Sustainable Defense:

More Security, Less Spending

Final Report

Final Report of the Sustainable Defense Task Force of The Center for International Policy

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Table of Contents

Charts

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Co-directors Ben Freeman and William D. Hartung took primary responsibility for editing and drafting the report. Amy Belasco did the bulk of the budget analysis and writing in Part Two, on defense budgets past, present, and future, as well as providing useful, detailed comments on the structure and substance of the rest of the report. Project consultant Carl Conetta did the work on savings from force structure cuts and contributed to sections on threat assessment, strategy, economic challenges, and climate change. Neta Crawford wrote the material on the Pentagon, fuel use, and climate change. Miriam Pemberton wrote the sidebar on Pentagon spending and jobs. Lawrence Korb provided analysis of the readiness issue. Matt Fay wrote the section on the war tax. Mandy Smithberger wrote the section on savings from cutting private service contractors. Mandy Smithberger and her colleague Lydia Dennett from the Project On Government Oversight wrote the section on reducing the size of the nuclear weapons complex. Gordon Adams, Ben Friedman, Larry Wilkerson, and Ike Wilson gave feedback on the sections on strategy and the new strategic environment. John King provided suggestions on the overall structure of the piece and the budgetary analysis. Laicie Heeley provided editing input and advice on framing of the arguments in the report. Lindsay Koshgarian provided input on options for spending reductions. CIP President and CEO Salih Booker provided input and guidance throughout the project. Kingston Reif of the Arms Control Association and Jessica Sleight of Global Zero provided extremely useful comments on the sections on savings from a new nuclear strategy. Cassandra Stimpson of the Center for International Policy provided excellent attention to detail in copy-editing the report and we're deeply indebted to Christina Arabia, Director of the Security Assistance Monitor at the Center for International Policy, for formatting the report. We thank Megan Grosspietsch for her help in designing the final report. Pam Rutter of the Project On Government Oversight graciously provided the cover photo for the report.

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Executive Summary

An alternative defense strategy that avoids unnecessary and counterproductive wars, reduces the U.S. global military footprint, takes a more realistic view of the major security challenges facing the United States, and reduces waste and inefficiency could save at least $1.2 trillion in projected spending over the next decade while providing a greater measure of security.

Contrary to recent assertions by advocates of higher Pentagon spending, America can be made safer for far less money. The United States has made enormous investments in security in the past two decades. At $716 billion per year, current spending on the Pentagon and related agencies is well above the post-World War II average, and only slightly less than the levels reached in 2010, when the United States still deployed nearly 180,000 troops in Iraq and Afghanistan. Yet, the Pentagon's current plan budgets $7.6 trillion for national defense over the next ten years.

Any future investment in defense has to be both strategically wise and fiscally sustainable. In many ways, the US has overpaid for security in this century, and in some ways, this spending has been counterproductive. A more realistic, effective defense strategy would not only provide greater security, but also save taxpayer dollars.

This report's recommendations are a sharp contrast to the National Defense Strategy announced by the Pentagon in January 2018 and the companion evaluation of that strategy provided by the National Defense Strategy Commission (NDSC), which has declared that "[t]he security and well-being of the United States are at greater risk than at any time in decades." The commission's report and the National Defense Strategy that it evaluates exaggerate the challenges posed by major powers while ignoring severe threats that cannot be addressed by the Pentagon.

Military strategy is just one part of a larger approach to ensure the safety of the United States and its allies and protect U.S. interests. National strategy involves assessing all of the major challenges facing the United States, providing the resources needed to address them, and setting priorities among competing demands. Many of these challenges – from climate change to economic inequality to epidemics of disease – are not military in nature.

Elements of a New Strategy

An alternative strategy for the United States requires a fresh approach, one that takes into account accelerating changes and challenges in the global environment and makes a balanced assessment of the tools needed to address these challenges.

A new strategy must be much more restrained than the military-led approach adopted throughout this century, replacing a policy of perpetual war with one that uses military force only as a last resort, when vital security interests are at stake. A new approach should rely on diplomacy, economic cooperation, and other non-military instruments as the primary tools for addressing security challenges.

The first element of a new strategy must be a recognition that the U.S. homeland is relatively safe by historical standards, from conventional attack by any major power and from the risk of attacks from terrorist organizations based outside of the United States. While another major international terrorist attack on the United States remains possible, the nation is much better prepared today, while even elementary safeguards were missing 18 years ago. In any event, domestic terrorism is not primarily an international threat and the policy solution does not demand military force expansion, while nuclear threats can be thwarted by a deterrence-only strategy and force posture.

Second, the wars of the last 18 years – including large-scale counterinsurgency efforts, nation building, and global terrorist-chasing, as occurred in Iraq, Afghanistan, and beyond – have done more harm than good, in some cases disastrously so. Abandoning such policies could lead to concomitant reductions in the size and geographic reach of the U.S. military while promoting greater security. Most importantly, it would stop unnecessarily risking the lives of U.S. troops.

Third, an alternative national security policy needs to recognize that Russia does not pose a traditional threat to the United States, nor does China. Neither country has conventional military power that can compete with the United States. Neither approaches the dominant military power of the United States, which has the only truly global military force. Given the potentially disastrous consequences of war between nuclear-armed great powers, plans to prevent such a conflict should take precedence over spinning out warfighting scenarios. Ultimately, the competition between the three major powers centers on economic dominance (particularly with China) and diplomatic influence.

Greater reliance on allies tied to a more restrained strategy will allow a reduction in global U.S. troop deployments, especially ground troops, and smaller reductions in the Air Force and Navy. In addition to relying more heavily on allies, the United States should be able to surge its forces in the event of a military crisis in Western Europe or East Asia rather than maintain large and costly forward deployments. In Europe, for example, NATO allies alone cumulatively spend more than triple on their militaries than Russia, and their economies taken together are ten times the size of Russia's. U.S. allies have ample resources to defend themselves with the United States playing a less costly, supporting role.

Given, the above, the notion that the United States needs to be prepared to fight two major regional wars, with active combat in one and deterrence in the second, should be discarded as a guide to military force structure.

Fourth, the strategic approach to regional challenges, like the potential development of nuclear weapons by Iran and North Korea, outlined in current strategy documents needs to be rethought. It devalues diplomacy in favor of preparation for and threats of military conflict. The predominance of military options in U.S. strategy comes even as the Trump

administration has violated and discarded the Iran nuclear deal, which was working to curb that nation's nuclear ambitions at minimal cost to the United States and its allies. A new administration should rejoin the deal. Likewise, negotiations with North Korea, however challenging, are a far preferable option to war, which could not be won without catastrophic numbers of casualties in South Korea and the possibility of nuclear strikes against U.S. allies in East Asia.

Fifth, overall U.S. nuclear strategy should move towards a posture of sufficiency – a large enough arsenal to deter attacks on the United States and its allies. No additional capability is needed. As indicated in the alternative nuclear posture developed by Global Zero, restraint in nuclear planning would allow for a reduction to 1,100 total warheads from a stockpile that currently stands at roughly 4,000. It would include the elimination of the land-based portion of the nuclear triad – Intercontinental Ballistic Missiles (ICBMs) – which pose risks of accidental or rash resort to nuclear weapons due to the extremely short time frame in which they would need to be launched in fear of an attack.

Sixth, the most urgent risks to U.S. security are non-military, and the proper national security tools ought to be non-military as well. They include climate change, which undermines frontiers, leads to unpredictable extreme weather, and fosters uncontrollable migration; cyber-attacks and cyber offensive operations, which undermine the credibility of the internet and pose challenges to infrastructure security; global disease epidemics, which pose societal risks to all nations; and income and wealth gaps, which foster insecurity and conflict.

Last but not least, a new strategy should put as much or more emphasis on diplomatic cooperation as it does on preparing for or engaging in military confrontation. Currently, the total budget for national defense – including the Pentagon and nuclear weapons spending at the Department of Energy – is over a dozen times larger than the budget for the Department of State. This imbalance must change. There are global security interests and goals shared in common by all members of the international community. The United States must partner with other nations in addressing challenges like climate change, epidemics of disease, nuclear proliferation, and human rights and humanitarian crises. None of these challenges are best dealt with by military force. Rather, they will depend on building non-military capacities for diplomacy, economic assistance, and scientific and cultural cooperation which have been allowed to languish in an era in which the military has been treated as the primary tool of U.S. security policy.

Defense Budgets Past, Present, and Future

The defense budget debate in recent years has pivoted around the restrictions set by the Budget Control Act (BCA) of 2011, which set spending limits for the fiscal years between 2012 and 2021. From its outset, defense hawks and other policymakers complained that the BCA's new limits would "decimate" defense readiness and modernization and put the United States at the mercy of its adversaries. But there is ample evidence that the BCA

caps were neither extreme nor actually adhered to and could provide guidance towards a much more fiscally sustainable and predictable budgetary path in the future.
Spending reductions attributable to the BCA have been modest. Total Department of Defense (DOD) spending almost doubled from $425 billion in FY2000 to $812 billion in FY2010 (in 2019 dollars). The 2010 figure represented the highest level in both war funding and base budget funding since World War II. Proposed funding of $750 billion for FY2020 is only a modest reduction from this peak spending, and well above the Cold War average of $377.3 billion.

