure and maintain the next generation of ballistic missile submarines, bombers and intercontinental missiles will occur after the 10-year time frame examined in this report. Additionally, the authors believe that a decision to significantly reduce any nuclear triad forces should not be made without reevaluating U.S. deterrence requirements – a process now underway at DOD – and involving other nations via legally-binding arms control agreements. Because these two processes have not yet provided reliable information about potential nuclear reductions beyond New START, any estimates of cost savings from pruning the nuclear triad would be speculative.

44. This objective is consistent with the planning process that drove the 2010 QDR. See Kathleen Hicks and Samuel Brannen, "Force Planning in the 2010 QDR," *Joint Force Quarterly* 59 (4th Quarter 2010): 139.

45. In FY 2001, Army end strength was 481,000 and Marine Corps end strength was 173,000. See Department of Defense, *National Defense Budget Estimates for FY 2012* (March 2011): Table 7-5.
46. For analysis of the current health of the fleet, see Rear Admiral James McManamon, "The 'Bridge' to the Fleet: Material Readiness Key to Warships Ready for Tasking," Naval Sea Systems Command (February 15, 2011).
47. Off-the-record meeting at the Center for a New American Security (November 16, 2010).
48. The Army has lost fewer light, medium and heavy tactical vehicles than it expected from battle losses, maintenance washouts and the abandonment of vehicles in theater. See Department of the Army, *Army Truck Program, Tactical Wheeled Vehicle Acquisition Strategy, Report to the Congress* (June 2010): 18.
49. Congressional Budget Office, *Budget Options* (February 2005): 30-31.
50. For analysis of such a campaign, see Jan van Tol et al., *AirSea Battle: A Point-of-Departure Operational Concept* (Washington: Center for Strategic and Budgetary Assessments, 2010): 40-41.
51. According to the Congressional Budget Office (CBO), the weapons capacity of 2009 can be matched by purchasing 850 F-35As, 480 F-35 B/Cs and 57 F/A-18s. See Congressional Budget Office, *Alternatives for Modernizing U.S. Fighter Forces* (May 2009): 28.
52. In FY 2001, Marine Corps end strength was 173,000. See Department of Defense, *National Defense Budget Estimates for FY 2012*: Table 7-5.
53. For studies of these security dynamics in East Asia, see Zhu Feng, "An Emerging Trend in East Asia: Military Budget Increases and Their Impact," *Asian Perspective* 33:4 (2009); Richard A. Bitzinger, "A New Arms Race? Explaining Recent Southeast Asian Military Acquisition," *Contemporary Southeast Asia* 32:1 (2010); and Robert J. Art, "The United States and the Rise of China: Implications for the Long Haul," *Political Science Quarterly* 125:3 (2010).
54. Daniel H. Else and David E. Lockwood, *Military Base Closures: Highlights of the 2005 BRAC Commission Report and Its Additional Proposed Legislation* (Washington: Congressional Research Service, October 2006): 2.
55. Todd Harrison, *Analysis of the FY 2012 Defense Budget*: vii.
56. For example, see Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options* (March 2011): 76-77.
57. For example, in 2009 DOD estimated that a typical retiree and his or her family would pay approximately \$860 a year through TRICARE Prime whereas a similar retiree and his or her family enrolled in an HMO would pay approximately \$5,200 a year for comparable coverage. See *ibid.*: 78.
58. *Ibid.*
59. On September 19, 2011, President Obama presented a plan for promoting economic growth and reducing the deficit that included two changes to TRICARE: initiating annual fees for enrolling in TRICARE for Life, and increasing TRICARE pharmacy benefit copayments. See Office of Management and Budget, *Living Within Our Means and Investing for the Future* (September 2011): 20-21.
60. The Congressional Budget Office's calculations assume that DOD had increased some copayment requirements before considering this option. If that assumption proves wrong, total savings would be higher.
61. Defense Business Board, "Modernizing the Military Retirement System" (July 21, 2011): slide 9.
62. *Ibid.*: slides 9, 21, 23.
63. *Ibid.*: slides 4-9, 20.
64. *Ibid.*: slide 13.
65. *Ibid.*: slides 13, 19.
66. *Ibid.*: slides 21, 23.

