Illustrative Options for National Defense Under a Smaller Defense Budget
At a Glance

The Congressional Budget Office was asked to examine the effects on U.S. forces of a substantially smaller defense budget. Because forces can be reduced in many ways depending on the military strategy adopted, CBO created three broad options to illustrate the range of strategies that the United States could pursue under a budget that would be cut gradually by a total of $1 trillion, or 14 percent, between 2022 and 2031.

- Option 1 retains the 2017 national security strategy of “deterrence by denial,” which relies heavily on U.S. combat forces to deter military aggression against allies by denying or reversing military gains in regional conflicts. The size of U.S. forces would be reduced in proportion to the smaller budget, retaining the same balance of capabilities.

- Option 2 would shift emphasis from deterrence by denial to deterrence through punishment, a strategy that is similar to the United States’ approach during the Cold War. The option would de-emphasize the role of U.S. combat forces in regional conflicts in favor of a heavier reliance on coalition forces in combat operations. It would call for reductions in conventional forces, such as brigade combat teams and fighter aircraft, and increases in long-range strike capabilities, such as cruise missiles, antiship missiles, and air defense missiles.

- Option 3 focuses on maintaining the freedom of navigation in sea, air, and space around the world that the United States currently enjoys. It avoids the use of large ground forces to seize and hold territory in regional conflicts in favor of engaging enemies at standoff ranges.

Although the second and third options would require the same amount of funding as the first option, they would result in different force structures and different budget allocations among the military services.
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All years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

Numbers in the text, tables, and figures may not add up to totals because of rounding.

To remove the effects of inflation, the Congressional Budget Office used the gross domestic product price index from the Bureau of Economic Analysis. Dollar amounts are expressed in 2022 dollars.

In this report, funding refers to total obligational authority (TOA), a financial measure used by the Department of Defense (DoD) to identify the funding available for its programs. TOA differs from budget authority most notably in its adjustment for the timing of rescissions and lapses of prior-year budget authority. In recent years, the difference between TOA and discretionary budget authority in DoD’s budget request for the coming year has generally been $1 billion or less.

On the cover: Service members participate in a war game at the Marine Corps War College in April 2019. Photo courtesy of the Marine Corps.
Reducing defense budgets requires some combination of cutting the size of the force, purchasing fewer or less expensive weapons, and reducing the cost to operate and maintain the forces and equipment that remain in service. The analysis in this report is based on the 2017 National Security Strategy (NSS), a strategic plan that is similar to previous strategic plans dating back to the 1990s. (The military currently operates under an interim NSS issued by President Biden.) The 2017 NSS lays out a plan of deterring aggression with the threat of a U.S. military response that would deny an adversary any gains sought through military force. That strategy requires "military overmatch"—the ability to rapidly dominate an adversary's military—in an array of possible combat situations, including those that deny territorial gains near their homelands to China or Russia, the nation's biggest adversaries.

To implement the NSS, the 2018 National Defense Strategy (NDS) calls for a military budget that is big enough to maintain a large combat force at a high level of readiness. The multiyear plan for the military, the Future Years Defense Program (FYDP) for fiscal year 2021, which is used for this report, is based on the 2018 NDS.

Proposals for reducing defense budgets raise concerns that the resultant force would not meet the requirements of the NSS. But it is also possible that the NSS or the military's approach to implementing it might be changed to reduce the need for military forces and weapons.

The options in this report illustrate how decisionmakers might use that latter approach: starting by examining the military objectives that underlie the NSS and revising those objectives (and the NSS itself, if necessary) in favor of ones that could be achieved with less expansive (and less expensive) military capabilities, perhaps freeing resources to address other national priorities.

The Congressional Budget Office examined the possible effects on military forces and acquisition programs if funding for the Department of Defense (DoD) was reduced by $1 trillion (in 2022 dollars) over the next 10 years, relative to CBO's projection of the 2021 FYDP. If a 10-year cumulative reduction of $1 trillion in DoD's funding was achieved by phased budget cuts over the first five years of the period and growth with the rate of inflation thereafter, the defense budget in 2031 would be about 15 percent smaller than DoD's 2022 funding request.

CBO examined three options for reconfiguring the military within the confines of that smaller budget, each illustrating a different strategy for using military force to deter aggression. The changes in strategy would affect every aspect of military decisionmaking, including force size, weaponry, and relationships with U.S. allies.

**What Was CBO's Analytical Method?**

CBO created three options embodying different approaches to the use of military power in support of national security objectives, all with the same $1 trillion reduction in funding. Those differing approaches drive choices that lead to different configurations of military forces. In the first option, CBO retained DoD's current approach to the use of military force, reducing forces and acquisition programs in proportion to their size in the current budget. That resulted in an active-duty force that would look much like today's force but would have about 20 percent fewer personnel by 2031. In Options 2 and 3, CBO changed the objectives related to deterrence and conflict, particularly as they related to great powers like China and Russia. It used those revised objectives to illustrate the changes in the number and types of military units that might be fielded.

In all of the options, CBO reduced only the full-time, active-duty force, leaving the reserve component untouched. That is because the reserve component is less expensive to maintain and provides flexible ways to augment or support the active-duty force if it should become necessary.

None of the plans are without risk, and reducing the size of the active component highlights a principal risk of cutting the military budget. A smaller active force requires more time to mount a significant military
response, time that is needed to consolidate active forces in a region of conflict and to mobilize the reserves. Given more time, an enemy can consolidate its gains and fortify its position, making a counterattack more difficult and more costly. As a result, there would be greater pressure on civilian leadership to commit forces as soon as possible, increasing the risk of miscalculation in a rush to war.

There are also potential benefits to reducing the size of the military budget. For example, resources could be freed for other national priorities. Those might include protecting the nation against ongoing nonmilitary threats, such as cyberattacks against critical infrastructure and the spread of disinformation, which adversaries are using to threaten the United States and its allies.

**What Did CBO Find?**

Although substantial, a reduction that reached 15 percent by 2031 would be smaller than both the 1990s’ budget reductions (a 30 percent decline in annual budgets between 1988 and 1997) and the 18 percent decline in annual budgets between 2012 and 2015 that followed enactment of the Budget Control Act of 2011 (BCA). The reductions of the 1990s were achieved by cuts in force size and a sharp curtailment of funding for new weapons. The decrease after enactment of the BCA resulted from both the caps placed on defense funding by the BCA and reductions in the size of the force for operations in Afghanistan and Iraq. In CBO’s notional options, each reduction would be achieved in a different way, depending on the demands and goals of the underlying strategy (see Table S-1).

**Option 1: Proportional Reduction**

In Option 1, the active-duty force would shrink by roughly one-fifth and the number of units would be reduced proportionally. DoD could try to maintain overmatch with a smaller force by concentrating that force in regions where the greatest threat was perceived so that it could strike back quickly, or it could concentrate its forces in a central location and accept some risk that it would respond less rapidly to a threat. With fewer personnel and less equipment, that smaller force might have more difficulty supporting the nation’s overmatch strategy than current forces.

**Option 2: Coalition Defense**

Option 2 would change how the United States uses military force to deter aggression against its allies. This would change DoD’s military approach, requiring the department to reconfigure its force structure. Instead of deterrence through “denial”—denying an adversary its military objectives—the military’s new approach would be to deter with the threat of “punishment”—severely damaging an adversary by military actions such as naval blockades and no-fly zones and avoiding the use of large ground forces in combat operations. Put another way, the objective in Option 2 would be to inflict high military, economic, and diplomatic costs for military aggression.

If its allies were attacked, the United States would de-emphasize use of its own combat forces in favor of supporting allied combat operations with long-range strike capabilities; support and collaboration related to command, control, and intelligence; and logistics support. If the aggressor did not relent, constant pressure would be applied through continued military attacks, economic sanctions, and diplomatic actions until the aggressor changed its behavior.

To accommodate the new approach with a smaller budget, the military would reduce the size of ground combat and tactical aviation forces in favor of increasing naval forces and creating greater long-range strike, logistics, and communications capabilities.

**Option 3: Command of the Commons**

Option 3 would further de-emphasize use of U.S. combat forces in regional conflict, focusing instead on maintaining the U.S. military’s current primacy in freedom of navigation at sea, in the air, and in space (collectively known as the global commons). The military objective would be for the United States to be able to maintain control of the flow of goods and commerce in the commons, to maintain ready access to ports and logistics hubs by U.S. forces and allies, and, if necessary, to deny adversaries access to the commons. DoD would deter military aggression outside of the commons by helping allies harden themselves against attack and by building strong regional coalitions of military, economic, and diplomatic partners.

DoD would retain a slightly larger naval force than in Option 1, but that force would be reconfigured to better maintain U.S. control of sea-lanes. DoD would boost investment in intelligence, surveillance, and reconnaissance (ISR) capabilities, especially for the Air Force and Space Force.
What Are Some Limitations of CBO’s Analysis?

CBO makes no judgment as to whether a budget reduction should be implemented, what security strategy the United States should formulate, or how DoD should adjust forces under a smaller budget. The options presented here are meant to show that a wide range of alternatives could be pursued with the same budget, including the current budget. Those options are designed to be high-level illustrations and have not been subject to the analysis and planning that DoD puts into crafting war plans or building a FYDP.
Chapter 1: Background

Each year when the Congress appropriates funds for defense and nondefense activities, lawmakers face broad trade-offs in determining the amount of funding and its allocation. In this report, the Congressional Budget Office examines what the implications would be if the Congress reduced defense funding by a sizable amount to focus on other priorities.

The Senate Budget Committee asked CBO to explore three aspects of military funding and its relationship to force structure and strategy:

- The effect of significant reductions on the U.S. military's size and capability;
- How forces and programs might adapt to a smaller budget; and
- How changes might affect the military’s ability to support U.S. interests.

When faced with a reduction in funding, military planners might opt to reduce the inventory of a specific weapon system or eliminate certain units that are expensive to maintain. Examining such reductions in isolation typically fails to account for how changes in particular forces or equipment might affect overall U.S. military operations, including whether such cuts would make it difficult for the Department of Defense to implement the current national security strategy. This report starts at the other end of the process, looking at the military’s approach to national security objectives under resource constraints and how those objectives could be changed as needed to inform changes in force structure and equipment.

To illustrate this approach, CBO examined a reduction in defense funding of $1 trillion (in 2022 dollars). The reductions would be phased in over the first five years of that period starting in 2022, with the new, smaller budget held constant at 2026 levels (in real terms—that is, with the effects of inflation excluded) for the remaining five years, until 2031. (For a more detailed description of CBO’s approach, see the appendix.) Over the 10-year period, such funding would amount to a cumulative reduction of about 14 percent; the annual budget in 2031 would be about 15 percent smaller than in 2022. Although that reduction would be large, it would be smaller than the 30 percent reduction in the defense budget between 1988 and 1997 and the 18 percent decline in total funding between 2012 and 2015 that followed enactment of the Budget Control Act of 2011. Adjusted for inflation, the reduced defense budget in 2031 would be about $20 billion (or 3 percent) less than what the United States spent on defense in 2003.

Funding for military forces and programs could be reduced by 15 percent in many ways, but all would result in some combination of a smaller force and fewer acquisitions for equipment modernization efforts. The options in this report represent only a few possibilities for achieving a $1 trillion budget reduction, and if there is any future reduction in defense budgets, it would probably differ from $1 trillion. The options are meant to show how, in deciding what capabilities to keep and what to shed, planners could choose to reevaluate military objectives and assumptions about the role of the United States in foreign conflicts. The same approach could be used to restructure forces under the current budget.