War spending has not only allowed the DOD to skirt BCA spending limits but has also subsidized its day-to-day defense spending. For example, despite a reduction in troop deployments for the post-9/11 wars from 180,000 in 2010 to a projected level of 22,000 in FY2020, the administration has proposed a war budget of $163 billion in 2020, virtually identical to the $165 billion figure reached in 2010.

Despite the vociferous complaining and ominous warnings from DOD spokesmen and defense hawks in Congress, the BCA decade has turned out to be very well-funded for the Pentagon. The President's plan in 2012, cited by many BCA critics as the desirable level, projected $6.4 trillion in spending for the BCA decade, FY2012-FY2021. Counting the subsidies to the base budget provided by war spending along with several upward adjustments of the budget caps, DOD is slated to receive $5.8 trillion over that time span. This level of spending for the base budget with war subsidies is over one trillion higher than the prior decade's level of $4.7 trillion before enactment of the BCA, when hostilities in both Iraq and Afghanistan were at their peak.

The figures suggest that critics who have cited threats to readiness and modernization from the caps on Pentagon spending have greatly over-stated their case. If there is a readiness or modernization issue it is not because the DOD hasn't been given ample taxpayer money, it's because the DOD bureaucracy has not been spending that taxpayer money effectively.

Options for Reducing Spending

This report details over $1.2 trillion in savings from the Pentagon's spending plan for the next decade. Savings come from reductions in the size of the force resulting from a more restrained strategy; a downsized nuclear arsenal tied to a deterrence-only nuclear posture; and efficiencies in Pentagon operations.

On the issue of force structure, a more realistic defense strategy would allow the United States to reduce its armed forces by 10% to an active-duty strength of 1.2 million personnel. This reduction could cull $600 billion from the administration's ten-year plan, contributing substantially to the $1.2 trillion in defense budget savings foreseen by the task force. Although smaller than today's military, this armed force would remain the most powerful on earth, well equipped for current and emerging security challenges. The force structure cuts would also entail cancelling the Littoral Combat Ship (LCS) and reducing

the size of the proposed F-35 fleet; cutting the number of carriers in the Navy from 11 to 9, thus eliminating the requirement to build new carriers within the next decade.

In the short-term, there are a number of steps Congress can take to begin to rein in over-spending by the Pentagon:

1. Restrict the Overseas Contingency Operations (OCO) account to expenditures that are directly related to current wars, as a step towards eliminating it altogether as those wars wind down. Only $25 billion of the FY2020 administration's $165 billion proposal for OCO is for direct war spending.

2. Cut back the Pentagon's work force of private contractors by 15% at a savings of well over $20 billion per year, including an audit of which functions are necessary and which are redundant.

3. Block plans for the creation of an independent Space Force, saving billions in unnecessary bureaucratic overhead.

4. Forego placing weapons in space, including missile interceptors. Their potentially destabilizing effect could put U.S. military and civilian space assets at risk.

5. Roll back the Pentagon's $1.2 trillion nuclear modernization plan, starting with the elimination of the new low-yield nuclear warhead and the new nuclear cruise missile (officially called the Long-Range Standoff Weapon).

The table below outlines the full list of savings proposed in the task force report.

List of Options for Reducing Spending

Force Structure and Weapons Procurement Reductions	10-Year Savings Est.
Army Reductions and Restructuring	$160 Billion
Marine Corps Reductions and Restructuring	$60 Billion
Reduce U.S. Navy Personnel and Weapons Procurement	$193 Billion
Reduce U.S. Air Force Personnel and Aircraft Procurement	$100.5 Billion
Reduce Peacetime Troop Deployments Overseas	$17 Billion
End Endless Wars/Phase Out OCO	$320 Billion
Overhead and Efficiencies	
Reduce O&M Spending on Service Contracts	$262.5 Billion
Replace Some Military Personnel with Civilians	$16.7 Billion
Close Unnecessary Military Bases	$20 Billion
Nuclear Weapons, Missile Defense, and Space	
Eliminate the New Nuclear Cruise Missile	$13.3 Billion
Cancel the New ICBM	$30 Billion
Cancel the Space Force	$10 Billion
Cancel Ground-Based Midcourse Defense System	$20 Billion
Cancel New Nuclear Warheads and Rollback Modernization	$15 Billion
Include Nuclear Weapons Complex in a BRAC Round	$10 Billion
Total Savings:	**$1,251 Billion**

* Force structure cuts include reductions in equipment purchases such as downsizing the proposed F-35 fleet, reducing the Navy's aircraft carrier force from 11 to 9, and canceling the Littoral Combat Ship (LCS).

About the Center for International Policy

The Center for International Policy (CIP) is an independent nonprofit center for research, public education and advocacy on U.S. foreign policy. CIP works to make a peaceful, just and sustainable world the central pursuit of U.S. foreign policy. CIP was founded in 1975 in the wake of the Vietnam War by former diplomats and peace activists who sought to reorient U.S. foreign policy to advance international cooperation as the primary vehicle for solving global challenges and promoting human rights. Today, we bring diverse voices to bear on key foreign policy decisions and make the evidence-based case for why and how the United States must redefine the concept of national security in the 21st century.

About the Sustainable Defense Task Force

CIP convened the Sustainable Defense Task Force (SDTF) in November 2018 to craft a 10-year defense budget and strategy document that could demonstrate a way to rein in runaway Pentagon and nuclear spending and encourage informed debate in Congress, the media, and among citizens' organizations to advance a common-sense approach for protecting the United States and its allies more effectively at a lower budgetary cost.

Given historically high levels of Pentagon spending and the unprecedented level of U.S. debt, this effort is of particular value in the context of debates in the new Congress that took office in January 2019, and as a touchstone for debates over Pentagon spending and military strategy during the run-up to the 2020 presidential election.

In recent years debates over Pentagon spending have focused primarily on wasteful spending, specific weapons systems, or the need for more fiscal discipline. These discussions are important but can be far more illuminating when they are backed up by a solid, evidence-based analysis of how to keep America and its allies safe without overspending on defense. This is the mission of the SDTF.

The original Sustainable Defense Task Force was requested by Rep. Barney Frank in 2010 for use as a tool in debates over how to cut the deficit and was instrumental in ensuring that the Pentagon budget was subjected to caps as part of the 2011 Budget Control Act. Those efforts were a key factor in achieving a cumulative reduction of between $200 and $300 billion in spending relative to Pentagon projections over a five-year period.

The new SDTF is a bipartisan group of experts from academia, think tanks, government, and retired members of the military. The co-Directors are William Hartung, Director, Arms & Security Project of CIP and Ben Freeman, Director, Foreign Influence Transparency Initiative at CIP, working in conjunction with CIP Senior Associate Carl Conetta, who served as a consultant to the project.

Part One: Strategic Environment and Elements of a New Strategy

Introduction

This report will demonstrate that an alternative defense strategy that avoids unnecessary and counterproductive wars, reduces the U.S. global military footprint, takes a more realistic view of the primary security challenges facing the United States and its allies, and reduces waste and inefficiency could save more than $1 trillion in projected spending over the next decade, while providing a greater measure of security.[1]

Contrary to recent assertions by advocates of higher Pentagon spending, America can be made safer for far less money. The United States has made enormous investments in security in the past two decades. At $716 billion per year, current spending on the Pentagon and related agencies is well above the post-World War II average, and only slightly less than the levels reached in 2010, when the United States still deployed nearly 180,000 troops in Iraq and Afghanistan.[2] Yet, the Pentagon's current plan budgets $7.6 trillion for national defense over the next ten years.[3]

Any future investment in defense has to be both strategically wise and fiscally sustainable. In many ways, the United States has overpaid for security in this century, and in some ways, this spending has been counterproductive. A more realistic, effective defense strategy would not only provide greater security – a more appropriate level of defense spending would also be more sustainable by a number of measures.

Fiscally, scaling back Pentagon spending to fit a more realistic strategy will slow the growth of U.S. government debt, which is expected to increase by more than $10 trillion over the next decade.[4] At this rate, the interest on the debt alone will exceed Pentagon spending itself and become one of the largest categories of spending in the federal budget. The increased interest spending to fund the debt risks crowding out other public investments that could meet urgent needs and strengthen the U.S. economy.

A sustainable security policy would also reduce the relentless pressure on our armed forces inflicted by the non-stop wars of this century, which have cost trillions of dollars, resulted in the deaths of thousands of troops, and left hundreds of thousands of veterans with serious disabilities. Recruiting and maintaining a capable, well-trained force depends in part on using it only for essential security tasks, not nation-building and wars of choice, which have had major negative consequences without providing corresponding security benefits. A sustainable force would match resources to the revised set of missions our armed forces are being asked to perform, saving substantial sums in the process.

A sustainable approach to defense would also scale back the U.S. military footprint, which

includes hundreds of overseas bases, multiple wars, and engagement in military activities in well over 100 countries per year.[5] This global presence too often causes more problems than it solves by provoking terrorist blowback and putting the United States at risk of being drawn into unnecessary conflicts.

This report's recommendations are in sharp contrast to the National Defense Strategy announced by the Pentagon in January 2018 and the companion evaluation of that strategy provided by National Defense Strategy Commission (NDSC), which has declared that "[t]he security and well-being of the United States are at greater risk than at any time in decades."[6] The commission's report and the National Defense Strategy that it evaluates exaggerate the challenges posed by major powers while ignoring severe threats that cannot be addressed by the Pentagon.[7] Both documents set the wrong priorities, and, as a result, propose the wrong tools to achieve a lasting and stable security for the United States. They are exercises in threat inflation that would send U.S. national security policy down a dangerous and counterproductive path and lessen, rather than enhance, our security. The findings of the NDSC underscore the need for an independent look at the U.S. National Defense Strategy.