Appendix

APPENDIX: SIDE-BY-SIDE COMPARISON
OF NATIONAL DEFENSE BUDGET SCENARIOS

33

OCTOBER 2011

Hard Choices
Responsible Defense in an Age of Austerity




APPENDIX: SIDE-BY-SIDE COMPARISON OF NATIONAL DEFENSE BUDGET SCENARIOS (DOLLARS IN BILLIONS)

The four scenarios consider budget authority for national defense (function 050), which includes funding for the Department of Defense (DOD), atomic energy defense activities, and other defense-related activities. The scenarios exclude savings related to Overseas Contingency Operations (OCO). Readers should note that function 050 is not the same as the “security” spending category that the Budget Control Act uses for its discretionary spending caps in Fiscal Years (FY) 2012-2013. The estimated savings were calculated using the Congressional Budget Office (CBO) August 2011 baseline, which sets future budget authority equal to the FY 2011 appropriation adjusted for inflation.

Readers should consult the endnote accompanying each policy change for additional information about the proposed change.

NAVAL FORCES				
Scenario	1. REPOSITION AND RESET		2. CONSTRAINED GLOBAL PRESENCE	
Target savings FY12-21	\$350-400		\$500-550	
PROGRAM	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS
Aircraft Carrier (CVN)	—	—	Permanently reduce CVN fleet from 11 to 10, active-duty air wings from 10 to 9, and 5,600 sailors by retiring the USS <i>George Washington</i> in 2016	\$7.0
Amphibious Ships	—	—	—	—
Attack Submarine (Virginia-class SSN-774)	—	—	—	—
Cruiser (Ticonderoga-class CG-47)	Retire six ships	\$3.3	Same as Scenario 1	\$3.3
Destroyer (Arleigh Burke-class DDG-51)	Procure six additional Flight IIA ships beyond current plans	-\$10.2	Procure four additional Flight IIA ships beyond current plans	-\$6.8
Littoral Combat Ship (LCS)	End program in FY17 after 27 total ships have been procured	\$7.0	Same as Scenario 1	\$7.0
SUBTOTAL		\$0.1		\$10.5

 Areas of reinvestment

NAVAL FORCES

3. SELECTIVE LEVERAGE		4. FOCUSED ECONOMY OF FORCE		
\$650-700		\$800-850		
POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	SOURCE(S)
Same as Scenario 2	\$7.0	Same as Scenarios 2, 3	\$7.0	CBO ¹
Cancel two LHA-6s and three LSD(X)s scheduled for procurement during FY16-21	\$13.0	Same as Scenario 3	\$13.0	Estimate based on Future Years Defense Program (FYDP) and CBO ²
Hold procurement to one per year, reducing planned buy from 19 to 10 ships during FY12-21	\$25.0	Same as Scenario 3	\$25.0	Estimate based on FYDP and CBO ³
Same as Scenarios 1, 2	\$3.3	Same as Scenarios 1, 2, 3	\$3.3	Estimate based on FYDP ⁴
Procure two additional Flight IIA ships beyond current plans	-\$3.4	No additional procurement	—	CBO ⁵
Same as Scenarios 1, 2	\$7.0	End program in FY13 after 12 total ships have been procured	\$14.2	Estimate based on FYDP and Congressional Research Service (CRS) ⁶
	\$51.9		\$62.5	

AIR FORCES									
Scenario	1. REPOSITION AND RESET		2. CONSTRAINED GLOBAL PRESENCE		3. SELECTIVE LEVERAGE		4. FOCUSED ECONOMY OF FORCE		
Target savings FY12-21	\$350-400		\$500-550		\$650-700		\$800-850		
PROGRAM	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	SOURCE(S)
F-35 Joint Strike Fighter	Reduce total procurement of each F-35 variant by 25% and substitute F-16s and F/A-18s for the canceled F-35s	\$9.5	Reduce total procurement of each F-35 variant by 50% and substitute F-16s and F/A-18s for the canceled F-35s	\$19.0	Cut F-35A from 1,763 to 850, F-35B from 311 to 150, and F-35C from 369 to 330, and do not buy substitutes	\$25.0	Cancel F-35B, cut F-35A from 1,763 to 850, and F-35C from 369 to 330, and do not buy substitutes	\$42.6	Estimate based on Bowles-Simpson and CBO ⁷
MQ-4C Broad Area Maritime Surveillance (BAMS) Unmanned Aircraft System (UAS)	—	—	Cut the Navy buy in half, procuring only 21 aircraft through FY21	\$4.0	Cancel	\$10.0	Same as Scenario 3	\$10.0	CBO ⁸
Strategic Airlift	Reduce requirement from 316 to 301 aircraft, and retire 15 C-5As	\$2.4	Same as Scenario 1	\$2.4	Same as Scenarios 1, 2	\$2.4	Same as Scenarios 1, 2, 3	\$2.4	DOD ⁹
V-22 Osprey	—	—	Cancel in FY16, stopping total procurement at 363 aircraft (314 MV-22s, 49 CV-22s)	\$7.9	Same as Scenario 2	\$7.9	Same as Scenarios 2, 3	\$7.9	Estimate based on FYDP and CRS ¹⁰
SUBTOTAL		\$11.9		\$33.3		\$45.3		\$62.9	