How a $1 Trillion Reduction Would Compare With Past Budget Reductions

Past changes in defense funding were associated with changes in the global security environment and fiscal pressures on the federal budget. In recent decades, there have been two large, multiyear budget reductions (see Figure 1-1). The first was in response to the collapse of the Soviet Union. The second was driven by two factors: the BCA and a reduction of forces in Iraq and Afghanistan. In the BCA, the Congress established funding caps to reduce deficits following the 2007–2009 recession.

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1. Reductions were measured relative to DoD’s 2021 Future Years Defense Program for 2021 to 2025 and CBO’s projections of that program for 2026 to 2030. See Congressional Budget Office, Long-Term Implications of the 2021 Future Years Defense Program (September 2020), Figure 1, www.cbo.gov/publication/56526. The Biden Administration has not yet formulated a five-year plan or formal national defense strategy.
The 1990s Military Drawdown

After peaking in 1985, the defense budget began to fall over the next few years as large-scale weapon system modernization programs were completed and tensions with the Soviets eased. The Cold War began winding down in 1989 with the withdrawal of Soviet forces from Afghanistan; with the demolition of East Germany's wall in Berlin and the collapse of the Soviet Union in 1991, the most significant threat to the United States disappeared. That collapse led to a reduction in U.S. defense funding, often termed the “Peace Dividend.” By 1997, adjusted for inflation, DoD’s budget was 30 percent less than in 1988. During the drawdown, forces were reduced, acquisition programs curtailed, and bases closed. The number of active-duty personnel in 1997 was about one-third less than in 1988 (see Figure 1-2).

Compared with the drawdown of the 1990s, the $1 trillion reduction considered in this report would change funding by about half as much, 15 percent, by 2031. Likewise, the decrease in the number of service members in CBO’s options would be smaller than the 34 percent reduction during the 1990s, ranging from 19 percent to 24 percent depending on the option.

The 2011 Budget Control Act

After 1997, DoD’s funding was relatively flat for three years and then grew slowly until the attacks of September 11, 2001, after which it increased rapidly. Funding peaked in 2010 at $858 billion, including substantial funding for the wars in Afghanistan and Iraq. (All dollar amounts in this paper are expressed in 2022 dollars). After 2010, defense budgets began to fall. By 2015, the budget had reached a low of $643 billion, 25 percent below the 2010 peak but still well above levels in the second half of the 20th century.

The decline in funding between 2010 and 2015 can be attributed to two simultaneous developments. The first
was a reduction in the size of the force after the surge in the number of personnel in Afghanistan and Iraq from 2010 to 2011. The second was the constraint on the federal budget following the economic effects of the 2008 financial collapse and policies implemented to address it. The Congress enacted the BCA in an environment of then-record deficits. Limits on defense funding and reductions in the size of the force committed to overseas operations resulted in a budget in 2015 that was 18 percent smaller than it had been in 2012.4 After 2015, the Congress began adjusting the BCA’s caps upward, so that by 2021, DoD’s total funding was only about 8 percent less than the 2012 amount.

A $1 trillion reduction in funding over the 2021–2031 period would have a small effect on the total number of service members relative to the drawdowns after the Cold War, the Korean War, and the Vietnam War. Because the cost of personnel has grown over time, cutting their numbers slightly would enable the department to avoid making bigger cuts in equipment.

The Effect of Budget Reductions on the Number of Service Members

Rather than rising and falling over time with the defense budget, the size of the active-duty military has generally fallen since the end of the Vietnam War, aside from slight increases during the 1980s buildup and at the height of the wars in Afghanistan and Iraq. In 2001, CBO estimates, the average cost of an active-duty service member’s pay was about $71,000. Based on the 2022 budget request, that cost is now about $106,000, CBO estimates. The high cost of personnel has led the services to seek increasingly accurate and lethal weapon systems, which require fewer support systems and personnel but are generally more costly to develop, manufacture, and maintain.

Because of the cost of personnel, relatively small changes in force size can lead to large changes in the budget. Hence, personnel decisions play an important part in any plans to make large reductions in defense funding. DoD might choose to reduce the size of the force, to

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4. For context, DoD’s outlays fell from 4.2 percent of GDP in 2012 to 3.2 percent of GDP in 2015. DoD’s outlays measure the actual disbursements from the Treasury that arise from funding for defense programs. See Congressional Budget Office, “Historical Budget Data” (February 2021), www.cbo.gov/data/budget-economic-data#2.
Box 1-1.

**Approaches for Keeping a Larger Force**

The analysis in this report assumes that trends in the current defense budget will continue over the next 10 years. For example, increases in military compensation will continue to grow faster than the employment cost index, and operation and maintenance (O&M) costs will continue to grow faster than inflation, as they have done for several decades.

If those trends could be reversed and the Department of Defense (DoD) could reduce the growth in some of those costs, DoD could offset some of the reductions in force structure that it might otherwise have to make to meet possible budget constraints such as those considered in this report. DoD has identified some ways to achieve savings by making its business practices more efficient, and it is trying to implement those changes. The Congressional Budget Office also has identified policy changes that could achieve some significant savings and allow DoD to retain a larger force.

**Savings Identified by DoD**

Previous analyses by CBO indicate that, even if the size and composition of the military remained fixed, DoD’s budget would probably grow faster than inflation by an average of 1 percent per year in real terms (that is, with the effects of inflation excluded), primarily because of increases in wages, prices, and O&M costs.

Under the 2021 Future Years Defense Program, defense spending would be held roughly constant in real terms. In principle, cost growth causes DoD to lose buying power, forcing it to trade between priorities to stay within the constraints of a flat budget. In practice, however, DoD plans to find efficiencies and preserve buying power.

DoD, as required by the 2018 National Defense Authorization Act, has implemented an enterprise management system to regularly identify ways to make its business processes more efficient. To date, DoD claims to have saved $1.3 billion in 2017 and $3.3 billion in 2018 in such efficiencies—both well under 1 percent of the budget—and $6 billion in 2019, about 1 percent of the total budget. It is not clear whether the department could continue to find such savings without substantive changes in defense programs.

DoD has also claimed that the Base Realignment and Closure process (BRAC) will enable the department to achieve savings by consolidating forces and closing underused or unused facilities. In principle, those savings would be achieved in the long term by avoiding O&M costs for those sites. In the near term, costs typically would increase because of the cost of consolidating forces and creating new spaces, closing installations, or disposing of property.

CBO did not consider BRAC in its options because the process can be contentious, and savings are generally difficult to predict. In addition, this report focuses on making strategic changes to force structure, which are a major cost driver in DoD’s budget; the cost of facilities is a small part of the total defense budget.

**Savings Identified by CBO**

Every two years, CBO provides a catalog of specific options intended to reduce federal spending, including defense spending. Some of those options would reduce (or slow the growth in) DoD’s manpower and operating costs. For example, restoring service members’ housing allowance to its historical level of 80 percent of average housing costs could save $3.1 billion a year by 2031, enough for the Army to operate an additional combat aviation brigade (see Table). If the growth in basic pay was slowed, DoD could save $2.6 billion a year by 2031.

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CHAPTER 1: BACKGROUND

ILLUSTRATIVE OPTIONS FOR NATIONAL DEFENSE UNDER A SMALLER DEFENSE BUDGET

reduce the cost per member (that is, reduce military compensation or the growth rate of that compensation), or some combination of the two. For simplicity, the three options in this report exclude changes in compensation. However, reducing compensation costs or costs in other areas such as modernization of weapon systems could generate savings that would allow DoD to maintain a larger force structure (see Box 1-1). 5

### Setting the Nation’s Priorities for Security

The military makes choices about forces and equipment modernization programs on the basis of guidance from a set of strategy documents that outline the Administration’s approach to national security (see Figure 1-3). At the most general level, the White House issues the National Security Strategy, communicating national objectives and priorities to synchronize efforts across the government to make the best use of the military, economic, and diplomatic elements of national power. The NSS provides a national narrative about why and how the United States acts in the world community.

The military generally couches the relationship between strategy and forces in terms of “ends, ways, and means,” according to the Joint Chiefs of Staff. 6 In this report, CBO frames “ends” as broad strategic objectives, “ways” as the approaches for achieving those objectives, and “means” as the resources used to achieve those objectives. The military’s approaches for achieving the NSS’s objectives are spelled out in numerous documents that follow the strategy’s publication. The allocation of resources that results from that strategic planning process is incorporated in the Future Years Defense Program, DoD’s multiyear plan for the military. The FYDP aligns resources and plans to meet DoD’s strategy and objectives.

5. See Congressional Budget Office, Approaches to Changing Military Compensation (January 2020), Figure 2-1, p. 16, www.cbo.gov/publication/55648.

Using the NSS’s approaches (for example, using military overmatch to deny an adversary any victory) and priorities (for example, identifying China and Russia as key U.S. adversaries or emphasizing support to allies), federal agencies create their own strategy documents that provide in greater detail how they expect to support national security guidance. For the defense agencies, that document is the National Defense Strategy.

The NDS aligns the approaches to national defense in the NSS with programs and funding in the national defense portion of the federal budget, about 95 percent of which is in DoD’s budget. Documents that flow from the NDS (such as the National Military Strategy and the guidance issued by each military service chief) provide a more detailed set of plans for allocating resources to the forces and programs within each DoD organization and placing them in order of priority. At each level, the guidance becomes more specific, and the amount of funding affected becomes smaller.

**Key Elements of the 2017 National Security Strategy**

This report focuses on the NSS released in December 2017, which was used to set priorities in the 2021 FYDP. It establishes broad objectives for national security across all elements of national power. The NSS organizes its approaches into four pillars:

- “Protect the American people, the homeland, and the American way of life,”
- “Promote American prosperity,”
- “Preserve peace through strength,” and
- “Advance American influence.”

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7. Proposed funding for national defense (budget function 050) is $753 billion for 2022. DoD’s funding would be $715 billion or about 95 percent of the total, a share that has been consistent for many years.
The military has a role to play in each pillar, but the third, “preserve peace through strength,” has the greatest bearing on DoD’s plans for forces and equipment. Under that heading, the NSS identifies five threats, dividing them into three categories: the “revisionist powers” of China and Russia; the “rogue states” of Iran and North Korea; and certain transnational organizations, particularly jihadist terrorist groups.

According to the NSS, military overmatch is a key component of preserving peace through strength. Overmatch, which the 2017 NSS describes as the combination of capabilities in sufficient scale to prevent any enemy’s success, is cited as critical to strengthening the nation’s diplomatic position, allowing the United States to shape the international environment, and protecting U.S. interests. The U.S. military grew accustomed to having overmatch against adversaries after the end of the Cold War, when Russia was no longer considered an adversary, and China was just beginning efforts to modernize its military. The United States engaged in conflicts with adversaries in Bosnia, Kosovo, and Iraq. They were followed in the 2000s by operations in Afghanistan and Iraq. All were militaries that U.S. forces could easily overmatch in conventional combat (though other factors affected the outcome in Afghanistan). As Russia and China have increased their military capabilities and become increasingly hostile to the interests of the United States and its allies, the U.S. military has sought to preserve its overmatch capability.

However, overmatch has become increasingly difficult to maintain given China and Russia’s long-range precision weapons, the growing ability of China’s navy to operate in the deep waters of open oceans, asymmetric tactics that play to weaknesses in U.S. forces, and the use of gray-zone, or less-than-war, tactics involving cyber and information operations. Some analysts suggest that overmatch might not be achievable against those countries in their regions—even if DoD’s funding remains at levels that are quite high by historical standards.\(^8\) The NSS recognizes the challenges the United States has in retaining overmatch, noting that in recent years both state actors (acting on behalf of a government) and nonstate actors (which are not affiliated with a government) have been able to harm the United States, its forces, and its allies in ways that were not previously possible.\(^9\)

Achieving the overmatch envisioned in the 2017 NSS would be even less feasible should the defense budget be reduced.