The following sections examine the current strategic environment and flesh out the implications of a new, realistic strategic approach, and an assessment of cost savings that could be generated by a change in strategy and force structure, and by the introduction of greater efficiencies in the Pentagon's operations.

Overreliance on the Military Instrument

Military strategy is just one element of national security strategy. National strategy assesses the vital interests of the United States, the country's role in the world, and the major challenges to national well-being and safety facing the United States, providing the resources needed to address them, and setting priorities among competing demands. As discussed later in this chapter, many of these challenges – from climate change, to economic inequality, to epidemics of disease – are not military in nature.

The challenges to national security are broader than purely military issues and the military is just one of the many tools used to carry out that strategy. Over the past twenty years or more, the United States has leaned too heavily on the military tool, engaging the country in costly global deployments and an endless series of military interventions, large and small. Instead of contributing to American security, the militarization of U.S. foreign policy has seriously compromised our safety. It has often failed, as in Iraq and Afghanistan, thereby reducing the credibility of U.S. military capabilities. Overreliance on force has also weakened the capacity of American diplomacy to resolve issues and negotiate solutions to international crises. Most important, global basing and operations have inspired the growth of the very things the U.S. military is attempting to prevent: a global rebalancing to counter U.S. military power and a rise in terrorist activities.

The 2018 National Defense Strategy deals almost exclusively with military challenges. It proposes a shift away from a primary focus on terrorism and instability in the greater Middle East to a concern with great power rivalry. However, despite this rhetorical change, a world-spanning military campaign against terrorism remains the main operational approach of the U.S. military.

The focus on great power rivalry is simply stitched on to current priorities and endless combat, at greater risk and greater expense.

One of the core weaknesses of the current national security strategy is that it relies disproportionately on the Department of Defense to address all threats. It fails to recognize that the major national security challenges the United States faces are not predominantly military. Climate change, economic inequality, and global health challenges clearly pose serious risks to U.S. security. Cyber defense, espionage, and influence operations are also serious challenges. The military is ill-suited to address these challenges.

It is not enough to argue, as the National Defense Strategy does, that these issues can be addressed through "the seamless integration of multiple elements of national power – diplomacy, information, economics, finance, intelligence, law enforcement, and military."[8] If funding priorities are still military-centric, such integration will never happen.[9] Currently, the military receives more funding than the rest of these elements of national power combined, including over a dozen times as much as the Department of State.[10] Yet the National Defense Strategy Commission's only concrete funding recommendation is to increase spending on the Pentagon and the nuclear weapons complex at the Department of Energy by 3% to 5% above inflation for at least the next five years. This could lead to national defense budgets well over a trillion dollars within the next decade, up from roughly $700 billion currently.[11] In this scenario, the funding needed to address critical non-military challenges would necessarily lag far behind the required amount.

The result of such a bias in the national security toolkit is that the military is rapidly becoming the policy instrument of choice, even for tasks for which it is inappropriate, such as border security, humanitarian assistance, and even diplomacy. Security assistance programs, historically overseen by the State Department, are now increasingly budgeted and executed directly through the defense budget, with minimal diplomatic oversight.[12] This swells the defense budget, as the U.S. military is distributed to every corner of the globe.[13]

Overall, the strategy of global military preeminence and intervention pursued over the past 20 years has been counterproductive, and has starved other crucial security tools like diplomacy and foreign assistance. It has provoked the expansion and dispersal of terrorist groups, stimulated global power rebalancing, and threatened important programs that could stimulate growth and equal opportunity at home. It is time for a change.

Overview of the Current Strategic Environment

The National Defense Strategy focuses on three categories of major challenges: great power competition, as embodied by Russia and China; the regional risks posed by Iran and North Korea; and global terrorism. We will address these in turn.

The Challenge of Russia and China

The rise of China and the resurgence of Russia have created a perception that America's military capabilities are deficient. The NDSC has sounded the great-power alarm, namely that "[t]he U.S. military could suffer unacceptably high casualties and loss of major capital assets in its next conflict. It might struggle to win, or perhaps lose, a war against China or Russia."[14] But a closer inspection suggests that this is not the case.

Thankfully, the NDSC's assessment of the threats posed by Russia and China – and their military capabilities relative to the United States – are overstated. While it is true that both nations have been asserting their military power more forcefully over the past decade, from Syria and the Ukraine to the South China Sea, they still lag well behind the United States. Equally significant, each nation has limited military objectives. If these relationships are handled carefully, without provocative buildups or overheated rhetoric, tensions can be reduced and conflict can be avoided. In addition, a new nuclear strategy (outlined below) and a more restrained approach to overseas intervention can help stave off a destructive and expensive arms race among the three great powers. A war involving two major nuclear powers would pose unacceptable risks, and every effort must be made to avoid one. A military-driven approach to Russia and China that ignores areas of potential cooperation, from anti-terror efforts to curbing arms proliferation to addressing climate change, is bound to fail.

This is not to say that Russia and China do not pose challenges to U.S. interests. But it is important not to overstate them, and to avoid an escalation of tensions that could spur an arms race or worse.

The military capacities of these states do not nearly equal those of America and its allies. The gaps in spending between the United States, Russia and China have narrowed during this decade. Still, spending by the U.S. and its closest allies outstrips Russian and Chinese spending by a 3 to 1 ratio.[15] And U.S. European allies alone outspend Russia 3 to 1, and have economies that together are ten times the size of Russia's, indicating ample capacity to build up further if needed.[16] But funding is not the only measure of relative military capabilities or goals.

First and foremost, the balance of defense budgets or relative defense capabilities are only important relative to the fundamental framework of relations among the countries of concern. During the Cold War, this framework was an existential contest - a duel to

the death - between expansive "blocs" characterized by mutually-exclusive visions and programs for organizing political, economic, and social life worldwide. These were not insular states but crusading ones, and their global contest was highly militarized from the start. Nothing like this exists today. It might in the future, which is a good reason to retain capacities for force reconstitution, and also a good reason to carefully manage relations with these states.

Other factors relevant to force comparisons include which contestant is more efficient in using resources, more experienced, better trained, and better led. Also important is the relative quality of contestants' "human capital" (military personnel), including their health, education, motivation, and focus. Are the armed forces professional or conscript? How well do the two sides utilize technology? How well do they integrate various services and arms to fight as a team? Regarding all these factors, the United States enjoys distinct advantages. Defense expert Dr. Eugene Gholz summarizes U.S. advantages as follows:

"U.S. military power outstrips all other countries' by a wide margin. The lead is built on many factors, including a tremendous stock of advanced military equipment (not just weapon systems) purchased with many years of high defense procurement budgets, decades of sustained annual investment in military innovation that outstrips most other countries' entire defense budgets, learning from combat experience and realistic military exercises, and a national commitment of high-quality human capital in the all-volunteer force and in the defense industry."[17]

The United States, Russia, and China also differ in their modernization potential. Russia has little economic capacity to seriously compete with the United States, now or ever. The Russian economy is currently one-tenth the size of the U.S. economy.[18] Also, although portions of its armed forces are in much better shape than during the 2008 Russo-Georgian War, it continues to struggle to bring the rest up to par. Exacerbating these issues, its once formidable defense industrial base remains in disrepair.[19]

China, by contrast, is in a position to eventually rival American military power. However, as Stephen Biddle and Ivan Oelrich have noted, "The chief reason for concern lies not in China's current arsenal, but in the trajectory of technical and acquisition trends whose maturation could take decades or even generations."[20]

In addition, the posture and disposition of U.S., Russian, and Chinese armed forces are quite different, and this affects or shapes their relative capacities. Both the Russian and (especially) Chinese military are less technologically advanced than the United States'. In addition, unit-for-unit, they are less well equipped. Also, both countries are more invested in ground forces than are the United States and its allies. And these Chinese and Russian ground forces are burdened by internal security missions and the need to secure long borders. One analyst has noted that over half of China's military budget is devoted to internal security and border defense.[21]

Conversely, Russia and China enjoy the advantage of their proximity to focal areas of concern: Eastern Europe and the South and East China Seas, respectively. Yet this proximity also generates challenges. Europe has a potential for self-defense that could overwhelm

any Russian aggression. America's European NATO allies, taken as a group, spend over three times what Russia does on its military, and have the capacity to spend considerably more if needed.[22] Likewise, any major conflict in the seas abutting China would entail destructive and disruptive consequences for China that would render any Chinese victory pyrrhic.