GROUND FORCES

Scenario	1. REPOSITION AND RESET		2. CONSTRAINED GLOBAL PRESENCE		3. SELECTIVE LEVERAGE		4. FOCUSED ECONOMY OF FORCE		
Target savings FY12-21	\$350-400		\$500-550		\$650-700		\$800-850		
PROGRAM	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	SOURCE(S)
Army and Marine Corps End Strength	Starting in FY15, reduce Army active duty to 482,000, Marine Corps active duty to 175,000, and reduce 6,200 reservists	\$41.4	Same as Scenario 1	\$41.4	Starting in FY15, reduce Army active duty to 460,000, Marine Corps active duty to 162,500, and reduce 12,000 reservists	\$63.8	Starting in FY15, reduce Army active duty to 430,000, Marine Corps active duty to 150,000, and reduce 18,034 reservists	\$105.1	Estimate based on CBO ¹¹
Ground Combat Vehicle (GCV)	Delay fielding until after FY21 and reinvest some savings into upgrading Bradley Fighting Vehicles	\$7.0	Same as Scenario 1	\$7.0	Same as Scenarios 1, 2	\$7.0	Same as Scenarios 1, 2, 3	\$7.0	CBO ¹²
Joint Light Tactical Vehicle (JLTV)	Cancel	\$10.9	Same as Scenario 1	\$10.9	Same as Scenarios 1, 2	\$10.9	Same as Scenarios 1, 2, 3	\$10.9	Estimate based on GAO* and CRS ¹³
Joint Tactical Radio System (JTRS) Ground Mobile Radio (GMR)	Uphold the decision to cut the buy from 86,956 to 11,030	\$15.0	Same as Scenario 1	\$15.0	Same as Scenarios 1, 2	\$15.0	Same as Scenarios 1, 2, 3	\$15.0	DOD ¹⁴
SUBTOTAL		\$74.3		\$74.3		\$96.7		\$138.0	

*Government Accountability Office

DEFENSE-WIDE ACTIVITIES		
Scenario	1. REPOSITION AND RESET	
Target savings FY12-21	\$350-400	
PROGRAM	POLICY CHANGE	SAVINGS
Base Support and Facilities Maintenance	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$19.5
Depots	Alter pricing structure for repairs, and ease restrictions on contracting for maintenance	\$6.4
DOD Civilians	Reduce the workforce of 784,000 employees by 75,000 over 10 years by not replacing some retirees	\$36.7
DOD Retail Activities	Consolidate DOD's commissary and exchange systems over five years	\$9.1
Headquarters (Contractor)	Increase by 10% the previously announced 30% reduction in spending on contractor augmentees for headquarters staff	\$10.2
Intelligence	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$53.1
Joint Improvised Explosive Device Defeat Organization	Shut down in FY17	\$1.2
"Leap Ahead" Unmanned Systems	Add \$1.5 billion per year in additional research and development funding	-\$15.0
Missile Defense	Cancel the Precision Tracking Space System (PTSS) program and reduce spending on experimental national missile defense programs	\$37.5
Overhead for Commercial Activities	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$40.5
Other Procurement	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$23.6
Research and Development	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$56.2
SUBTOTAL		\$279.0

DEFENSE-WIDE ACTIVITIES	
2. CONSTRAINED GLOBAL PRESENCE	
\$500-550	
POLICY CHANGE	SAVINGS
From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$26.0
Same as Scenario 1	\$6.4
Reduce the workforce of 784,000 employees by 100,000 over 10 years by not replacing some retirees	\$48.9
Same as Scenario 1	\$9.1
Increase by 15% the previously announced 30% reduction in spending on contractor augmentees for headquarters staff	\$15.3
From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$70.8
Same as Scenario 1	\$1.2
Same as Scenario 1	-\$15.0
Same as Scenario 1	\$37.5
From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$53.9
From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$31.5
From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$75.0
	\$360.6