The NSS expands on the “peace through strength” pillar by setting objectives for the military against a great power.\(^10\) According to the 2017 NSS, “We must convince adversaries that we can and will defeat them—not just punish them if they attack the United States. We must ensure the ability to deter potential enemies by denial, convincing them that they cannot accomplish objectives through the use of force or other forms of aggression.” To attain those objectives, the U.S. military must be able to rapidly dominate (overmatch) even its most capable adversaries, either preventing them from achieving their initial objectives or rapidly reversing their gains.\(^11\)

In a conflict with a great power, such a response would most likely result in a rapid escalation of hostilities, potentially leading to a large-scale war. However, the threat of defeating an enemy would be hollow if the United States could not demonstrate its ability to overmatch its forces in combat. Though the 2018 NDS sets the expectation that the U.S. military will fight as part of a coalition such as the North Atlantic Treaty Organization (NATO) or the Australia, New Zealand, and United States Security Treaty, it makes the U.S. military responsible for denying victory to an aggressor.

**Key Elements of the 2018 National Defense Strategy**

The 2018 NDS describes DoD’s priorities for supporting the NSS by laying out three lines of effort:

- “Rebuilding military readiness as we build a more lethal Joint Force,”
- “Strengthening alliances as we attract new partners,” and
- “Reforming the Department’s business practices for greater performance and affordability.”

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\(^10\) Ibid., pp. 27–28.

\(^11\) For one characterization of this approach, see Congressman Mike Gallagher, “To Deter China, the Naval Services Must Integrate,” *Texas National Security Review* (February 4, 2020), https://tinyurl.com/3bkanej3.
In the first line of effort, maintaining high readiness for war and creating a more lethal force can be aligned with the NSS’s denial-with-overmatch approach. The NDS describes a military that is constantly prepared for war, particularly a costly conventional conflict against China or Russia, and that is simultaneously prepared to deter other conflicts that crop up elsewhere, disrupt terrorist threats, and counter threats from weapons of mass destruction. Maintaining a high level of readiness for a large, conventional war with a great power and modernizing equipment to enhance lethality and ensure overmatch are the components of the NDS that tend to drive up costs.

The second line of effort aims to increase the nation’s ability to deter enemies from attacking and increase its combat capacity by working with allies to build up their military strength. The effective size of the U.S. military can be expanded through collaboration with other countries’ militaries, generally at less cost than if those forces resided in the U.S. military. The costs associated with collaboration consist mostly of operation and support (O&S) funding for joint training exercises and may include acquisition costs associated with direct material support of allies, such as providing equipment to allied forces as well as munitions for training.

The third line of effort, reforming business practices, aims to find administrative savings that could be reinvested in building a more lethal, more capable military (see Box 1-1 on page 8 for a discussion of reforms and other approaches to reducing the cost of DoD’s operations and personnel).

Relationship Between Strategy, Forces, and Funding
Strategic assumptions in the NSS about the use of military force guide DoD’s choices of forces and weapon systems. The objective of deterrence by denial has implications for the size and capabilities of the U.S. military. Convincing a great power that the U.S. military has the means to deny the adversary’s objectives requires the United States to maintain a large force, ready to deploy, equipped to fight in a contested space, and to do so on short notice. Those requirements influence choices about force size, equipment, training, and transportation. Those choices, in turn, define the military’s current budgetary needs. Changes in the NSS’s approach to deterrence would lead to different choices and thus to different budgetary needs.

Deterrence by denial in a conventional (nonnuclear) conflict is based on a credible threat of overmatch, requiring not only that those forces be of sufficient size but also that they be equipped with weapon systems capable of overwhelming the adversary. The current focus on overmatch has led to an emphasis on fielding systems in areas such as hypersonic weapons and new space systems and modernizing systems in areas such as ground-based cruise missile systems.12

Chapter 2: Options to Achieve Deterrence With a Smaller Defense Budget

The Congressional Budget Office created three options to illustrate how changes in the country’s approach to the use of military force might enable the armed forces to deter military aggression on a budget that is smaller than the current defense budget. Although the budget reduction is the same in each option, the share allocated to each service and the force structure within each service vary depending on how the United States approaches the use of military force in international conflicts (see Figure 2-1 and see Table 2-1).

The primary strategic objective underlying each option is deterrence—discouraging adversaries from attacking by making them fear the consequences of an attack. Deterrence requires the United States to have a modern military force large enough to present a credible threat. Because the greatest military threats to the United States and its interests are other great powers (primarily China and Russia), the options focus on countering those threats. Other nations, such as North Korea and Iran, pose a threat to stability in their geographic regions but present a lesser challenge in conventional warfare.

In Option 1, CBO explores how the current approach of deterrence by denial could be executed with a smaller force and smaller budget. Under Option 2, the United States would still seek to deter aggression with a force structure that could overwhelm an adversary, but it would place more responsibility on U.S. allies to use their own combat forces to defend their boundaries or expel enemy forces from allied territory. Under Option 3, the United States would seek to deter adversaries by relying more heavily on the combat forces of regional U.S. allies to halt or confound aggression locally while the U.S. military focused on supporting their operations from the global commons, which may be loosely characterized as regions around the globe governed by international agreement, such as the Indian Ocean, South China Sea, or Arctic regions.

Although estimates of the costs of military forces can be produced with some accuracy, estimating the amount of deterrence provided by military forces and programs or the effectiveness of forces in combat operations is much more difficult. The three options provide a very broad overview of the types of changes that would be associated with different approaches to deterrence and conflict. Military planners would need to refine each option to fully understand its implications.

The options share some characteristics in addition to having the same defense budget. Funding for defense-wide functions is the same under each option even though funding for the Army, Navy, Air Force, and Marine Corps varies. The options would make no changes to nuclear forces or to forces in the reserve component.1 (For further discussion of the similarities among the options, see the appendix.)

**Option 1: Proportional Reduction**

Under Option 1, the Department of Defense would generally adhere to a strategy based on the 2017 National Security Strategy but would make some changes to accommodate the reduction in force size resulting from a smaller budget. That strategy requires military overmatch in an array of possible combat situations. The new force would be a smaller version of the current force, with 19 percent fewer personnel in the active component, on average.

**Approach to Deterrence**

A smaller force would reduce DoD’s ability to rapidly react to military conflicts around the world. For example, with a smaller force spread around the globe, the military would require more time to gather its forces and mount a military response to regional conflict. In the absence

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of a rapid response, the United States would have less ability to shape other nations’ behavior in the early stages of conflict. If clashes did occur, the value of committing U.S. combat forces would need to be carefully weighed against the risk of being unable to act in other engagements, possibly making it easier for other adversaries to act in their region of influence while the U.S. military was engaged elsewhere. The United States would also have fewer forces available to respond to a diffuse series of smaller attacks conducted in rapid succession.

Nor would participating in multiple regional conflicts be the only challenge. According to some analysts, demonstrating the ability to respond fast enough to deny a great power its objective requires a large military force with assets staged around the world. Such an arrangement allows the United States to strike before an enemy completes its operations and begins fortifying its positions. To make that threat credible, U.S. forces must be

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### Table 2-1.

**Change in the Number of Units Under Various Options**

<table>
<thead>
<tr>
<th>Service</th>
<th>Unit</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units in 2022&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Units in 2031</td>
<td>Change (Percent)</td>
<td>Units in 2022&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Army</strong></td>
<td>Brigade Combat Teams</td>
<td>31</td>
<td>25</td>
<td>-19</td>
</tr>
<tr>
<td></td>
<td>Security Force Assistance Brigades</td>
<td>5</td>
<td>4</td>
<td>-20</td>
</tr>
<tr>
<td></td>
<td>Aviation Brigades</td>
<td>11</td>
<td>9</td>
<td>-18</td>
</tr>
<tr>
<td></td>
<td>Long-Range Strike Missile Battalions</td>
<td>0</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Antiship and Air Defense Missile Units</td>
<td>0</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Air and Missile Defense Units</td>
<td>7</td>
<td>6</td>
<td>-14</td>
</tr>
<tr>
<td><strong>Marine Corps</strong></td>
<td>Infantry Battalions</td>
<td>24</td>
<td>20</td>
<td>-17</td>
</tr>
<tr>
<td></td>
<td>Aviation Squadrons</td>
<td>24</td>
<td>20</td>
<td>-17</td>
</tr>
<tr>
<td></td>
<td>Air-Land-Sea Attack Missile Units</td>
<td>0</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td><strong>Navy</strong></td>
<td>Carrier Strike Groups</td>
<td>11</td>
<td>9</td>
<td>-18</td>
</tr>
<tr>
<td></td>
<td>Large Surface Combatants</td>
<td>98</td>
<td>78</td>
<td>-20</td>
</tr>
<tr>
<td></td>
<td>Small Surface Combatants</td>
<td>28</td>
<td>20</td>
<td>-29</td>
</tr>
<tr>
<td></td>
<td>Submarines</td>
<td>69</td>
<td>62</td>
<td>-10</td>
</tr>
<tr>
<td></td>
<td>Large Amphibious Ships</td>
<td>36</td>
<td>28</td>
<td>-22</td>
</tr>
<tr>
<td></td>
<td>Small Amphibious Ships</td>
<td>0</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Maritime Aviation Squadrons</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Combat Logistics and Support Ships</td>
<td>59</td>
<td>51</td>
<td>-14</td>
</tr>
<tr>
<td></td>
<td>Unmanned Naval Vessels</td>
<td>0</td>
<td>10</td>
<td>--</td>
</tr>
<tr>
<td><strong>Air Force</strong></td>
<td>Tactical Fighter Squadrons</td>
<td>103</td>
<td>78</td>
<td>-24</td>
</tr>
<tr>
<td></td>
<td>Bomber Squadrons</td>
<td>9</td>
<td>7</td>
<td>-22</td>
</tr>
<tr>
<td></td>
<td>Airlift Squadrons</td>
<td>39</td>
<td>35</td>
<td>-10</td>
</tr>
<tr>
<td></td>
<td>Tanker Squadrons</td>
<td>36</td>
<td>24</td>
<td>-33</td>
</tr>
<tr>
<td></td>
<td>Unmanned Aircraft Squadrons</td>
<td>31</td>
<td>24</td>
<td>-23</td>
</tr>
</tbody>
</table>


All options assume the implementation of a $1 trillion reduction (in 2022 dollars) that would be phased in over the first five years of the 2022–2031 period. By the end of the period, the Department of Defense’s (DoD’s) cumulative funding would decrease by about 14 percent, from $7.3 trillion to about $6.3 trillion. Funding in 2022 dollars would fall from the proposed $715 billion in 2022 to $606 billion in 2031, a reduction of 15 percent. In DoD’s current plan, the active-duty force would be 1.4 million in 2022.

**Option 1: Proportional Reduction.** Preserves current post–Cold War strategy of deterring aggression through threat of immediate U.S. military response with the objectives of denying an adversary’s gains and recapturing lost territory. Distributes the reduction in funding evenly across departments, retaining a smaller force and implementing a less ambitious modernization program.

**Option 2: Coalition Defense.** Adopts a Cold War–like strategy for large nuclear powers of making aggression very costly and recognizing that the size of conventional conflict would be limited by the threat of a nuclear response. Deters aggression through threat of immediate U.S. military response with the objective of severely damaging an adversary and applying pressure through military, diplomatic, and economic actions of a coalition of allies. Reduces use of conventional combat forces. Increases use of ground-based long-range missiles and air defense. Emphasizes local naval blockades and no-fly zones.