The economic challenge posed by China may be more important than any military threat. The Chinese economy is expected to be larger than that of the United States within the next decade, a position that will allow it to project greater military, economic, and diplomatic power should it choose to do so.[23] The country's rapid growth rate and its assertive international investment strategy, embodied in the Belt and Road economic initiative and the formation of the Chinese-led Asian Infrastructure Investment Bank, which now has 97 member nations, are in stark contrast to the military-first approach that characterizes current U.S. strategy.[24] The Belt and Road initiative has faced serious challenges recently, but it remains a symbol of China's emphasis on economic over military competition on the global stage.[25]

Nowhere is the contrast between the U.S. and Chinese approach clearer than in Africa, where China has been making deals that involve building local infrastructure in exchange for preferred access to key resources, even as it moves into funding manufacturing and services.[26] Meanwhile, the United States has focused on arming, training, and equipping the majority of militaries on the continent for the fight against terrorism. In essence, the United States and China aren't even playing the same game when it comes to exerting influence in Africa and beyond, and America's overly militarized approach has had mixed results at best, at immense cost to U.S. taxpayers.[27]

This is not to suggest that China's economic strategy doesn't pose serious challenges, both for China itself and for the world economy and environment. Debt driven expansion at home and abroad have exposed vulnerabilities in the Chinese model, and there have been criticisms of the labor and environmental impacts of major Chinese infrastructure projects in Africa.[28]

Simultaneously, China's ability to devote greater resources to military purposes will have to compete with the need to foster internal stability by meeting the needs and aspirations of its own population. Michael Beckley of Harvard University's Belfer Center has outlined one key element of China's internal development challenge:

"China is about to experience the most rapid aging crisis in human history, with the ratio of workers-to-retirees shrinking from 8-to-1 today to 2-to-1 by 2040.. By that point, China will have $10 trillion to $100 trillion in unfunded pension liabilities. Add to this pension shortfall the rising medical costs associated with having one of the oldest societies on the planet . . . and it becomes clear that China would do well to maintain current levels of military spending, let alone increase them."[29]

The best outcome for U.S.-Chinese relations would be a cooperative approach that includes creating mutual incentives to address climate change, improve labor conditions, and promote sustainable growth. Doing so will pose major challenges, but that's all the

more reason to devote time, attention, and resources to the problem rather than squander scarce funds on military confrontation or a crushingly expensive arms race.

Regional Challenges

The strategic approach to regional challenges like the potential development of nuclear weapons by Iran and North Korea that is outlined in current strategy documents devalues diplomacy in favor of preparation for and threats of military conflict. The predominance of military options in U.S. strategy comes even as the Trump administration has violated and discarded the Iran nuclear deal, which was working to curb that nation's nuclear ambitions at minimal cost to the United States and its allies.[30] Diplomatic negotiations with North Korea, however challenging, are a far preferable option to war, which could not be won without catastrophic numbers of casualties in South Korea and the possibility of nuclear strikes against U.S. allies in East Asia.[31]

North Korea is extremely unlikely to attack the United States with a nuclear weapon given that it would unquestionably see its own society completely destroyed in return. Such an attack would only occur via miscalculation or if North Korean leader Kim Jong Un perceived an imminent attack that put himself and his regime at risk of annihilation. Hence the need for communication, and the imperative to refrain from saber-rattling. Former Secretary of Defense William Perry has underscored these points, noting that North Korea's nuclear capacity "does not mean they are intending to initiate a nuclear war."[32] Perry went on to say that there are real risks, but that they are not posed by the danger of an intentional attack on the United States by North Korea:

"North Korea is bombastic and warmongering in its rhetoric, and often ruthless in in its tactics. But the regime is not irrational. Its leaders seek survival, not martyrdom. But as long as they possess these weapons in a region infused with intense and long-standing conflicts, the risk of blundering into a nuclear catastrophe through miscalculation or brinkmanship gone awry is unacceptably high."[33]

With respect to Iran, the Trump administration's greatest strategic error to date was walking away from the Iran nuclear deal, formally known as the Joint Comprehensive Program of Action (JCPOA). Not only was the agreement effective in preventing Iran from obtaining a nuclear weapon or advancing its capabilities for doing so, but it was a prime example of the kind of effective multilateral diplomacy that will be needed to address other global problems, from issues of the environment to war and peace.

Placing the United States, the United Kingdom, France, Germany, Russia, China and representatives of the European Union on the same page with the Iranian government was a major achievement that could have paved the way for a more balanced U.S. approach to the region, in which negotiations with Iran on other issues might have been possible. Instead, the Trump administration has threatened to seek regime change in Iran while doubling down on a counterproductive, destabilizing relationship with Saudi Arabia, as evidenced most clearly by U.S. support for the Saudi/UAE-led coalition's brutal war in

Yemen that has fueled the resurgence of al-Qaeda in the Arabian Peninsula (AQAP).[34] Despite the setbacks and disruption caused by the Trump Administration, the best way forward is to adopt a balanced approach that acknowledges Tehran's interests, and that renounces the use of force to resolve differences between the U.S. and Iran, or among Iran and its regional rivals, Saudi Arabia and Israel. Military action against Iran would be destabilizing, and would likely drive Tehran to revive its nuclear weapons program while increasing the prospects of greater conflict throughout an already war-torn region. As Ali Vaez, an Iran expert at the International Crisis Group, has pointed out, a full-scale military intervention in Iran would "make the Afghan and Iraqi conflicts look like a walk in the park."[35]

Following the regional strategy outlined above would allow for a substantial reduction in the large forward military presence that the United States currently maintains in each of these potential zones of conflict, reducing the overall size of the U.S. military.

Counterterrorism

The recent major U.S. interventions – in Afghanistan and Iraq – have both been justified in part or in full by the fight against terrorism. In Afghanistan, counter-terrorism was the rationale from the outset, starting with an effort to dislodge al-Qaeda and continuing with an eighteen-year long attempt to defeat the Taliban. In Iraq, a conflict originally (falsely) justified as necessary to reverse that nation's alleged possession of weapons of mass destruction morphed into a campaign against Al-Qaeda in Iraq, which in turn led to the creation of ISIS. Major counter-terrorism efforts are also underway in Syria, Somalia, Mali, Yemen, Libya, the Philippines and scores of other places around the world. An analysis by Brown University's Costs of War Project has found that the United States is carrying out counterterror operations in at least 80 locations, including counter-terrorism training in 65 locations, military exercises in 26 countries, troops in combat in 14 countries, and drone strikes in seven countries.[36]

The U.S. decision to launch a 'global war on terror' following the September 11th attacks has come at tremendous cost. The Brown Costs of War Project puts the full price tag of America's post-9/11 wars and anti-terror efforts at $5.9 trillion and counting, including the direct costs of the wars, related increases in the Pentagon's base budget, homeland security, defense-related interest on the national debt, and the responsibility of providing care for the veterans of these conflicts.[37]

The budgetary costs are just part of the story. The conflicts have taken the lives of over 6,900 U.S. soldiers, and left hundreds of thousands more with serious disabilities, ranging from severe physical wounds to Post-Traumatic Stress Syndrome (PTSD) to Traumatic Brain Injuries (TBI).[38] The costs to all parties involved in the wars have been even higher, with over 480,000 deaths on all sides, including at least 244,000 civilians.[39]

Despite these immense human and budgetary costs, the effectiveness of global counter-terror operations in stemming terror attacks or eliminating terrorist organizations has

been mixed at best. Tactical victories like the initial success in pushing al-Qaeda out of Afghanistan and the hard won territorial gains against ISIS in Iraq and Syria have not prevented the proliferation of new terrorist organizations around the world, accompanied by deadly attacks in major conflict zones.[40] To make matters worse, the widespread U.S. military presence has not only made U.S. troops targets of terror attacks, but it has also served as a tool for terror groups who have exploited opposition to U.S. intervention to recruit new members.

There has been a substantial decline in terrorist attacks on U.S. soil since 9/11, but it is largely due to domestic security measures, not overseas troop deployments.[41] As an analysis by the New America Foundation has noted, "[f]ar from being foreign infiltrators, the large majority of jihadist terrorists in the United States have been American citizens or legal residents."[42] In fact, as of 2017 New America determined that "foreign terrorist organizations . . . have not directed and carried out a successful deadly attack in the country [the U.S.] since 9/11." Rather, "the most likely threat continues to be lone individuals or pairs inspired by jihadist ideology."[43]

Efforts to train and equip allied militaries to fight terrorism have not fared well. The most notable example is the Iraqi military, which, despite $25 billion in arms and training from the United States, dissolved in the face of a 2014 invasion of northern Iraq by ISIS forces.[44] Less spectacular examples abound. For example, in Africa, where the United States has deployed roughly 6,000 troops and conducts up to 3,500 exercises, programs and engagements each year, the number of terrorist organizations has grown dramatically since 2001.[45] As the independent journalist Nick Turse has noted, this phenomenon is particularly evident in West Africa:

"[T]he entire region, relatively free of transnational terror threats in 2001, is now beset by a host of militant groups. They include, according to the Defense Department's Africa Center for Strategic Studies, the local branch of Al-Qaeda in the Islamic Maghreb, Al Mourabitoun, Ansar Dine, and the Macina Liberation Front, which all operate under the mantle of Jama-at Nusrat al-Islam wal-Muslimin, as well as Boko Haram, the Movement for Unity and Jihad in West Africa, Ansaroul Islam, and the Islamic State in West Africa."[46]

With respect to U.S. efforts in Niger, which received considerable attention after four U.S. soldiers were killed in a counter-terror mission there in October 2017, Michael Shurkin of the RAND Corporation has said that "Everything we've done certainly hasn't amounted to much because everything is getting worse. None of it is really effective." Shurkin is similarly skeptical of the U.S. military's counterterror advising and training beyond Niger: "Simply throwing money at the existing programs strikes me as a really bad idea . . . At the very least, we're going to waste a lot of money. And we can definitely make things worse."[47]

The militarization of U.S. Africa policy has come at the expense of opportunities for cooperation on the larger problems plaguing the continent by ignoring what Salih Booker and Ari Rickman of the Center for International Policy have described as "the real killers – namely, poverty and corruption" – both of which have created fertile ground for the development of terrorist organizations.[48]

The failure of U.S. global military operations to effectively address the terrorist challenge suggests that a new approach is urgently needed. A less militarized approach that focuses on law enforcement, intelligence sharing, homeland security, and select efforts to address the underlying drivers of terrorism, such as poverty and corruption, offers better prospects for success. It would also have the distinct advantage of not worsening the problem it is intended to solve.