DEFENSE-WIDE ACTIVITIES		
Scenario	3. SELECTIVE LEVERAGE	
Target savings FY12-21	\$650-700	
PROGRAM	POLICY CHANGE	SAVINGS
Base Support and Facilities Maintenance	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$32.5
Depots	Same as Scenarios 1, 2	\$6.4
DOD Civilians	Reduce the workforce of 784,000 employees by 125,000 over 10 years by not replacing some retirees	\$61.1
DOD Retail Activities	Same as Scenarios 1, 2	\$9.1
Headquarters (Contractor)	Increase by 20% the previously announced 30% reduction in spending on contractor augmentees for headquarters staff	\$20.4
Intelligence	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$88.5
Joint Improvised Explosive Device Defeat Organization	Same as Scenarios 1, 2	\$1.2
"Leap Ahead" Unmanned Systems	Same as Scenarios 1, 2	-\$15.0
Missile Defense	Same as Scenarios 1, 2	\$37.5
Overhead for Commercial Activities	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$67.4
Other Procurement	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$39.4
Research and Development	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$93.7
SUBTOTAL		\$442.2

DEFENSE-WIDE ACTIVITIES

4. FOCUSED ECONOMY OF FORCE

\$800-850

POLICY CHANGE	SAVINGS	SOURCE(S)
From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$39.0	Estimate based on Bowles-Simpson ¹⁵
Same as Scenarios 1, 2, 3	\$6.4	CBO ¹⁶
Reduce the workforce of 784,000 employees by 150,000 over 10 years by not replacing some retirees	\$73.3	Estimate based on DOD and GAO ¹⁷
Same as Scenarios 1, 2, 3	\$9.1	CBO ¹⁸
Increase by 25% the previously announced 30% reduction in spending on contractor augmentees for headquarters staff	\$25.5	Estimate based on CRS ¹⁹
From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$106.2	Estimate based on DOD ²⁰
Same as Scenarios 1, 2, 3	\$1.2	Estimate based on DOD ²¹
Same as Scenarios 1, 2, 3	-\$15.0	Estimate based on FYDP ²²
Same as Scenarios 1, 2, 3	\$37.5	CBO ²³
From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$80.9	Estimate based on Defense Business Board ²⁴
From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$47.2	Estimate based on DOD ²⁵
From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$112.5	Estimate based on FY11 appropriation ²⁶
	\$523.8	

NON-DOD ACTIVITIES									
Scenario	1. REPOSITION AND RESET		2. CONSTRAINED GLOBAL PRESENCE		3. SELECTIVE LEVERAGE		4. FOCUSED ECONOMY OF FORCE		
Target savings FY12-21	\$350-400		\$500-550		\$650-700		\$800-850		
PROGRAM	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	POLICY CHANGE	SAVINGS	SOURCE(S)
Atomic Energy Defense Activities	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$12.6	From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$16.8	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$21.0	From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$25.2	Estimate based on FY11 appropriation ²⁷
Other Defense-Related Activities	From FY13 to FY21, hold spending 7.5% below FY11 level plus inflation	\$4.6	From FY13 to FY21, hold spending 10% below FY11 level plus inflation	\$6.2	From FY13 to FY21, hold spending 12.5% below FY11 level plus inflation	\$7.7	From FY13 to FY21, hold spending 15% below FY11 level plus inflation	\$9.3	Estimate based on FY11 appropriation ²⁸
SUBTOTAL		\$17.2		\$23.0		\$28.7		\$34.5	
TOTAL	\$382.5		\$501.7		\$664.8		\$821.7		