**Option 3: Command of the Commons.** De-emphasizes use of U.S. military force in regional conflicts in favor of preserving U.S. control of the global commons (sea, air, space, and the Arctic), ensuring open access to the commons for allies and unimpeded global commerce. Prepares allies to deter aggression with their own forces and supports them with long-range strikes and naval blockades. Increases intelligence assets to detect and counter gray zone, or nonmilitary, tactics such as interference with elections and economic coercion.

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<sup>a</sup> The number of units reflects the number projected for 2022 in DoD’s 2021 plan; aircraft squadrons are standardized to have 12 aircraft each.
capable of military overmatch in a wide range of operations, including the most demanding: direct military confrontation with China or Russia. Achieving such overmatch against all potential threats has been identified as a challenge by critics of the 2018 National Defense Strategy, even with current funding. Implementing such an approach with a smaller force, as described in this option, would be more difficult.

Tactical commanders typically seek to achieve overmatch at an operational level by amassing a military force large and powerful enough to apply constant pressure on an enemy at a pace that outmatches that enemy’s ability to react. Overmatching an enemy at the tactical level may include wearing it down by making it constantly shift locations or destroying enemy units and eliminating their ability to counterattack. Pursuing overmatch at a tactical level in combat is different from a national military strategy that tries to achieve and maintain overmatch across entire theaters of conflict and a wide range of potential scenarios.

The key factors supporting overmatch are capacity (personnel and units), capability (kinds and quality of forces), and agility (the ability to rapidly shift position). To achieve overmatch at the strategic level under the wide variety of operational scenarios envisioned in the 2018 NDS requires that general and special-purpose combat forces have the capacity and capability for all those scenarios. The greater the number of scenarios under consideration, the larger the number of combat forces that must be maintained. To maintain agility, those combat forces need the support of an even larger contingent of logistical forces that can rapidly transport them to a battlefield and sustain them in combat.

Considering a wide range of possible military scenarios is part of the military’s planning in response to the NSS, and the scenarios that are adopted affect force structure, which drives the budget. For example, in exploring potential scenarios, some military planners indicate that in a conflict with China, the U.S. military may be required to fight a ground war on China’s border. If that scenario was added to the list of overmatch scenarios that DoD considered, it might have significant effects on the size, readiness, and cost of ground forces.

Challenges of an Overmatch Strategy

The expectation that U.S. forces should have overmatch against all opponents can be traced to post–Cold War conflicts like the Gulf War in 1990, operations in Bosnia in 1992 and Kosovo in 1998, and the first phases of the conflicts in Afghanistan and Iraq in 2002 and 2003. After the Soviet Union collapsed, the U.S. military found it was readily able to dominate adversaries’ military forces, though it sometimes took several months to amass enough forces in a region to do so. Those experiences have established an expectation that the United States should always achieve overmatch.

But those demonstrated successes against lesser adversaries might not be possible against adversaries in the future regardless of the size of the U.S. defense budget. Changes in technology and tactics make it less likely the United States can achieve overmatch in military confrontations with adversaries. Moreover, many potential adversaries, including China and Russia, have spent the years since the first war in Iraq honing their weapons and tactics specifically to counter U.S. advantages and diminish the U.S. military’s ability to dominate them. Observers note that countering the proliferation of precision weapons and asymmetric tactics presents a challenge to the current force. Furthermore, China’s and Russia’s militaries are much larger and more capable than the adversaries U.S. forces faced after the Cold War. As a result, some observers question the feasibility of pursuing overmatch.

3. Ibid.
5. See Joint Chiefs of Staff, Joint Publication 3-0: Joint Operations (October 2018), https://go.usa.gov/xFYUS (PDF, 2.5 KB).
7. For more on war planning, see Michael Loftus, “What’s in a War Plan?” War Room (U.S. Army War College, September 24, 2020), https://warroom.armywarcollege.edu/articles/war-plan/.
10. Asymmetric tactics include cyberattacks, information operations such as collecting tactical information and spreading propaganda about an opponent and using soldiers who are not officially part of a military force.
in large direct conflicts with China and Russia, even if the U.S. military was larger than it is today.¹¹

**Maintaining Overmatch With a Smaller Force**

DoD could try to maintain overmatch with a smaller force by concentrating that force in regions where the greatest threat was perceived so that it could strike back quickly. That would pose at least three risks. First, fewer personnel would be available for other operations. Second, if U.S. leaders miscalculated a threat, U.S. forces might not be where they were needed when a conflict arose. The time spent relocating forces would make it harder to stop an enemy. Third, the presence of large forces parked near the borders of another nation could erode deterrence by making war with the United States a foregone conclusion in the mind of an adversary and might make that adversary more aggressive. Even without such aggression, the high concentration of military forces in a region would increase the chance of miscalculation and unintended war.

Another method a smaller force could adopt to overmatch opponents would be to concentrate in a central location and accept some risk that it would respond less rapidly to a threat. In principle, that risk might be less than the risk of trying to respond to aggression with forces that were out of position relative to the fight. However, concentrating a small force in one location would leave fewer U.S. military personnel elsewhere in the world, and the absence of those personnel might also leave power vacuums in some regions and give allies the impression that they had been abandoned—making them less likely to support the United States in international decisions.

The 2018 NDS sets the objective of strengthening existing coalitions like the North Atlantic Treaty Organization and building new coalitions with other regional allies, working with them to build up their military strength and interoperability (the ability to operate in conjunction with each other). Collaborating with allies and building powerful regional coalitions are fundamental approaches to national defense, but coalition building would become a greater priority as the size of the U.S. military decreased because coalition forces can extend the capacity and capability of a smaller U.S. force. (Option 2 relies more heavily on coalition forces than on military overmatch; it also relies more heavily on forces in the reserve component.)

The United States faces some difficulties in relying on allied combat forces to execute its plans: U.S. military plans might not always align with how allied military commanders want to or are able to execute the mission; and planning that depends on our allies increases the number of variables that are beyond U.S. military commanders’ control, such as the funding, size, readiness, and interoperability of allies’ defenses, making operations more difficult to execute and increasing the risk of failure.

Although a smaller force would have even more difficulty achieving overmatch than the current force, the United States could still seek to overmatch adversaries’ military technology. To accomplish that goal on a smaller budget, it would be necessary to make trade-offs between the development of new weapons and the maintenance and operation of older systems. In addition, the new technologies would not be as widely distributed throughout the services.

**Should Deterrence Fail**

Maintaining a smaller standing force saves money but incurs risks. If conflict occurs with a great power, the current strategy calls for rapidly ejecting hostile military forces from allies’ territory and reversing the enemy’s gains.¹² A smaller version of the current military using the current strategy would risk requiring more time to mobilize resources and generate a force large enough to guarantee success, according to some analysts. Delays would give an enemy time to entrench its forces and solidify its military and diplomatic positions.

One way to expedite the U.S. response with a smaller force would be to speed up the decision to commit military forces, giving the military more time to mobilize. However, a strategy that relied on deciding early in a crisis to commit forces would present the risk that civilian leaders would fail to act quickly enough, and the military would have to respond with a force that could be too small. Even with the best possible foresight, having a smaller force would mean accepting longer response times and, in some cases, making a rapid national


commitment of resources to get ready for a major conflict. As a result, it is more likely that the United States would find itself in a difficult fight against an entrenched enemy if smaller forces failed to deter such aggression from happening in the first place.

Another risk is that civilian leadership could decide to go to war without affording the military sufficient warning. In that case, the military might not be able to adequately prepare forces of the right sizes and types needed to succeed. In the best case, being unprepared would increase the chances of a longer war, with friendly forces being repelled by the enemy until DoD could generate a force that was large enough. In the worst, case, it would increase the chances of outright defeat.

By reacting to a conflict in its early stages, civilian leadership would provide more time for the military to grow and prepare, increasing its chances for success. If civilian leadership could anticipate conflict before it began and mobilize forces at that point, the military would be able to respond even sooner, reducing the time the enemy would have to reinforce its position. Either case would require civilian leaders to make a risky decision to mobilize national resources—funding, personnel, and perhaps even industrial capacity—to expand a smaller force to one that was large enough to improve the chances of success (or perhaps even deter aggression before it began).

Changes to Forces and Programs

Under this option, the number of units in each service would be reduced to meet limits on funding for operation and support, which comprises the funding for military compensation, unit operations, and equipment maintenance. Although the general principle behind Option 1 is to reduce each force in proportion to its current funding, force size would be disproportionately affected for some types of units for two reasons (see Table 2-1 on page 15). First, older units (like F-15 fighter squadrons) might be reduced more than newer units (like F-35 fighter squadrons) to preserve modernization plans as much as possible. Second, units consist of discrete elements, and it might not be possible to reduce the number of items by the same percentage as the overall percentage change in the force. For example, if the Navy had 10 aircraft carrier strike groups, that force element could only be reduced in 10 percent increments. A 15 percent change in funding for aircraft carriers would be translated into either a 10 percent or a 20 percent reduction in the number of aircraft carriers (each strike group has one aircraft carrier). If the number of aircraft carriers was reduced by only 10 percent, the rest of the savings would be taken from funding in other parts of the force, from acquisition funding, or from infrastructure funding.

**Navy.** Under Option 1, the Navy would reduce its O&S budget by cutting the number of ships from about 300 in 2022 to 238 in 2031. The number of aircraft carrier strike groups would shrink from 11 to 9 and the number of submarines from 69 to 62 (see Figure 2-2). The number of older, less capable, large surface combatants and amphibious warfare ships would be reduced as well. CBO adjusted force structure reductions to accommodate ship acquisition and modernization programs and industrial base constraints given the reduced funding. More surface combatants and amphibious ships were cut than submarines (which are all nuclear-powered) because the U.S. shipbuilding industry can build conventionally powered surface ships more quickly, allowing the Navy to restore those forces faster than others in times of crisis. Option 1 would continue the planned new frigate program but reduce the number of littoral combat ships, which are less capable than newer types of small surface combatants. In addition, the sealift force (cargo ships for the deployment of military assets) would be recapitalized by purchasing used sealift ships instead of building new ones.

**Marine Corps.** The Marine Corps’ O&S funding would be reduced by cutting its ground combat capacity from 24 to 20 active infantry battalions and its aviation capacity from 24 to 20 squadrons. Keeping the same number of military commitments with a smaller force would increase the frequency of deployments. The increase might result in problems with personnel retention, morale, and readiness, unless more funding was available to address those issues. Reducing the number of operational deployments would avert such issues but would also reduce U.S. presence globally, reducing engagement with allies.

13. This report relies on CBO’s primer on military force structure except for the hypothetical new units in Options 2 and 3. For a detailed discussion of the way CBO relates force structure to costs, see Congressional Budget Office, *The U.S. Military’s Force Structure: A Primer, 2021 Update* (May 2021), www.cbo.gov/publication/57088.