Nuclear Strategy

U.S. nuclear strategy needs a thorough revamping, moving towards a posture of sufficiency – a large enough arsenal to deter attacks on the United States and its allies, but no larger.[49] Such an approach would allow for a sharp cut in strategic warheads and a corresponding cut in the numbers of nuclear delivery vehicles. It would also enable the elimination of the land-based portion of the nuclear triad – Intercontinental Ballistic Missiles (ICBMs) – which poses risks of accidental or rash resort to nuclear weapons due to the extremely short time frame in which they would need to be launched on fear of attack, and the ease of targeting them given their fixed locations.[50]

Unfortunately, U.S. nuclear policy is headed in the wrong direction. The Trump administration's abandonment of the Iran nuclear agreement and the Intermediate Nuclear Forces (INF) Treaty have undercut nuclear-nonproliferation and could spur the deployment of destabilizing intermediate range missiles in Europe and Asia. The distinct possibility that the Trump administration will not extend the New Strategic Arms Treaty (New START), combined with its promotion of new, low-yield nuclear weapons, could accelerate a budding nuclear arms race even as it increases the risk of a nuclear war.

New START expires in 2021 but can be extended for five years at any time prior to that date by mutual agreement of Washington and Moscow. A letter from 24 senators to President Trump – organized by Sen. Chris Van Hollen (D-MD) – underscored the crucial importance of the treaty, noting that it is "in the vital national security interests of the United States" and that letting it expire would risk "unraveling a broader arms control regime that has helped uphold stable deterrence and curb a costly, destabilizing arms race for half a century."[51] Recent statements by the Trump administration that it will seek new arms control agreements with Russia and China before considering the extension of New START bear watching, but arms control experts fear that they may be a "poison pill" designed to scuttle the existing treaty rather than a serious commitment to nuclear arms reductions.[52] Extending New START first, and then pursuing talks with Russia and China would be a far better approach.[53]

Box 1: A Deterrence-Only Nuclear Strategy

Current U.S. nuclear policy entails a commitment not just to nuclear deterrence – sustaining sufficient nuclear forces to dissuade any nation from attacking the United States with nuclear weapons – but to various scenarios for nuclear warfighting, which involve the possibility of the United States attacking first with nuclear weapons, either in fear of nuclear attack or in response to non-nuclear attacks.

A recent report by the organization Global Zero, which promotes a long-term goal of eliminating all nuclear weapons, argues persuasively for a "deterrence-only" policy that would allow for substantial cuts in current and proposed U.S nuclear forces, resulting in savings of hundreds of billions of dollars over the next three decades. Global Zero describes the basic outlines of its approach as follows:

"The United States should adopt a deterrence-only policy based on no first use of nuclear weapons, no counterforce against opposing nuclear forces in second use, and no hair-trigger response. The policy requires only a small highly survivable second-strike force and resilient command, control and communications (C3). Five new strategic submarines (SSBN's) backed by a small reserve fleet of 40 strategic bombers would fully support the policy, which requires a robust capability to destroy a nuclear aggressor's key elements of state control and sources of its power of wealth. All other U.S. nuclear forces . . . should be phased out and all other planned U.S. nuclear force programs should be cancelled."[54]

Global Zero proposes an accompanying increase in investments in Command, Control, and Communications (C3) over nuclear forces to avoid accidental or rash decisions to launch a nuclear weapon.

As noted above, to achieve a deterrence-only posture, the Global Zero plan would maintain roughly 1,100 nuclear warheads – actively deployed and in reserve – on five Columbia-class ballistic missile submarines and 40 nuclear-capable bombers. This compares to a current deployed and reserve force of nearly 4,000 nuclear warheads, and a fleet of 12 ballistic missile submarines. America's 400 land-based Intercontinental Ballistic Missiles (ICBMs) would be eliminated under the proposal; the current plan to build 100 new nuclear bombers would be scaled back; and seven fewer ballistic missile submarines would need to be built. Savings from doing so would be counterbalanced by the increased spending on Command and Control systems, but the net savings over the next decade from adopting a deterrence-only strategy would be well over $100 billion. See part three of this report for a more detailed presentation of potential savings from a deterrence-only nuclear strategy.

The logic of the deterrence-only strategy rests on several key propositions, including the relative invulnerability of ballistic missile submarines from attack and the need for fewer targets to carry out a strategy that does not seek to take out all known and potential nuclear targets of an adversary. This approach would be safer in several respects, most notably because it would adopt a policy of no first use of nuclear weapons, which would reduce the likelihood of an accidental or misguided nuclear attack by the United States or a nuclear adversary.[55] As ten U.S. senators noted in a July 2016 letter to President Barack Obama, maintaining a first use policy "exacerbates mutual fears of surprise attack, putting pressure on other nuclear-armed states to keep their arsenals on high-alert and increasing the risk of unintended nuclear war."[56] The margin of safety provided by abandoning a first use policy would be reinforced by the elimination of ICBMs, thereby ending the danger posed by a policy of launch on warning that would give the president a matter of minutes to decide whether the United States was in fact under attack.

Former Secretary of Defense William J. Perry sums up the case against ICBMs as follows: "These missiles are some of the most dangerous weapons in the world. They could even trigger an accidental nuclear war."[57]

A full elaboration of the strategic benefits of Global Zero's alternative nuclear posture is contained in their report, The End of Nuclear Warfighting: Moving to a Deterrence-Only Posture.[58]

It should be noted that even more modest changes in the structure of U.S. nuclear forces would yield significant savings. An April 2019 report by Kingston Reif and Alicia Sanders-Zakre of the Arms Control Association (ACA) puts forward a number of alternative nuclear postures that would make the United States safer while saving considerable sums. One alternative demonstrates that the United States could deploy the 1,550 warheads allowed under the New START treaty with a force that reduces the number of ballistic missile submarines (SSBN's) by two (from 12 to 10) and the ICBM force by 100 (400 to 300), among other changes, at a savings of $149 billion over 30 years. ACA also outlines a posture that eliminates ICBMs, reduces deployed warheads to 1,000, and goes to 8 ballistic missile submarines from 12, saving $281 billion over 30 years.[59]

As Reif and Zakre note, "the choice . . . is between the current strategy, which is excessive and unnecessary, puts the United States on course for a budgetary train wreck, and would increase nuclear risk, or a more realistic and affordable approach that still leaves the United States with a devastating nuclear force that is more than capable of deterring any nuclear threats to the United States."[60]

New Strategic Challenges

As noted above, the National Defense Strategy ignores major challenges to U.S. and global security. This section will address two of them: economic concerns and climate change.

Economic Strength

Several realities prompt U.S. economic concerns: the long-term reduction in the economy's growth rate, the slowed improvement in U.S. labor productivity, growing inequality, America's declining share of the world economic pie, and the dire need to reinvest in the nation's infrastructure. Exacerbating all these issues is the renewed, sharp climb in the federal deficit and national debt. The former will soon surpass $1 trillion per year; the latter will equal 100% of the nation's GDP within the next decade.[61]

The way in which excessive debt can intensify budget dilemmas is clear. Within five years, the interest paid annually on the national debt (presently $400 billion) will grow to exceed what the nation spends on national defense.[62]

Economic strength and resilience form an essential foundation for military power and global influence. As such, all of the above-mentioned trends prompt notable security concerns.

Climate Change

Turning to the challenge posed by climate change, rising temperatures and sea levels, extreme weather, and desertification will increase the frequency and intensity of natural disasters worldwide, exacerbate water and food insecurity, and increase the scope of health crises.[63] Public health impacts include not only increased heat stress, but also higher propagation of climate-sensitive diseases, such as meningitis, malaria, dengue fever, West Nile virus, and diarrheal diseases.[64] Negative economic effects will also be severe, potentially reducing average global income by nearly one-quarter during this century.[65]

The deleterious effects of climate change will distribute unequally across regions, among countries, and within them, contributing to intra- and interstate tensions. In the Global South, climate change will subtract substantially from economic development, sapping the prospects for poverty reduction while potentially overwhelming already fragile state structures. Of course, developed economies will suffer significantly as well. According to the U.S. government's latest climate assessment, "Annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century — more than the current gross domestic product (GDP) of many US states."[66]

In addition to the immediate economic impact of climate change will be social dislocation and increased conflict potentials. Intensified competition over available water, food, and arable land will drive these issues further. Senior U.S. military officials and climate experts have estimated that tens of millions of people could be displaced by climate change in the next decade alone, dwarfing the number of refugees generated by the war in Syria, for example.[67] This too will increase conflict potentials. Indeed, the combination of extreme environmental conditions, resource scarcity, mass population movements, and weak and over-burdened governments may produce a perfect storm of communal violence, extremism, and interstate war.