ENDNOTES

1. In 2016, the USS *George Washington* (CVN-73) is scheduled to begin refueling and complex overhaul, a costly and time-consuming process. This policy change would save overhaul costs, along with operating and support costs from 2017 to 2021. However, the savings would be reduced by the additional costs to decommission the carrier. See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options* (March 2011): 90-91.
2. The total amphibious fleet would decline significantly below the Department of the Navy's inventory goal of 33 ships as a result of this policy change. Authors' estimate based on the Department of the Navy's FY 2012 budget estimates; Congressional Budget Office, *An Analysis of the Navy's Fiscal Year 2012 Shipbuilding Plan* (June 2011): 6, 21; Ronald O'Rourke, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress* (Washington: Congressional Research Service, April 13, 2011): 6; and Office of the Chief of Naval Operations, *Report to Congress on Annual Long-Range Plan for Construction of Naval Vessels for FY 2011* (February 2010): 22. Readers should note that according to RAND, policymakers can offset the removal of some LHA-6s from the fleet by substituting CH-53Ks for MV-22s, a change included in some of the scenarios. See Robert W. Button et al., *Maritime Prepositioning Force (Future) Capability Assessment* (Santa Monica, CA: RAND Corporation, 2010).
3. Authors' estimate based on the Department of the Navy's FY 2012 budget estimates. The same figure was estimated in Congressional Budget Office, *Budget Options* (February 2005): 16.
4. This policy change is offset to varying degrees in Scenarios 1-3 by procuring additional DDG-51 destroyers. Authors' estimate based on projected savings from eliminating modernization and operating and support costs for six CG-47s. For modernization costs, see the Department of the Navy's FY 2012 budget estimates. For operating and support costs, see Joseph R. McDonald, "An Analysis of CG-47 Cruiser Class Operating and Support Costs Trends and Cost Relationship With Platform Age," Naval Postgraduate School (June 2011): 14-15.
5. Congressional Budget Office, *An Analysis of the Navy's Fiscal Year 2012 Shipbuilding Plan*: 18.
6. Authors' estimate based on the Department of the Navy's FY 2012 budget estimates; and Ronald O'Rourke, *Navy Littoral Combat Ship (LCS) Program: Background, Issues, and Options for Congress* (Washington: Congressional Research Service, April 29, 2011).
7. Readers should note that these figures are derived from existing estimates. Modeling updated policy options for the F-35 program was beyond the scope of this report. See National Commission on Fiscal Responsibility and Reform, "\$200 Billion in Illustrative Savings" (November 10, 2010): Options 46 and 47; and Congressional Budget Office, *Alternatives for Modernizing U.S. Fighter Forces* (May 2009): 34-35.
8. This policy change would continue to support other maritime intelligence, surveillance and reconnaissance platforms, such as the P-8A Poseidon aircraft, and might convert some Air Force RQ-4 Global Hawks to maritime specification. Congressional Budget Office, *Policy Options for Unmanned Aircraft Systems* (June 2011): 13.
9. General Duncan McNabb, testimony before the Senate Armed Services Committee, Subcommittee on Seapower (July 13, 2011).
10. To offset the reduction in MV-22s, this policy change would procure additional CH-53Ks after FY 2021. CH-53Ks have three times the payload of MV-22s. Authors' estimate based on the Department of the Navy's and the Department of the Air Force's FY 2012 budget estimates; and Jeremiah Gertler, *V-22 Osprey Tilt-Rotor Aircraft: Background and Issues for Congress* (Washington: Congressional Research Service, March 10, 2011). For analysis of the potential benefits of substituting CH-53Ks for MV-22s, see Robert W. Button et al., *Maritime Prepositioning Force (Future) Capability Assessment*.
11. In January 2011, then-Secretary Gates announced that starting in FY 2015, the Army's permanent active-duty end strength would decline from 547,000 to 520,000, and the Marine Corps's active-duty end strength would decline from 202,000 to 187,000. As a result, all four scenarios use baselines of 520,000 soldiers and 187,000 Marines so as not to count savings that are already reflected in the Future Years Defense Program. The proposed reductions would be spread out from FY 2015 to FY 2021. Authors' estimate based on Congressional Budget Office, *Budget Options Volume 2* (August 2009): 7. We thank our colleague Matt Irvine for developing this estimate.
12. This policy change would reinvest about \$7 billion of the savings generated from delaying the GCV into developing and purchasing upgrades for Bradley Fighting Vehicles, which will remain in the Army's inventory through at least 2025. See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options* (March 2011): 94-95.
13. The JLTV program currently lacks finalized information related to procurement quantity, cost and accessories. The authors' estimate assumes the following: 1) the Government Accountability Office's estimated unit cost of \$800,000 per vehicle, which includes the base vehicle cost plus government-furnished equipment, armor kits, and general and administrative fees; and 2) the Congressional Research Service's estimated procurement quantity of 32,600 vehicles, of which 12,258 would be procured during FY 2012-2021 according to the authors' modeling of the current acquisition schedule. (The authors assume a low rate initial production of 1,086 vehicles per year from FY 2016 to FY 2018 – assuming low rate initial production equals about 10 percent of the total buy – and a full rate production of 3,000 vehicles per year from FY 2019 to FY 2021). Changing these assumptions would change the estimated savings. For unit cost, see Government Accountability Office, *Defense Acquisitions: Issues to Be Considered as DOD Modernizes Its Fleet of Tactical Wheeled Vehicles* (November 2010): 14, 18-19. For procurement quantity, see Andrew Feickert, *Joint Light Tactical Vehicle (JLTV): Background and Issues for Congress* (Washington: Congressional Research Service, March 10, 2011): 4-5. The authors' estimate also draws on the Department of the Army's and the Department of the Navy's FY 2012 budget estimates. For additional analysis, see Terrence K. Kelly et al., *The U.S. Combat and Tactical Wheeled Vehicle Fleets* (Santa Monica, CA: RAND Corporation, 2011); and Senate Appropriations Committee, "Department of Defense Appropriations Bill, 2012," Report 112-77 (September 15, 2011): 162.