CHAPTER 2: OPTIONS TO ACHIEVE DETERRENCE WITH A SMALLER DEFENSE BUDGET
ILLUSTRATIVE OPTIONS FOR NATIONAL DEFENSE UNDER A SMALLER DEFENSE BUDGET

Figure 2-2.
Effect on Units in 2031 of Various Options for a Reduced Defense Budget

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022 Force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Air Force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmanned Aircraft Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanker Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airlift Squadrons</td>
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<tr>
<td>Bomber Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tactical Fighter Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrier Strike Groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Surface Combatants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Surface Combatants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submarines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Amphibious Ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Amphibious Ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maritime Aviation Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combat Logistics and Support Ships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmanned Naval Vessels</td>
<td></td>
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<tr>
<td>Infantry Battalions</td>
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<tr>
<td>Aviation Squadrons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air–Land–Sea Attack Missile Units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


All options assume the implementation of a $1 trillion reduction (in 2022 dollars) that would be phased in over the first five years of the 2022–2031 period. By the end of the period, the Department of Defense’s (DoD’s) cumulative funding would decrease by about 14 percent, from $7.3 trillion to about $6.3 trillion. Funding in 2022 dollars would fall from the proposed $715 billion in 2022 to $606 billion in 2031, a reduction of 15 percent.

Option 1: Proportional Reduction. Preserves current post–Cold War strategy of deterring aggression through threat of immediate U.S. military response with the objectives of denying an adversary’s gains and recapturing lost territory. Distributes the reduction in funding evenly across departments, retaining a smaller force and implementing a less ambitious modernization program.

Option 2: Coalition Defense. Adopts a Cold War–like strategy for large nuclear powers of making aggression very costly and recognizing that the size of conventional conflict would be limited by the threat of a nuclear response. Deters aggression through threat of immediate U.S. military response with the objective of severely damaging an adversary and applying pressure through military, diplomatic, and economic actions of a coalition of allies. Reduces use of conventional combat forces. Increases use of ground-based long-range missiles and air defense. Emphasizes local naval blockades and no-fly zones.

Option 3: Command of the Commons. De-emphasizes use of U.S. military force in regional conflicts in favor of preserving U.S. control of the global commons (sea, air, space, and the Arctic), ensuring open access to the commons for allies and unimpeded global commerce. Prepares allies to deter aggression with their own forces and supports them with long-range strikes and naval blockades. Increases intelligence assets to detect and counter gray zone, or nonmilitary, tactics such as interference with elections and economic coercion.

* = zero units.

a. The 2022 force refers to the number of units projected for 2022 in DoD’s 2021 plan; aircraft squadrons are standardized to have 12 aircraft each.
Acquisitions would be cut in all equipment categories, with 80 percent of reductions occurring in aviation assets, particularly fighter aircraft, and in ground mobility equipment, particularly tanks and other heavily armored vehicles.\textsuperscript{15}

**Army.** O&S funding would be reduced by cutting the number of brigade combat teams (BCTs) from 31 to 25 and aviation brigades from 11 to 9 (see Table 2-1 on page 15). As a result, the Army would be slower to project forces for major combat operations. The smaller force would also necessitate more trade-offs between readiness for large-scale war and regular operational commitments in the Middle East and other regions. About 30 percent of the Army’s reductions in weapon systems would be met by reducing acquisition programs associated with the types of units being reduced, such as armored vehicle recapitalization programs and rotary-wing modernization programs. Other acquisition programs would be reduced by cutting the inventory of support equipment such as trucks, radios, rifles, and field kitchens.

**Air Force.** Cuts in O&S funding would come from reductions in the number of fighters, tankers, and intelligence assets (see Figure 2-2). About half of those reductions would be the natural result of supporting fewer ground forces in the Army. The remainder of the savings would be created by acquiring F-35A fighters over a longer period than currently planned, overhauling existing B-2 bombers rather than acquiring new B-21 bombers, and canceling further acquisitions of new fighter aircraft (Next Generation Air Dominate aircraft).

The Space Force was established in December 2019 and is part of the Department of the Air Force. Because today’s funding for the Space Force is substantially less than funding for the other services, CBO does not discuss the Space Force separately from the Air Force in this report. Under all of CBO’s options, maintaining and improving upon the effectiveness and resilience of intelligence, surveillance, and reconnaissance assets in space would be important in helping to mitigate the effects of reduced force structure. As a result, CBO did not include cuts to space systems in any of the options. Where increases in ISR capabilities are called for, they would most likely be directed, at least in part, to space systems operated by the Space Force.

**Option 2: Coalition Defense**

Option 2 would shift the weight of deterrence strategy from the threat of vanquishing any enemy that attacks the United States or its allies to the threat of punishing acts of military aggression through a series of attacks by U.S. and allied forces intended to make the cost of aggression greater than any benefit gained.

The shift in military objectives results in a new approach that in some ways resembles how the United States dealt with the Soviet Union and Warsaw Pact forces during the Cold War. Those adversaries had significant conventional and nuclear forces, all on high alert. Because of the threat of nuclear war and the significant capability of the Soviet Union’s conventional forces, the United States depended on the threat of punishment to deter Soviet aggression.

For example, in Europe, the U.S. military’s objective was not to repel the Soviets in a conventional fight, but rather to slow or stop a Soviet advance until the United States and its allies could mount a counterattack. Should its threat of slowing or stopping aggression prove inadequate, the United States also demonstrated its resolve to reverse the Soviet advance with a crushing counterattack by pre-positioning large amounts of military gear in Europe and using it to conduct large-scale exercises called REFORGER.\textsuperscript{16} Similarly, Option 2 includes an extended mobilization and deployment timeline as well as smaller-scale exercises similar to the current Defender-Europe and Defender-Pacific exercises.\textsuperscript{17}

The Cold War approach to conflict between great powers is also compatible with smaller-scale operations. For example, during the Cold War, the United States was

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\textsuperscript{15} The Commandant of the Marine Corps has issued guidance on reducing equipment and is divesting the Corps of tanks and tactical air support and developing new long-range strike units, antiship missiles, and air defense units.

\textsuperscript{16} REFORGER—REturn of FORces to GERmany—was a series of annual military exercises conducted from the late 1960s to early 1990s to validate the ability of allies in the North Atlantic Treaty Organization to rapidly deploy forces to Europe. The aim of the exercises was to reinforce NATO positions on the continent and to demonstrate the West’s commitment to defend against aggression by the Soviet Union or other members of the Warsaw Pact.

\textsuperscript{17} Defender-Europe is an annual large-scale multinational joint exercise led by the U.S. Army that is designed to build readiness and interoperability between the United States, NATO, and other partners. Defender-Pacific is a smaller joint exercise that demonstrates strategic readiness among the U.S. and its Indo-Pacific allies.
able to disrupt Soviet military operations in Afghanistan without directly involving U.S. combat forces.

Under Option 2, the United States would plan to promptly counterattack an aggressor’s military forces and follow up with military, economic, and diplomatic actions designed to force the aggressor to change its behavior. The objective would be to increase the cost of aggression rather than to mount a full-scale defense or immediate counterattack. However, the U.S. military would not be precluded from a more aggressive response, especially against less capable forces.

In addition to taking direct military action, the United States would help its allies strengthen their defenses and seek to create regional collaboration among allies’ combat forces so that attacks on those in a coalition of such allies would be more difficult and costly. In a conflict, stronger individual allies that are practiced in joint combat operations would ensure that a coalition’s response would, with U.S. military support, punish an attacker.

Naval forces and long-range ground and air-launched weapons would be built up more under Option 2 than under Option 1. The focus would be on standoff weapons, which reduce the need for U.S. combat forces to engage directly with an enemy. Moving away from reliance on close-in and short-range forces would allow DoD to reduce the number of conventional units like Army BCTs and fighter attack squadrons, adding long-range rocket and artillery units with new ground-based missile capabilities. Option 2 would also prioritize forces that facilitate cooperation among allied militaries, enhanced command-and-control capabilities, and coalition training.

**Approach to Deterrence**

Under Option 2, the goal would be to discourage adversaries from attacks against a sovereign state by the threat of prompt retaliation by active-component forces. For example, China would be deterred from attacking Japan or Taiwan by the presence of a coalition of regional combat forces that was far enough from China’s mainland to avoid attack but near enough to respond quickly. The threat of a direct strike would be enhanced by the prospect of diplomatic and economic actions such as a naval blockade and an embargo on China’s energy imports. (Because China has the industrial base to replace combat losses, the threat of military action alone might not be an adequate deterrent.) Compared with Option 1, under Option 2 fewer U.S. ground forces and short-range tactical aviation units would be stationed in regions where conflict was likely, and tactics like antiship warfare would be prioritized.

Demonstrating that the U.S. force (with its coalition partners) can mount a large-scale confrontation against a great power despite an active-duty military that is smaller than it is today is a key component of this military approach. Reserve forces would play an important role in enabling the United States to rapidly expand the military; as part-time forces, they would be a less expensive way for the military to preserve its capacity to take on another great power. Maintaining the reserve component at its current size would come at the cost of a slightly smaller active-duty force but would show enemies that the United States retained the ability to pursue a large-scale conventional conflict.

If the deterrence provided by the forces in Option 2 failed (or if the international situation changed enough that war seemed likely), the reserves could be mobilized over a period of months and together with active-duty forces could work to reverse any gains by an adversary (or possibly deter that adversary if they were mobilized well before a conflict began). Although Option 1 would maintain the reserve component at its current size to provide a hedge, the reserve component is more critical to deterrence under Option 2. Option 1’s approach to deterrence emphasizes an active-duty force that is ready to act quickly; Option 2 would use the reserve component as a deterrent against large-scale aggression by promising to mobilize to increase the long-term costs for the aggressor.

To demonstrate the U.S.’s ability to mobilize its reserves, reserve forces would be used in both operations and training exercises. As in the Cold War, the threat of large-scale military action would be backed up by logistical tactics such as pre-positioning war stocks and equipment in regions around the world.

Mobilization of a large military force for war would be neither rapid nor easy, as shown by recent experience. For example, the Army had difficulty readying its National Guard brigades in time to use them in
the 1990s Gulf War. Preparation for modern conflict against China or Russia would require greater competence in more difficult operations such as combined-arms combat. (Combined-arms combat involves integrating different combat arms of a military—for example, infantry and Army aviation—to complement each other’s efforts.) A greater reliance on the reserves for combat power would mean that the United States would require more time to mobilize a force and mount an offensive than it requires with a large active-duty force. Civilian leaders would need to be able to recognize threats early and commit to deploying forces and calling up reserves quickly during a crisis.

**Allied Coalitions**

Rather than follow the 2018 NDS strategy of being constantly prepared for large-scale war, the priority in this option would shift to making more use of the combat power that resides in capable allies and strong, well-integrated coalitions. One way to expand the effectiveness of a smaller U.S. force would be to divide labor and create areas of specialization among the United States and its allies. Rather than the U.S. military deploying and sustaining large, personnel-intensive forces like BCTs or fighter/bomber squadrons, allies would maintain those capabilities themselves in their part of the world, much as South Korea today maintains a large conventional force for its defense. That approach would free the U.S. military to focus on its unique expertise in other capabilities, such as long-range strikes, standoff attacks, command and control, and the gathering, fusion, and dissemination of intelligence.

Without the guarantee of the immediate deployment of a large U.S. combat force to defend their sovereigny, allies would have to reassess the threats they faced from hostile regional actors as well as the way they prepared for attacks. The result could be greater investment in self-defense and closer collaboration between the United States and its allies. However, allies might feel abandoned and might question the United States’ resolve to honor its commitments and aid in their defense—potentially driving them away from collaboration with the United States.

Working as part of a regional coalition of combat forces has the advantage of providing political legitimacy, access, and overflight permissions for military operations. History has proven the value of U.S.-led coalitions in defeating aggression over the past 80 years. But the coalition approach also entails some risk, depending on the condition of U.S. allies’ military forces and their willingness to act. Some military planners are concerned that the military forces of U.S. allies in Europe, including members of the North Atlantic Treaty Organization, and in the Pacific might be unable to adequately repel acts of aggression on their borders. In Europe, Germany’s own defense parliamentary commissioner assessed its military in 2018 as “not deployable for collective defense.” Sweden converted to an all-volunteer force in 2010, but, faced with a lack of volunteers, was forced to revert to mandatory service in 2018. Allies in the Pacific also have potential shortcomings. Japan’s rapidly aging population is hampering its ability to maintain its military. In 2018, Japan reported that it was only able to recruit 77 percent of its planned intake of fixed-term male personnel and 37 percent of the active-duty force was over 40 years old.