As the world's largest institutional user of petroleum, and correspondingly, the single largest producer of greenhouse gases in the world, the Pentagon is a significant part of the problem.[68]

The U.S. military has an opportunity to reduce the risks associated with climate change — and thus its associated security threats — by reducing their role in creating greenhouse gas emissions. If the U.S. military were to decrease its greenhouse gas emissions, it would make the dire national security climate change related threats it predicts less likely.[69]

The need to address climate change is urgent and undeniable. Options for mitigating global warming and adapting to its effects are well developed and widely known.[70] The problem we face is one of will and resource allocation. Bringing climate change within minimally acceptable parameters will require the expenditure of at least one percent of GDP annually for several decades. According to one study, U.S. federal and private spending on mitigating climate change today falls short by $34 billion per annum, and the requirement for building climate resiliency into our infrastructure is much greater.[71]

Elements of a New Strategy

An alternative strategy for the United States requires a fresh approach, one that takes into account accelerating changes and challenges in the global environment and makes a balanced assessment of the tools needed to address these elements.

A new strategy must be much more restrained than the military-led approach adopted throughout this century, replacing a policy of perpetual war with one that uses military force only as a last resort, when vital security interests are at stake. A new approach should rely on diplomacy, economic cooperation, and other non-military efforts as the primary tools for addressing security challenges. As Lyle Goldstein has noted in the context of discussing the U.S.-China competition, there are two broad paths available for U.S. security policy going forward:

"[T]he United States faces certain stark choices. It can either seek to preserve the status quo of American global hegemony—necessitating a massive arms buildup and requiring more active and risky 'brinkmanship' to hold rising powers firmly in check. Or it can assume the much more rational and practical vision of its original founders: preserving first and foremost its own security and the liberties of its citizens, adopting a demeanor that is slow to anger, and steadfastly refusing to 'go abroad in search of monsters to slay.'"

Box 2: The Pentagon, Fuel Use, and Climate Change

The US military is preparing for threats of attack from human adversaries that are much less likely than the certain prospect of harm due to climate change.

Global warming is one of the most certain and immediate of any of the threats that the United States faces in the next several decades. Global warming has begun and its consequences are certain; drought, fire, flooding, and temperature extremes that will lead to displacement and death. The effects of climate change, including extremely powerful storms, famine and diminished access to fresh water, will likely make regions of the world unstable — feeding political tensions and fueling mass migrations and refugee crises. In response, the military has added climate change to its long list of national security concerns.

Indeed, unlike most parts of the present administration, the military acts as if the negative security consequences of a warming planet are inevitable. It has begun to adapt its operations and installations to deal with climate change.

Yet, while some sea level rise and mass extinction has already begun, the direst consequences of climate change and the associated threats to national security are not already baked into the system. There is time to reduce ongoing greenhouse gas emissions and it is urgent to do so. The U.S. military has an opportunity to reduce the risks associated with climate change — and associated security threats— by reducing their role in creating greenhouse gas emissions. If the U.S. military were to decrease its greenhouse gas emissions, it would make the dire climate change caused national security threats it predicts less likely, with the added benefit of saving taxpayer money on fuel in the long run.

The U.S. military has emitted 1,212 million metric tons of CO2 equivalent from 2001 to 2017. A conservative estimate indicates that of those emissions, 766 million metric tons of CO2 equivalent were emitted in "non-standard" military operations, including "overseas contingency operations" in the major war zones of Afghanistan and Pakistan, and Iraq and Syria. Of this, total war-related emissions are estimated to be more than 400 Million Metric Tons of CO2 equivalent.[72]

Absent any change in policy, the fuel consumption of the U.S. military will necessarily generate continued and unnecessarily high levels of greenhouse gases. These greenhouse gases, combined with other U.S. emissions, will help guarantee the nightmare scenarios that the military predicts and that many climate scientists say are possible.

If the United States chose to scale back its forces and operations, reductions in military fuel use would be beneficial in four ways. First, the United States would reduce greenhouse gas emissions. Second, the Pentagon reducing the use of greenhouse gas emitting fuels would lessen the associated climate change threats to national security. Third, by reducing its presence in the Persian Gulf — the forces most associated with protecting U.S. access to petroleum — the United States would reap political and security benefits, including reduced dependence of troops in the field and the U.S. military overall on oil, and therefore those who provide it. Finally, as a consequence decreased spending on fuel and operations to provide secure access to petroleum, the United States could, in the long run, decrease U.S. military spending and reorient its economy to more economically productive activities, including switching to renewable energy sources.

For further analysis and background sources see Appendix A.

The first element of a new strategy must be a recognition that the U.S. homeland is relatively safe by historical standards, from conventional attack by any major power and from the risk of attacks from terrorist organizations based outside of the United States. While another major international terrorist attack on the United States remains possible, the nation is much better prepared today, while even elementary safeguards were missing 18 years ago. At any rate, large scale military action abroad is not a remedy, but more likely a stimulant of such threats. Domestic terrorism is not primarily an international threat and the policy solution does not demand military force expansion, while nuclear threats can be thwarted by a deterrence-only strategy and force posture.

Second, the major thrust of defense policy for the last 18 years – counterinsurgency efforts, nation building, preventive wars like those undertaken in Iraq and Afghanistan, and global terrorist-chasing – has done more harm than good, in some cases disastrously so. These policies have entangled the United States in conflicts that could have been avoided, destroyed regional security in the Middle East, and encouraged the growth of terrorist organizations around the globe. Abandoning such policies could lead to concomitant reductions in the size and geographic reach of the U.S. military while promoting greater security.

Third, an alternative national security policy needs to recognize that Russia does not pose a conventional threat to the United States, nor does China. Neither country has conventional military power that can compete with the United States. Moreover, both nations' security policies are primarily focused on maintaining and enhancing military power in or near their borders, or in areas where they have had historic influence.

While it is true that Russian and Chinese military activism has sporadically impinged on U.S. concerns – in the Ukraine, Syria, and the South China Sea, for instance – neither country is attempting a fundamental global military challenge to the United States, nor can they. Neither state has anywhere near the ability to match the far-reaching military power of the United States, which has the only truly global military force. Moreover, the competition between the three major powers is concentrated in the economic arena, particularly with China; and in the battle for diplomatic influence.

U.S. policy needs to rely on relations with regional allies, allowing a reduction in global U.S. troop deployments, especially ground troops, and smaller reductions in the Air Force and Navy. Alliance burdens should be borne by each member proportionate to their national resources and to the security benefits they derive from the alliance. A rebalancing of alliance commitments is long overdue. In addition to relying more heavily on allies, the U.S. should be able to surge its forces in the event of a military crisis in Western Europe or East Asia rather than maintaining large forward deployments. The notion that the United States needs to be prepared to fight two major regional wars, with active combat in one and deterrence in the second, should be discarded as a guide to military force structure.

Fourth, as suggested above, U.S. nuclear planning and strategy also need a careful overhaul. Additional nuclear forces are not the answer either to the risks of proliferation or to maintaining deterrence with existing nuclear powers. Proliferation of nuclear weapons to

Iran and North Korea are primarily a diplomatic problem; the United States retains ample nuclear deterrence in both cases. Abandoning the Iran nuclear agreement decreased U.S. security, without making any progress in preventing proliferation. The agreement had capped and rolled back Iran's capacity to develop nuclear weapons. Negotiations with North Korea, however challenging, are preferable to a war on the Korean peninsula, which would be devastating to U.S. allies in South Korea and Japan and could expose them to nuclear attack. Diplomacy needs time to work, even with fits and starts.

Overall U.S. nuclear strategy should move towards a posture of sufficiency – a large enough arsenal to deter attacks on the United States and its allies. No additional capability is needed. As noted above, restraint in nuclear planning would allow for a reduction to 1,100 total warheads from a stockpile that currently stands at roughly 4,000. It would include the elimination of the land-based portion of the nuclear triad – Intercontinental Ballistic Missiles (ICBMs) – which pose risks of accidental or rash resort to nuclear weapons due to the extremely short time frame in which they would need to be launched on fear of attack.

Fifth, the most urgent challenges to U.S. security are non-military and the proper national security tools are different. These risks include climate change, which undermines frontiers, leads to unpredictable extreme weather, and fosters uncontrollable migration; cyber-attacks and cyber offensive operations, which devastate the credibility of the internet and pose challenges to infrastructure security; global disease epidemics, which pose societal risks to all nations; and income and wealth gaps, which foster insecurity and conflict. On the economic front, by 2050 the global constellation of economic power will be as different from today's as today's is from 1920. This is among the most important emerging realities facing the United States, as it concerns not just economic power but all forms of national power and all aspects of national life.

Military force is not the most useful tool to confront the above-mentioned challenges, but the devotion to allocate outsized resources to the military stands in the way of their solution.

Last but not least, a new strategy should put as much or more emphasis on diplomatic cooperation as it does on preparing for or engaging in military confrontation. Foremost, the United States must retain ample capacity to defend itself, protect its citizens and assets abroad, and meet its alliance commitments. However, there are additional global security interests and goals shared in common by all members of the international community. The United States must partner with other nations in addressing challenges like climate change, epidemics of disease, nuclear proliferation, and human rights and humanitarian crises. None of these challenges are best dealt with by military force. Rather, they will depend on building non-military capacities for diplomacy, economic assistance, and scientific and cultural cooperation and exchange which have been allowed to languish in an era in which the military has been treated as the primary tool of U.S. security policy.