14. Though the Army has already announced its decision to reduce the JTRS GMR buy, that decision is not reflected in the FY 2012 Future Years Defense Program. See Department of Defense, "June 2011 SAR Info Paper" (August 10, 2011).

15. This policy change would reduce spending on base support and facilities maintenance to reflect the cuts to the U.S. military's combat end strength. The policy change would achieve the spending reductions for base support, which includes activities such as cutting grass, by adopting best practices among the services. It would achieve the spending reductions for facilities maintenance by trimming expenditures as planned base closures move forward. The estimated savings from this policy change may be optimistic, but the authors believe that DOD can do much more to reform its business practices and reduce the inefficiencies that deplete its resources. See National Commission on Fiscal Responsibility and Reform, "\$200 Billion in Illustrative Savings": Options 55 and 56. The savings estimate was prepared based on the approximate FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

16. Congressional Budget Office, *Budget Options* (February 2007): 33-34.

17. According to the Government Accountability Office, approximately 30 percent of DOD's civilian workforce will be eligible to retire by March 31, 2015. This policy change would spread the total reduction evenly over 10 years and rely on workforce-shaping tools – such as early retirement, voluntary separation incentives and retention bonuses – to maintain the critical human capital capabilities that DOD needs. Estimating the potential additional costs of these tools is beyond the scope of this report. Authors' estimate based on DOD's civilian pay and personnel trends since FY 2001. See Department of Defense, National Defense Budget Estimates for FY 2012 (March 2011): Tables 6-9 and 7-5. The figure on eligible retirees is from Government Accountability Office, Human Capital: Further Actions Needed to Enhance DOD's Civilian Strategic Workforce Plan (September 27, 2010): 1. For analysis of workforce-shaping tools, see Beth J. Asch, Steven J. Haider and Julie M. Zissimopoulos, "The Effects of Workforce-Shaping Tools on Retirement: The Case of the Department of Defense Civil Service," *Journal of Public Health Management and Practice* 15, Supplement 6 (November 2009). A related recommendation was included in Benjamin H. Friedman and Christopher Preble, "Budgetary Savings from Military Restraint," *Cato Institute Policy Analysis* No. 667 (September 23, 2010): 11.

18. This policy change would provide active-duty service members with a tax-free grocery allowance to offset the higher prices that would result from the proposed consolidation. See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*: 84-85.

19. This policy change would further reduce funding for contractor augmentees on headquarters staffs to reflect the cuts to the U.S. military's combat end strength. Stephen Daggett, "Preliminary assessment of efficiency initiatives announced by Secretary of Defense Gates on August 9, 2010" (August 12, 2010): 3.

20. This policy change would achieve the spending reductions in part by having the Office of the Director of National Intelligence (ODNI) make greater use of its authority to eliminate unnecessary overlap and duplication. Authors' estimate based on FY 2010 intelligence spending of \$80 billion, of which approximately 80 percent goes to national defense (function 050).