Other observers point out that the size of those allies’ militaries has remained relatively stable over the past 20 years and that real funding for those militaries has increased, though not at the rate that some U.S. military planners would like. Germany, Sweden, and Japan are all examples of nations that have the resources to invest in strong defenses should the threat arise—even if some judge their current forces to be insufficient.

**Should Deterrence Fail**

As in Option 1, smaller budgets and greater reliance on the reserve component would delay the assembly of forces for a large military campaign. As military, economic, and diplomatic measures were being applied, the

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United States could use that time to expand its forces and prepare personnel for such a campaign. However, such a buildup would be slow and expensive, increasing risk. A delayed response might mean that the U.S. military would ultimately have to fight an entrenched enemy, requiring a larger force and more casualties. But acting rapidly could necessitate responding with a smaller-than-desired military force, which might decrease chances for success and increase the likelihood of a protracted war.

**Limits on Conventional Escalation**

If a U.S. adversary has nuclear weapons, it raises the risk that a conventional conflict could escalate to a nuclear one. Planning based on the 2018 NDS calls for a rapid vertical escalation of hostilities in conflicts. The defense strategy’s objectives are that U.S. combat forces engage in rapid, violent action against an enemy to restore the previous status quo, recovering all the territory or other assets the enemy had seized. The normal course of combat operations in a regional conflict against a nonnuclear adversary would probably include attacks on command-and-control capabilities, communication networks, and military forces located in a nation’s homeland. Even with rules of engagement in place, attacks by U.S. combat forces could lead to destruction of a nation’s strategic infrastructure, risking a vertical escalation of hostilities that could turn a small conflict into a large conflagration.

In a conflict with a great power that possessed nuclear weapons, however, even if the United States avoided attacking explicit nuclear targets, escalation could still occur. Escalation from a conventional conflict to nuclear war was always a central concern during the Cold War. The fact that China and Russia in recent years have begun to rely on the same command-and-control capabilities, communication networks, and military forces located in a nation’s homeland. Even with rules of engagement in place, attacks by U.S. combat forces could lead to destruction of a nation’s strategic infrastructure, risking a vertical escalation of hostilities that could turn a small conflict into a large conflagration.

By changing the U.S. approach to combat from denying an enemy its objectives and restoring the status quo to supporting coalition forces as they fight, Option 2 moves away from the need for a rapid vertical escalation of hostilities. Although U.S. combat forces might still act directly in a conflict, under Option 2, the United States would seek to punish aggression with horizontal escalation—increasing the complexity of the conflict for the aggressor by taking actions outside the area where hostilities were initiated: For example, naval blockades placed within a nation’s 200-mile exclusion zone, no-fly zones restricting an enemy’s ability to use its airspace for military or commercial purposes, and diplomatic and economic actions would be designed to push an enemy to reverse its position. Such an approach would provide more opportunities for civilian leaders to avoid the kind of large-scale confrontation between great powers that could lead to nuclear war.

**Changes to Forces and Programs**

Option 2 would maintain the naval and air assets needed to strike targets from a distance and reduce the combat forces in the Army and Air Force that are associated with large air-ground campaigns. The Navy’s fleet would be smaller and more agile, with an emphasis on frigates and submarines that could strike an enemy without putting a large fraction of the force in harm’s way. The Army and Marine Corps would add new long-range missile capabilities at the expense of ground combat units and aviation assets. The Air Force would emphasize long-range strike capabilities such as bombers and standoff missiles, and the Space Force would focus on improved ISR capabilities. Resources would be used for training and acquisition programs to ensure that the force, although smaller, would be optimally prepared and have up-to-date military technology.

**Navy.** The Navy would have a total fleet of about 370 ships, with more surface combatants and submarines than in Option 1 but fewer aircraft carriers and large amphibious ships. It would move from a fleet of large, complex, and more capable ships to a fleet whose capability was spread among a larger number of small, highly lethal ships designed for widely distributed operations; each ship would be capable of fighting a battle on

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24. Vertical escalation refers to increasing the intensity of an armed conflict, such as bringing larger forces to an ongoing conflict or creating new weapons not previously used in combat. An example of vertical escalation was the development and use of nuclear weapons during World War II. See Michael Fitzsimmons, “Horizontal Escalation: An Asymmetric Approach to Russian Aggression?” *Strategic Studies Quarterly*, vol. 13, no. 1 (Spring 2019), pp. 95–133, www.jstor.org/stable/e26585370.


26. Horizontal escalation is the process of expanding conflicts geographically, through diplomatic, economic, and informational means, or by securing intervention from other state actors. Ibid., p. 2.
its own. Specifically, the Navy’s carrier force would fall to 8 ships, and the number of large amphibious ships would be reduced by 39 percent. Those reductions would pay for 50 new small antiship combatants designated as corvettes (36 of which would be in the fleet by 2031) and 30 new small amphibious vessels to deploy antiship Marine Corps battalions and rocket artillery teams (see Figure 2-2 on page 19). The Navy would also refuel and extend the service life of an additional 5 Los Angeles class attack submarines (beyond the 2 funded in the Navy’s 2020 shipbuilding plan).\(^\text{27}\) If the surface combatant force was not large enough, the Navy could base more ships overseas at a relatively low cost.\(^\text{28}\) For example, the Navy could increase the number of destroyers based in Spain from 4 to 6, providing significantly more presence at a relatively low increase in cost.

In addition to small combatants, the Navy’s acquisition programs would focus on unmanned systems and small amphibious or support ships to transport ground units such as Marine Corps antiship missile battalion teams. The Navy would also fund the development and purchase of a new generation of long-range antiship missiles.

**Marine Corps.** To support sea control and naval blockade operations, the Marine Corps would prioritize the development of new capabilities involving teams positioned near where conflicts are likely to arise to enable them to continuously disrupt enemy operations.\(^\text{29}\) To fund those capabilities, the Corps would reduce the amount of heavy armor in its force structure and reduce the number of aviation squadrons to 15. The number of infantry battalions would be reduced from 24 to 17. The Corps would add long-range missiles and unmanned aerial vehicles and strengthen its air defense and ISR capabilities.\(^\text{30}\) The new capabilities would be organized into small rocket artillery units equipped with long-range truck-fired missiles.\(^\text{31}\)

**Army.** The Army would retain enough BCTs to maintain expertise in large-scale combat operations but shift its focus to developing smaller units that could assist allies with combat operations through long-range strikes and training by security force assistance brigades. The Army would prioritize Terminal High Altitude Area Defense units along with new long-range antiship cruise missiles, new long-range land attack missiles, and new long-range air defense capabilities.\(^\text{32}\) Like the Marine Corps, the Army would reduce its inventory of high-end capabilities for maneuver warfare (a military strategy that attempts to defeat the enemy by using shock and disruption to incapacitate it) below the inventory in Option 1, dropping from 25 to 20 BCTs and from 9 to 8 aviation brigades. Instead, it would increase the number of air and missile defense units from 6 to 12. To enhance its long-range attack capabilities, the Army would add new units to provide ground-launched missiles for land attack as well as antiship capabilities (see Table 2-1 on page 15). The number of security force assistance brigades would increase to 8 from the 4 brigades in Option 1. Those units would enable increased training and collaboration with allies and would allow the Army to retain key leaders (field grade officers and senior enlisted personnel) who could help create new combat units if needed.

**Air Force.** The Air Force would trim its capacity for large-scale combat operations, reducing the number of tactical fighter forces, airlift squadrons, and tankers below the numbers in Option 1, mirroring the Army’s reductions in the number of large ground combat forces. The number of tactical fighter squadrons would fall from 78 in Option 1 to 59 in Option 2; the number of aircraft and all tanks.**


30. The Marine Corps has already begun shifting away from conventional land combat forces, but those plans have yet to affect the plans and programs CBO considered in this analysis. See Garrett Reim, “Why the U.S. Marine Corps Plans Big Downsizing, Including Some F-35s, MV-22s and All Tanks,” Flight Global (updated March 25, 2020), https://tinyurl.com/3y3yhytv.


CHAPTER 2: OPTIONS TO ACHIEVE DETERRENCE WITH A SMALLER DEFENSE BUDGET

ILLUSTRATIVE OPTIONS FOR NATIONAL DEFENSE UNDER A SMALLER DEFENSE BUDGET

airlift squadrons would shrink from 35 to 22; and tanker squadrons would number 18 rather than 24. The Air Force would retain its long-range bomber force because of the force’s utility in the absence of forward bases and its ability to respond quickly in the early hours or days of a crisis. The Air Force would also add unmanned aircraft to provide additional long-range strike capabilities. Purchases of precision munitions would be 50 percent more than in Option 1. Improvements in ISR capabilities, including Space Force systems, would also be provided.

Option 3: Command of the Commons

This option would de-emphasize the use of military force in regional conflicts and instead prioritize its use to protect U.S. interests worldwide by preserving the flow of commerce and information in the global commons, in much the same way that the U.S. military does today. Global commons are the regions of the world managed by international agreements: the high seas (oceans outside territorial waters), the Arctic, Earth’s atmosphere, and space. Military forces would be configured to guarantee the free flow of commerce and communications for the United States and its allies as well as military access to logistics hubs, from which commercial goods are distributed worldwide. This approach, known in the political science literature as command of the commons, would allow the United States to wield economic power in global affairs while maintaining its ability to send logistics and combat forces to aid its allies in conflicts. Although military force would be de-emphasized, U.S. enforcement of no-fly zones would not be ruled out. Deemphasizing the use of ground forces in combat operations abroad would free resources for maintaining primacy in the global commons.

In Option 3, an ally’s own military capability would deter regional aggression. The threat of horizontal escalation by the United States in the global commons would further enhance that ally’s ability to deter attacks: Using the prospect of military force in the commons as well as direct diplomatic and economic pressures, the United States would threaten to grow small regional conflicts into complex global problems, making the consequences of aggression outweigh the gains.

Option 3 would narrow focus from overmatch in all situations to overmatch in the global commons, continuing the current U.S. military posture for the commons. Among the objectives set out in the 2018 NDS: that the United States should get “vastly more military use” out of sea, space, and air than other nations, that it credibly threaten to deny use of the commons to other militaries, and that opponents believe they would lose a military contest if they attempted to deny use of the commons to the United States.

If an enemy attacked an ally, the United States could use its command of the commons to restrict the enemy’s movement and trade while providing direct material support to U.S. allies who were under attack. Aiding combat operations with U.S. intelligence and logistical support, combined with global economic sanctions and diplomatic pressure on adversaries, would be the nation’s first course of action. The approach would not preclude limited use of combat forces to aid an ally by creating no-fly zones and controlling the airspace above the conflict. As a last resort, the United States could mobilize for war.

Of primary concern under Option 3 would be maintaining a Navy that could cover the geographic regions that are key to freedom of movement around the world (such as the Strait of Hormuz, the Eastern Indian Ocean, the South China Sea, and the Arctic) and developing intelligence assets that tracked enemy activity, capabilities that ensured the nation’s hold on space, and capabilities that sustained logistical reach to aid allies in combat. Those increases in naval forces, intelligence and space capabilities, and logistical reach would come at the expense of conventional forces designed to fight large-scale air and land campaigns, such as BCTs, fighter squadrons, and their supporting forces.