Part Two: The Defense Budget—Past, Present, and Future

Mismatch Between Defense Spending Trends and the Workings of the Defense Establishment

In November 2018, the National Defense Strategy Commission, chaired by former Ambassador Eric Edelman and Admiral (ret.) Gary Roughead, issued an alarmist report contending that caps imposed by the Budget Control Act of 2011 (BCA) threatened unpredictable and lower defense spending. Ominously, the Commission contended that the United States "could suffer unacceptably high casualties and loss of major capital assets in its next conflict," and might "struggle to win, or perhaps lose, a war against China or Russia" if spending did not increase substantially.[73]

The Commission blamed BCA spending caps and the "threat of unpredictable and delayed funding" under continuing resolutions for jeopardizing the strategy.[74] Although it did not claim to be able to identify the resources needed to fulfill the strategy, the Commission called for 3% to 5% annual increases above inflation over the next five years or longer to "create and preserve U.S. military advantages in the years to come."[75]

What the Commission's report failed to mention is that this would quickly increase the Pentagon's budget to more than a trillion dollars per year, which would be the highest level of Pentagon spending since World War II. Needless to say, this budgetary suggestion would be extraordinarily wasteful and, just as importantly, is completely untethered from the strategic environment that the United States currently faces.

Yet, calls for extraordinary budget increases without clear security justifications have become the norm rather than the exception when it comes to the Pentagon. While it's a common refrain that strategy should determine budgets, that is actually a rarity at DOD. Theoretically, U.S. military strategy provides a rough guide to setting the Pentagon's priorities and, ultimately, its budget. In fact, choices among individual programs and funding levels are made during the Pentagon's elaborate Planning, Programming and Budgeting process, which develops and presents the President's request sent to Congress annually in February (or March in 2019). Yet, this process depends on and locks horns with other players, ranging from Members of Congress and other executive agencies like the State Department, to defense industry giants and their lobbyists, to states and localities. Each of these players has high-value stakes in the jobs tied to purchases of weapons systems and RDT&E, as well as those created by bases, and in the pay and benefits for military personnel (see sidebar on Pentagon spending and jobs at the end of this section). As all these competing interests mold the Pentagon budget, connections between strategic priorities and budget choices often become obscured, if not outright eliminated.

This elaborate budget and planning process, coupled with intense lobbying as the defense budget is considered by Congress, has caused considerable uncertainty in defense spending over the past 70 years. This uncertainty has worsened in the past 18 years with the demands created by the Afghan, Iraq, and Syrian wars, as well as shifts in strategic emphasis from fighting insurgencies and terrorists to confronting China and Russia. While the 2011 BCA required modest cuts to the historically high level of defense spending, it also offered a predictable path to which DOD could have adapted and planned to follow. While there was nearly unanimous opposition to the BCA caps, were the cuts proposed actually that extreme? In short, no.

In 2011, the BCA set spending limits for the fiscal years between 2012 and 2021. Under the BCA's original spending caps for defense and non-defense—to be enforced by across-the-board sequesters if limits are not met—defense spending was slated to fall by almost 14% in real terms between 2011 and 2014 and then grow by a little less than 1% for the rest of the decade. This would have returned the Pentagon's base budget to what it was just a few year's prior, when the United States was waging wars in both Iraq and Afghanistan.

Given the BCA's modest decrease and predictability, one might have expected that high-level military officials and generals, members of Congress and other policymakers, and even lobbyists would have welcomed the smooth spending path created by the Act. Instead, a bitter fight erupted from the very beginning with defense hawks and other policymakers complaining that the new limits would "decimate" defense readiness and modernization, and put the U.S. at the mercy of its adversaries.

While there is little doubt that most in the Pentagon would prefer more resources rather than steady funding at lower levels, the wholesale condemnation of steady BCA caps fails to acknowledge that the defense establishment would benefit substantially from predictable spending that would match its deliberate and slow-moving modernization and manpower decisions with implementation taking place over decades.

As we document in this section, there is ample evidence that the BCA caps were neither extreme nor actually adhered to, but still could provide guidance towards a much more fiscally sustainable and predictable budgetary path in the future. It is thus the recommendation of this task force that, beginning in FY2020, defense spending returns to the level of the BCA caps, with annual inflation adjustments in subsequent years. Compared to the President's plan, this task force's alternative would save taxpayers more than $1.2 trillion dollars over the next ten years.

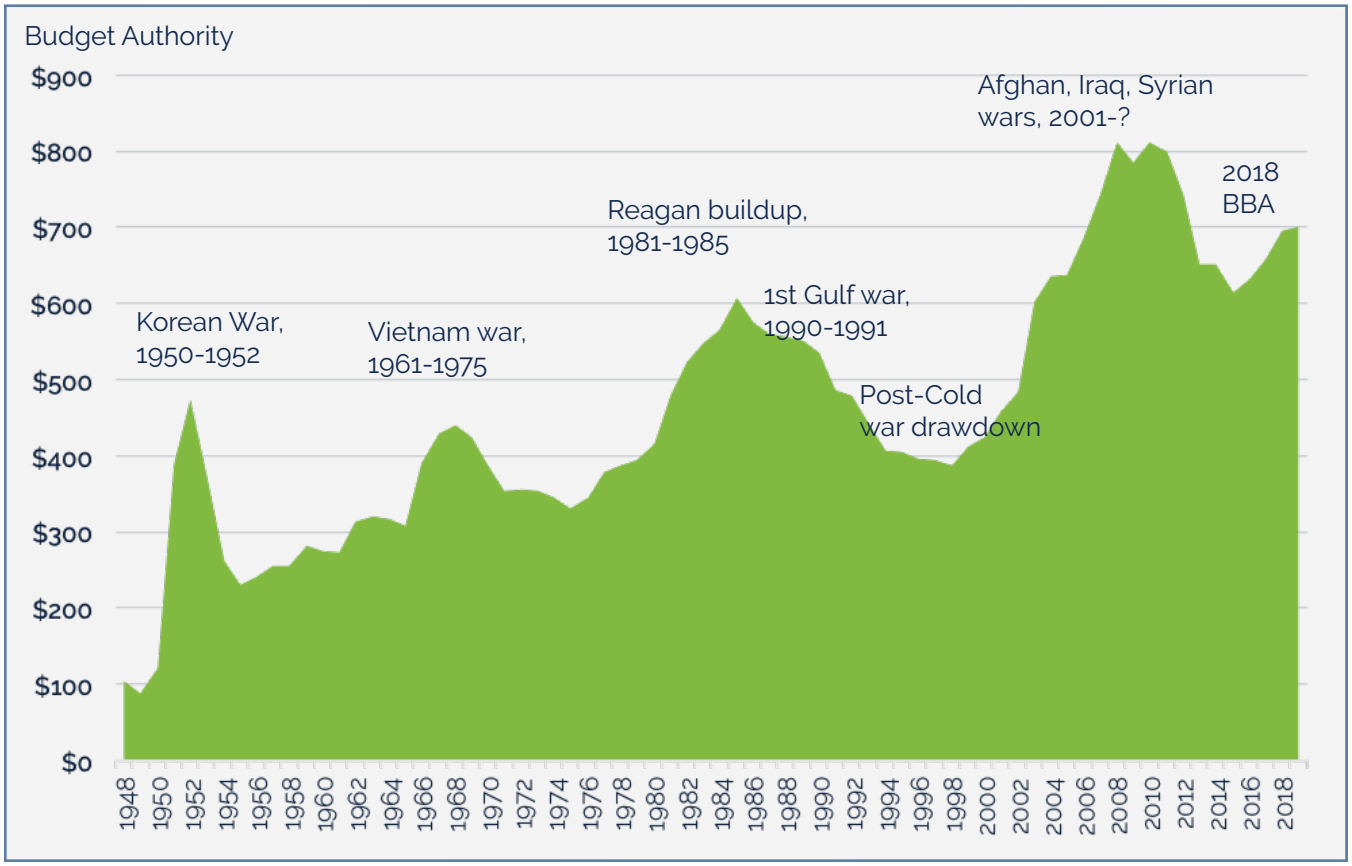
War Buildups and Drawdowns: Peaks and Valleys in Defense Spending, 1948-2019

Since 1948, defense spending has been cyclical, with sharp increases before and during the wars in Korea and Vietnam, the Reagan Cold-war buildup, and the long-lasting wars in Afghanistan, Iraq, and Syria; and sharp decreases after hostilities diminished or deficit

concerns decreased spending during the Reagan era (see Figure 1). While defense spending increased sharply with each war, it generally declined after each conflict by significantly lesser amounts (see Figure 1). Both the President's plan and the National Defense Strategy Commission's suggestion would break this long-standing historical pattern, by increasing Pentagon spending while winding down wars.

The drawdowns after each war have not been uniform, and in our current experience with the Afghan, Iraq, and Syrian wars, there has been only a minimal drawdown, followed by a substantial increase under the Bipartisan Budget Act of 2018, or BBA (see Figure 2). While defense spending shot up over four-fold for the brief Korean War, post-war spending fell by just 60%. This post-war defense spending at a substantially higher level than before the war signaled the beginning of our era of permanently large defense forces in response, at least initially, to the Communist threat that persisted from the 1950s until the fall of the Soviet Union in 1991 (see Figure 2).