The estimated savings from this policy change may be optimistic, but the authors believe that the intelligence community can do much more to reform its business practices and reduce the inefficiencies that deplete its resources. For the spending level, see ODNI, "DNI Releases Budget Figure for 2010 National Intelligence Program" (October 28, 2010); and Department of Defense, "DOD Releases Military Intelligence Program 2010 Topline Budget" (October 28, 2010). On the portion of intelligence spending in function 050 and the ODNI's potential role in eliminating duplication, see Gordon Adams and Cindy Williams, *Buying National Security* (New York: Routledge, 2010): 120; and Domenici-Rivlin Debt Reduction Task Force, *Restoring America's Future* (November 17, 2010): 103. The savings estimate was prepared based on the approximate FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

21. By delaying JIEDDO's closure until FY 2017, this policy change would give the organization five more years to aid ongoing military operations in Afghanistan and to transition its most promising technologies to the military services' permanent development activities. Most of JIEDDO's funds come from the Overseas Contingency Operations (OCO) budget, which the Budget Control Act does not constrain. The projected savings represent JIEDDO's estimated base budget funds from FY 2017 to FY 2021 based on the FY 2011 appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index. See the Department of the Army's FY 2012 budget estimates.

22. This policy change would prioritize investment in breakthrough technologies for stealthy, long-range sea- and ground-based combat UASs, along with unmanned submersibles. Authors' estimate based on projected levels of spending. For related analysis, see Congressional Budget Office, *Policy Options for Unmanned Aircraft Systems*.

23. To offset the PTSS cancellation, this policy change would accelerate the Airborne Infrared (ABIR) system and data exploitation via overhead persistent infrared sensors (e.g. SBIRS). The House Armed Services Committee included this recommendation in its mark up of the FY 2012 National Defense Authorization Act. See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*: 97; Congressional Budget Office, *Budget Options Volume 2*: 21; and House Armed Services Committee, "National Defense Authorization Act for Fiscal Year 2012," Report 112-78 (May 17, 2011): 81-82.

24. This policy change would reduce spending on commercial activities positions held by military personnel to reflect the cuts to the U.S. military's combat end strength. The estimated savings from this policy change may be optimistic, but the authors believe that DOD can do much more to reform its business practices and reduce the inefficiencies that deplete its resources. Authors' estimate based on Defense Business Board, "Reducing Overhead and Improving DoD's Business Operations" (July 22, 2010): 25. The savings estimate was prepared based on the approximate FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

25. "Other Procurement" includes funding for communications and electronic equipment, tactical vehicles, and other supports and spares. This policy change reduces spending on other procurement because of the gradual drawdown of U.S. forces in Afghanistan and the significant buildup of this type of equipment since FY 2001. However, policymakers should be aware that this reduction could potentially have a negative impact on the readiness of some

units. The savings estimate was prepared based on the actual FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

26. To help reshape DOD's research and development budget, this policy change would have the U.S. military prioritize East Asia and the Middle East, achieve greater interdependence among the services, and return to a more restrictive planning and acquisition system, as this report recommends. Though using a target percentage is a suboptimal way to estimate the potential savings, crafting a detailed plan for reshaping DOD's research and development budget was beyond the scope of this report. Lawmakers should recognize that because research and development funding is the key enabler of breakthrough technologies, reducing these expenditures entails risk for the U.S. military. The savings estimate was prepared based on the actual FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

27. This policy change would reduce funding for atomic energy defense activities by amounts that are consistent with its proportional share of function 050. The savings could be achieved by stretching past FY 2021 the National Nuclear Security Administration's work on the Chemistry and Metallurgy Research Replacement, Uranium Processing Facility, Mixed Oxide Fuel Fabrication Facility and Waste Solidification Building, and other programs. The savings estimate was prepared based on the actual FY 2011 appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index. For analysis of the activities identified for potential delay, see Government Accountability Office, *Nuclear Weapons: NNSA Needs More Comprehensive Infrastructure and Workforce Data to Improve Enterprise Decision-making* (February 14, 2011); Government Accountability Office, *Nuclear Weapons: National Nuclear Security Administration's Plans for Its Uranium Processing Facility Should Better Reflect Funding Estimates and Technology Readiness* (November 19, 2010); Government Accountability Office, *Nuclear Nonproliferation: DOE Needs to Address Uncertainties with and Strengthen Independent Safety Oversight of Its Plutonium Disposition Program* (March 26, 2010); and Government Accountability Office, *DOD and NNSA Need to Better Manage Scope of Future Refurbishments and Risks to Maintaining U.S. Commitments to NATO* (May 2, 2011).

28. This policy change would reduce funding for other defense-related activities by amounts that are consistent with its proportional share of function 050. The savings estimate was prepared based on the actual FY 2011 base budget appropriation inflated according to the Congressional Budget Office's August 2011 GDP price index.

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