34. Some analysts also consider cyberspace to be part of the global commons. The military shares responsibility for defense of the nation’s cyberspace with other government and private-sector entities in a complex relationship that is beyond the scope of this report.


Approach to Deterrence

The military priority in Option 3 would be to have open access to the global commons and its resources. Because most of the regions in the global commons are at sea or only accessible by ocean routes, naval forces would be key to maintaining command of the commons.

Option 3 is like Option 2 in that it would prioritize military allies’ self-defense and the formation of strong regional military coalitions. It differs from Option 2 in that coalition forces would be expected to be able to inflict punishing damage on an aggressor without the help of U.S. combat forces—though allies could expect the help of U.S. enabling capabilities, such as logistics and intelligence. Also, U.S. forces could use standoff weapons in enforcing no-fly zones and selectively limiting an enemy’s access to airspace.

For example, in the case of a great-power conflict such as Russian aggression in Europe, the U.S. military, bound by treaties with NATO, would support NATO’s military response from afar by engaging with Russia in the global commons, blocking Russia’s access to the high seas, and destroying its naval vessels, if necessary, while NATO forces in the region would engage in direct combat. By putting trade—which represents about 39 percent of Russia’s gross domestic product—at risk, a naval blockade and economic sanctions could affect Russia’s decision to attack and would probably diminish its ability to sustain a long-term fight.37

Limiting military objectives to command of the commons and withdrawing combat support from U.S. allies would incur some risk. Without the threat of immediate U.S. military action, allied militaries would bear most of the weight of their own defense and might prove unequal to the task. To reduce that risk, the United States would enhance allies’ ability to defend themselves, continue its strong support of existing coalitions like NATO, and build new regional military coalitions with allies, as in Option 2. However, even with U.S. military assistance in planning and preparation, if allies failed to invest in hardening their own defenses, enemies might be more likely to attack, and global stability could decrease. Weak allies would also make it harder to stop attacks once they had begun.

Command of the commons also requires prevailing in space, which has become vital to civilian commerce and military communications and intelligence. The United States moved in this direction by making space a greater priority in 2019, when it reconstituted the U.S. Space Command.38 The previous Administration also created a new uniformed service, the Space Force, which is part of the Department of the Air Force.39

Should Deterrence Fail

Immediate use of U.S. combat forces would not be the first choice for responding to an attack against an ally. Option 3 would rely on blockades conducted from the global commons, economic and diplomatic stations, and direct military action by allies to reverse aggressive actions.

Should the United States decide to deploy combat forces to aid military coalitions, it would take months or a year to gather and prepare those forces. The delay would give enemy forces time to enhance their defenses and would increase the risk and number of U.S. casualties. Deployment for a large-scale military campaign would take even longer, perhaps three to five years. Option 3 would thus present the same risk as Option 2: that U.S. forces would face an entrenched enemy that has had time to establish a sophisticated defense despite constant attacks by coalition forces.

Changes to Forces and Programs

The Navy’s resources would be the same in Option 3 as in Option 2, but the number and type of units would be reconfigured to better accommodate U.S. control of sea-lanes. The Army would reduce its acquisitions of new cruise missile units and use those savings to retain conventional combat capabilities so it could reduce the amount of time needed to mobilize for a large campaign. To facilitate control of the sea-lanes and enhance diplomatic and economic security, DoD would boost its emphasis on controlling space and build its ISR capabilities.

Navy

The Navy would receive the same amount of funding as under Option 2, resulting in a total fleet of about 340 ships by 2031. Its forces would have the same general composition as in the 2021 Future Years

38. For information about Space Command, see United States Space Command, “Mission” (accessed March 1, 2021), www.spacecom.mil/Mission/.
Defense Program and Option 1 but would be slightly larger than either one (see Figure 2-2 on page 19). The Navy would retain nine carrier strike groups for larger operations, such as opening the Strait of Hormuz, and shed its oldest anti-air warfare surface combatants, the Ticonderoga class cruisers. The number of littoral combat ships would be reduced, but the new frigate class would be built as planned in the 2021 FYDP. The Navy would also build the same new corvette as in Option 2 but would modestly increase its submarine forces as well.

**Marine Corps.** The Marine Corps’ budget and force structure would be about the same as in Option 2. The Corps would continue developing new units and ways to employ military forces to support naval operations in regional conflicts. The Navy would buy new light amphibious warships to support the Marine Corps. Though Option 3 would reduce the likelihood of using U.S. combat forces in conflict, the retention of a sizable Marine Corps would allow the United States to retain capacity in combined-arms operations in the event such capacity was needed.

**Army.** DoD would allot the Army a smaller share of the budget than under the first two options (see Figure 2-2 on page 19). As in Option 2, BCTs, aviation brigades, and their supporting forces would be reduced by more than in Option 1. Because U.S. forces would be less likely to engage in direct combat, the Army would not invest as much in long-range strike capabilities as in Option 2.

Like the Marine Corps, the Army would be expected to maintain enough active-duty forces (primarily armored BCTs and combat aviation brigades) to maintain combat skills in the event of a large military campaign. That force would support conflicts with smaller powers and assist in a national mobilization by sharpening combat skills in the reserve component and teaching those skills to new units.

Option 3 would add more security force assistance brigades than Option 2 to better support collaboration with and training of U.S. allies. The Army would build coalitions and train with allies in regional hot spots, providing logistical support, terminal high-altitude area and missile defense, and long-range missile support.

**Air Force.** The Air Force would increase its airlift and aerial refueling capabilities by more than in Option 2 so that it could support allied forces and supply munitions in regional conflicts. Long-range bombers (such as the B-2 and B-21) could attack targets located deep inside large regional powers like Iran (where penetrating munitions might be too heavy for fighter aircraft) or could be used early in a conflict to give naval aviation forces time to prepare. The Air Force would also keep more short-range fighters than in Option 2 to augment allied forces or carrier aircraft operations.

The Air Force would build up its ISR assets, retaining more unmanned aircraft than in Option 2 and investing in the Space Force’s ISR and communications capability. Command of the commons in space would allow global ISR capabilities to detect and expose attacks as they occurred. Those assets might include airborne and space-based sensors linked by high-bandwidth laser communications that would use automated data-processing algorithms to identify objects and events. By observing and distributing visual evidence of malign actions by nations, greater ISR capabilities would enhance allies’ targeting and planning for military operations and strengthen the case for diplomatic actions.40

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Appendix: CBO’s Analytical Approach

As a first step in preparing the three options in this report, the Congressional Budget Office defined the process by which overall funding for the Department of Defense (DoD) would be reduced. CBO constructed a 10-year budget with a total of $1 trillion in savings (in 2022 dollars) from the 2021 Future Years Defense Program. ¹

CBO’s second step was to create options that had different force structures, each informed by different assumptions about using military force in support of the nation’s security strategy. Force structure dictates the allocation of funding among the military services.

How CBO Generated a $1 Trillion Reduction

According to CBO’s projections, implementing DoD’s 2021 plan would cost $7.3 trillion (in 2022 dollars) over the next 10 years. ² Reducing that total to $6.3 trillion would amount to a 14 percent reduction in cumulative funding over that period. CBO phased in reductions over the first 5 years of the period and then held the budget constant (in 2022 dollars) for the remaining 5 years (see Figure A-1). By the end of the 10-year period, the new budget would be about 15 percent smaller (adjusted for inflation) than the 2022 budget request, falling from $715 billion in 2022 to $606 billion in 2031. ³

The 5-year phase-in period would give programs time to adapt to changes in funding, providing for reductions to occur at a pace that avoided undue disruptions to their function. That phased reduction has two important aspects. First, a 5-year phase-in would enable military and civilian personnel to be shed mostly through attrition, thereby preserving workforce quality and appropriate proportions of junior, midgrade, and senior enlisted personnel and officers in the workforce. Second, by allowing more time for planning, DoD could halt some new acquisition efforts before they started, and ongoing projects nearing completion could be allowed to finish or be wound down to avoid wasted spending. A phased reduction in acquisitions would allow programs to be canceled or reduced in a deliberate way, avoiding significant contractual penalties (see Box A-1).

To help structure the analysis of DoD’s budget, CBO divided total funding into three categories. ⁴ The first, operation and support (O&S), is composed of funding for the military personnel appropriation and for the operation and maintenance (O&M) appropriation. O&S funding provides military and civilian compensation, supports the military health care system, funds training and maintenance operations, and sustains back-office functions such as recruiting and personnel management. Those costs are the largest part of DoD’s budget, accounting for 63 percent of its proposed funding in 2022. O&S costs vary in direct proportion to the aggregate size and capability of DoD’s forces and can be clearly linked to the cost of different types of units.

The second funding category is acquisition, which is composed of the appropriation accounts for procurement and for research, development, test, and evaluation. The amount of acquisition funding determines how well

1. The savings are measured in terms of reductions in funding (total obligational authority) relative to DoD’s 2021 Future Years Defense Program for 2021 to 2025 and CBO’s projections of that program for 2026 to 2030. See Congressional Budget Office, Long-Term Implications of the 2021 Future Years Defense Program (September 2020), Figure 1, p. 2, www.cbo.gov/publication/56526. Savings in outlays would be slightly smaller over the first 10 years but would continue to accrue for several more years.

2. Ibid.

3. Expressed in nominal dollars (without removing the effects of inflation), DoD’s budget would be reduced by $1.1 trillion over the 10-year period. By the end of the period, the new budget would be about 3 percent more (in nominal dollars) than the 2022 budget request, increasing to $733 billion by 2031.

4. See Congressional Budget Office, Long-Term Implications of the 2021 Future Years Defense Program (September 2020), Figure 1, p. 2, www.cbo.gov/publication/56526.

5. Because the Defense Working Capital fund and operation and maintenance funding pay for similar activities and are relatively small, CBO treated the working capital fund as part of O&M appropriations.
forces are equipped: how much equipment is available to units and how updated that equipment is. Acquisition accounts for 35 percent of DoD’s total proposed funding in 2022 and is directly linked to the scope and speed of DoD’s modernization programs.

The third funding category is infrastructure, which is composed of funding in the appropriation accounts for military construction and family housing. That funding supports the facilities and real estate for training areas, equipment, and units, as well as government-owned housing for military personnel and their families. Infrastructure is the smallest category of funding, accounting for about 2 percent of DoD’s total proposed budget. Consequently, any savings from that category are expected to contribute little to overall savings in the three options.

### How Reductions Were Allocated to Service Branches

There are three primary ways to achieve savings: reduce the size of the force; reduce the size, scope, or rate of modernization programs; and reduce program and overhead costs by revising DoD’s business practices. CBO estimated savings by first making changes in force structure and then adjusting acquisition funding for modernization programs according to changes in the force. CBO did not attempt to provide options that improved the efficiency of DoD’s business operations or reduced input costs such as labor, but if DoD took those actions, the resulting savings could be used to reduce the magnitude of reductions in forces and programs.

The report describes possible changes in four of the five military services: the Army, Navy, Air Force, and Marine Corps. The Space Force was omitted because it is new and small, and its missions are still being defined. Any reductions in its funding would contribute little to overall savings. Under the options, any changes in the Space Force would be made indirectly by changing space capabilities that currently reside in the four larger services.
Box A-1.

**How the Phase-In Period Affects Budget Reductions**

To create its budget options, the Congressional Budget Office used a 5-year phase-in period for the funding reductions. Although the amount of the total reduction is fixed at $1 trillion (in real 2022 dollars) over a 10-year period, the size of the reduction in 2031 would depend on how rapidly the $1 trillion reduction was made. Making steeper reductions early in the 10-year period would mean that smaller reductions would be needed at the end of the period to meet the overall target. If the reduction was phased in over the first 3 years of the period, for example, the 2031 budget would be $618 billion, about 2 percent more than the options estimate. However, such a rapid, substantial change in funding would be difficult to implement, increasing the likelihood that the Department of Defense would have to pay cancellation fees for stopping acquisition programs and increasing the potential for rapid changes to negatively impact the quality and long-term stability of its personnel programs.

Reducing funding every year throughout the 10-year period would result in smaller annual reductions but a smaller budget in 2031. Phasing in the reduction over 10 years would result in a 2031 budget that was $557 billion, about 8 percent less than under the 5-year phase-in.

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**Size of the Force**

The direct relationship between O&S funding and force structure provides a way to analyze the effects on about two-thirds of DoD’s proposed 2022 budget of changing the number of units in the force. To assess how force structure relates to both funding and strategy, CBO’s analysis focused on major force elements such as the Army’s brigade combat teams, the Navy’s aircraft carriers, and the Air Force’s fighter squadrons. Such primary combat units represent military capabilities that are key to achieving various military objectives in support of national security strategy. The remainder of the force is composed of units that directly support major force elements in combat operations, or of overhead forces and organizations that generally do not deploy. Overhead forces provide the capability to generate new forces and sustain existing forces by training new personnel, acquiring new equipment, providing advanced professional development and education, developing doctrine and plans, and maintaining equipment. The ability to mobilize and expand a force is dependent on overhead forces’ capacity to convert resources into units.

Associating the rest of DoD’s forces with major force elements allows small changes in a limited number of units to be translated across the entire service. For example, the number of supporting transportation units could be reduced if the number of major combat units were reduced. There are also implications for equipment and acquisition costs. Fewer units would require less equipment, which would lead to reduced need for acquisition funding.

**Equipment Modernization Programs**

Budgets can also be reduced by cutting acquisition funding and the scope or scale of equipment modernization programs. Though such reductions would necessarily be part of overall budget reductions, cutting funds only for equipment would pose several challenges if it was the only method used to reduce the budget. First, there is less funding to cut from acquisition, which makes up 35 percent of DoD’s proposed budget in 2022, than from O&S funding. Second, significant reductions in modernization programs alone would leave the military with less equipment and older fleets. The risk of not having enough equipment to arm the force is obvious, but relying on older equipment also presents a risk. To be sure, some of the older weapon systems (for example, the B-52 bomber and the M1 Abrams tank) have been kept up to date through incremental upgrades and might not need to be replaced. But such incremental modernization might be constrained by a reduced budget, making it difficult to adapt and to counter technologically advanced adversaries like China and Russia.

In this report, most of the reductions in funding for acquisitions under the options would result from changes in the size of the force. For example, a reduction in the
number of Army brigade combat teams would directly lead to a reduction in the number of combat systems associated with those brigades (such as Abrams tanks, Bradley fighting vehicles, and Stryker combat vehicles) and in the number of systems that would need to be upgraded or replaced. In addition to reducing the size of the major acquisition programs, more savings would be generated through reductions in common equipment programs (for the Army, those would include medium-sized trucks, radios, rifles, and field kitchens) because a smaller force would need less supporting equipment.

**Efficiencies**
The third method for reducing the budget is to find efficiencies. Such an approach might include reducing or slowing the growth in the cost of military compensation, improving the efficiency of weapon system support or maintenance, seeking lower prices for weapon systems, or some combination of the three. But such savings are likely to be small and can often be difficult to predict and track.7 Instead, CBO focused on the two primary levers: changes to forces and changes in the pace of equipment modernization, using DoD’s assumptions about the costs and content of its programs (current and projected) in the 2021 Future Years Defense Program.8

**Attributes Common to All Options**
Each of the three options would rely on a different strategy for U.S. use of military force, demonstrating how DoD’s force structure and budget reductions could be allocated differently than they are in DoD’s current plans. All of the options, though, possess some common characteristics:

- Total DoD funding would be the same for each option even though funding for each military service would vary.
- The elements of force structure for each option would be fully funded and outfitted with the personnel and equipment required for that option. Personnel would be trained, and equipment inventories would be maintained.
- The reserve component would remain unchanged.
- Changes to defensewide functions would be the same.
- No changes would be made to nuclear forces because nuclear conflict is beyond the scope of this report.

**Staffing and Equipping the Force**
In all three of CBO’s options, units would be staffed, trained, and equipped at the same levels as they are today—there would simply be fewer units or a different combination of units. CBO did not explore approaches that would create what is called a hollow force or tiered readiness strategy, in which units are manned, equipped, or trained to lower levels than are needed to be fully operational. CBO chose to retain fully staffed units because, though personnel are expensive, partially staffed units would not be able to execute their missions, reducing the value of the U.S. threat to strike against an adversary. If less-ready forces were needed, they could be part of the reserve component, which has lower personnel costs because it consists of part-time employees.

CBO simplified its description of the options by assuming that the full-time force would be fully ready and expect to deploy at regular intervals, as it does now. Unused capacity in the active-duty force would be moved to the reserve component. If the demand for some units grew and regular activation of part-time forces was required, those units could be moved from the reserves to the active-duty force.

**Preserving the Reserve Component**
The reserve component’s forces are a necessary part of operational planning for the United States. In the event of a large-scale conflict, the purpose of the reserve component is to mobilize and increase the size of the active-duty force, as it did after the attacks of September 11, 2001.9 With its current workload, the military depends on the reserve component to make up shortfalls in personnel and reduce stress that would occur from overuse of the active component.10 The size of reserve forces

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10. For an example of regular usage of the reserve component, see Cynthia King, “30th ABCT Reunites With Equipment in Kuwait” (U.S. Army, October 28, 2019), https://go.usa.gov/xHn4y.
varies by service: The Army has the largest reserve component and the Navy the smallest.

In CBO’s options, the size of those forces and their funding would not be reduced from today’s levels. All of the options would retain the reserve component’s capacity and capabilities so that it could augment the active-duty force, but the role they played in national defense would be less or more important, depending on the approach taken in addressing military conflicts.

Combat forces in the reserve component cannot react as rapidly as those in the active component, so they would not be a high priority in Option 1, in which a denial-and-overmatch strategy would require the U.S. military’s rapid response. Under that option, reserve forces might be valuable in operations that followed the initial attack, or they might serve as a hedge in case the overmatch strategy failed and the United States found itself in an extended fight, or it wanted to increase the size of its military relatively rapidly because the international environment had become more dangerous.

As part of their deterrence strategies, both Option 2 and Option 3 would shift focus from immediate combat to emphasize plans for national mobilization, allowing the United States to field sufficient combat forces for a conflict among great powers. Even though reserve forces take longer to prepare for combat than active forces, they would be ready before newly created forces. Maintaining reserve forces that are trained and ready to mobilize would reduce the time it took to generate the combat forces that would be necessary to respond to aggression by another great power, giving those forces an important role in Option 2 and Option 3.

Size alone is not an adequate measure of the deterrent value of the reserve component. Reserve forces can also demonstrate that they are capable of rapidly reinforcing active-duty forces in combat operations and assisting in training and fielding new units. Regularly using the reserve component in exercises and deployments displays to potential adversaries the component’s competence and responsiveness.

CBO also had two practical reasons for not reducing the reserve component in its options. First, the savings gained by reducing reserve forces would be small: In general, three reserve units must be eliminated to get the same savings as cutting one active unit. Second, because states and territories depend on the National Guard for support in times of disaster or civil unrest, making reductions in the National Guard would have broader ramifications.11

Changes to Defensewide Activities
Many organizations within DoD are considered overhead and are not part of the Army, Navy, Air Force, Marine Corps, or Space Force. Those organizations perform activities that support DoD as a whole. Most of the funding for those organizations is in the O&M and acquisition accounts. Although defensewide organizations employ military personnel, no defensewide funding is spent on them; compensation for service members assigned to defensewide organizations is paid by their respective services.

CBO organized defensewide funding into five broad categories (see Table A-1):

- **The Joint Chiefs of Staff** is a headquarters staff at the Pentagon composed of personnel from all the services that assists the Chairman of the Joint Chiefs of Staff. The Chairman is the principal military adviser to the President, the Secretary of Defense, and the National Security Council. The Joint Staff plays a key role in DoD’s resource planning process by evaluating planned combat operations and assessing shortfalls in DoD’s personnel, equipment, or training.

- **Special Operations Command** (SOCOM) is a defensewide organization that supports Special Operations units. The bulk of its funding is drawn from the O&M budget, followed by funding from the acquisition budget and a small amount of funding from the infrastructure budget. Pay and benefits for Special Operations forces are in the services’ budgets.

- **The Office of the Secretary of Defense** includes organizations that make up DoD’s highest levels of civilian command and control.

- **The Defense Health Agency**, which manages health care for service members, retired military personnel, and their dependents, is the largest single defensewide cost. The cost of medical care for service members is directly related to the size of the force.

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11. The reserve component has been deployed in states across the country for fires, hurricanes, civil unrest, and pandemic relief. See National Guard Bureau, 2021 National Guard Bureau Posture Statement (September 2020), pp. 21–22, www.nationalguard.mil/Features/Posture-Statement/.
and changes with the number of personnel in the active and reserve components. The agency also funds health care for retired military personnel and their dependents ($14.5 billion in the proposed 2022 budget, which would not change with the size of the force). In the short term, those costs are relatively insensitive to changes in the size of the force.

- **Other Defense Agencies and Activities** operate schools for military dependents, run commissaries (stores for military families), manage payroll and finance activities, and provide telecommunications and logistics services. The category accounts for the largest share of defensewide O&S funding, and it includes organizations that provide specialized military capabilities that are not specific to any one service. Examples include the Missile Defense Agency and the military intelligence agencies.

Under all three options, funding cuts for the defensewide organizations would be roughly the same at 15 percent of the proposed 2022 budget. CBO presumes that defensewide organizations would shrink in tandem with the size of the overall force. Because not all defensewide functions are strongly correlated with the size of the force, some resources would probably need to be reallocated between different defensewide functions. Work would need to be scaled back in all three options.

- SOCOM would have to curtail global operations, including counterinsurgency operations. SOCOM and counterinsurgency operations are implicit in the discussion in each option about global commitments.

- The scope and number of intelligence collection activities of the Central Intelligence Agency and the National Security Agency would be reduced.

- Management functions, such as those performed by the Joint Chiefs of Staff and the Office of the Secretary of Defense, would have fewer resources and personnel.

- The Missile Defense Agency might have to delay deployment of new technology to keep development projects moving forward.

Detailed changes in the internal operations of those agencies are beyond the scope of this report, which is focused on the relationship between the country’s security strategy and the overall size and structure of the four major services.

### Changes to the Nuclear Forces

Nuclear forces are not modified in the options because this report focuses on deterrence and combat with conventional forces. The assumptions and parameters that determine the size and kinds of nuclear forces are determined by factors that are outside the scope of this analysis, including arms control agreements and the balance of weapons between great powers. Excluding nuclear forces has a modest effect on options to reduce the budget because their funding makes up about 7 percent of the total cost of the plans for national defense through 2030.\(^\text{12}\)

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This report was prepared at the request of the Chairman of the Senate Budget Committee. In keeping with the Congressional Budget Office's mandate to provide objective, impartial analysis, the report makes no recommendations.

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CBO seeks feedback to make its work as useful as possible. Please send any comments to communications@cbo.gov.

Phillip L. Swagel
Director
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