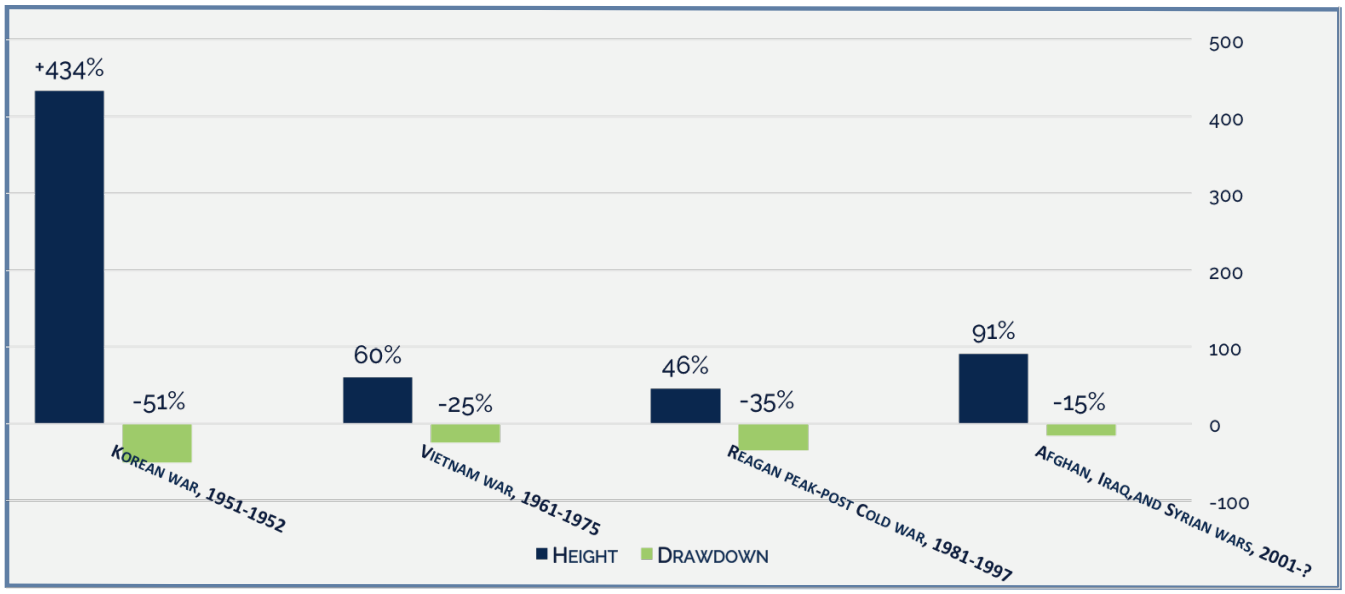
Figure 1: DoD Total Spending for base, supps, wars, 1948-2019 in billions of 2019 $



During the 15-year Vietnam War, spending grew by 60% in real terms, rising steadily with troop levels, and peaking in 1968 with spending of $434 billion in 2019 dollars and U.S. troop levels at 536,000.[76] In the next several years, spending and troop levels declined gradually by an average of 25% until the final U.S. withdrawal in 1975, again settling well above the pre-war level.

The height of the Reagan era defense buildup was in 1985, a 46% increase from before the buildup. In response to rapid growth in deficits, the fall of the Soviet Union, and the disappearance of the Communist threat, this buildup was reversed with a decline of 35% by 1997.

Figure 2: Buildups and Drawdowns, 1951-2019 in percent change



For the wars launched after the 9/11 attacks first in Afghanistan, then Iraq, and more recently Syria, the pattern of large growth followed by lesser declines is more pronounced. Total DOD spending almost doubled from $425 billion in FY2000 to $812 in FY2010, peak levels in both war funding and base budget funding.[77] U.S. troop levels deployed for war also peaked at 180,000 in 2010.

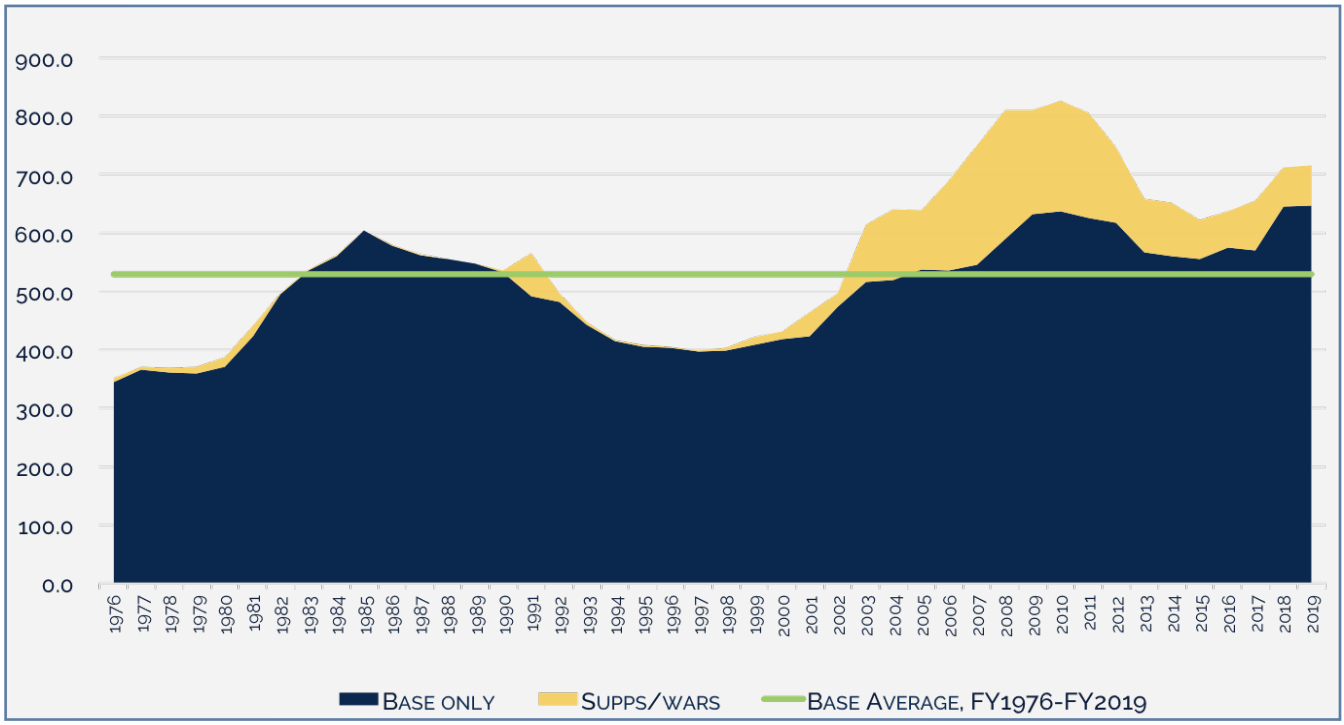
After 18 years of war, U.S. troop levels in-country for the Afghan, Iraqi, and Syrian wars are projected to be about 22,000 in FY2020, according to the President's Budget Request.[78] This is roughly one-ninth of the 2010 peak number of troops, while war spending in FY2020 is projected to be nearly equivalent to what it was in 2010 - $165 billion compared to $163 billion, respectively, in 2019 dollars. This discrepancy reflects not actual war costs but a deliberate decision by the Administration to make nearly $100 billion in base budget costs for peacetime support of the defense establishment part of the Overseas Contingency Operations (OCO) account in order to avoid budget caps in effect in 2020.

Spending for Everyday Defense Programs and Activities vs. War Spending, FY1976-FY2019

Reflecting the power of war as a rationalization of day-to-day defense spending, Figure

3 shows that since 1976, base budget spending has risen and fallen with wars. Over the past 30 years since the adoption of a volunteer force, defense spending has averaged $529 billion in 2019 dollars, correcting for inflation. In the past decade, defense base spending has substantially exceeded that average (see Figure 3).

Figure 3: Defense Spending, FY1976-2019 in billions of 2019 $



The Budget Control Act: From 800 Pound Gorilla to Paper Tiger

Enacted in 2011 after a long debate, the Budget Control Act was intended to be part of a larger exercise to reduce both discretionary spending (enacted annually) and mandatory spending for entitlement programs. The goal was to combat the rising federal deficit in the short-term, and the burgeoning expenses in response to the retirement of the baby-boom generation and ever-increasing medical spending in the long-term.

When the BCA's Joint Commission failed to deliver a plan, the BCA called for the setting of spending caps on defense and non-defense spending—known as automatic sequester caps—to limit spending to pre-set caps or risk across-the-board cuts to be applied equally to all programs and activities. The across-the-board cuts are referred to as the sequester. In 2012, the first year, Congress adopted spending limits compliant with the law.

The second year required a sequester that was implemented in March 2013 – modified

by Congress to apply midway through the fiscal year. Under the sequester, all defense resources were cut by just under 7% in nominal terms in 2013, and by modest amounts in later years.

Despite the modest decreases in defense spending, it was greeted with an outcry from many quarters, and continues to be cited as degrading defense readiness, and disastrously affecting ongoing programs. In 2013, for example, service chiefs argued that readiness, retention and morale would be harmed, acquisition programs would be delayed, and weapons system buys would be cut delaying modernization, all of which could jeopardize DOD's ability to "execute sustained successful major combat operations," the Army's Chief of Staff, General Ray Odierno told Congress in 2013.[79] This critique matches comments by many defense officials and defense industry lobbyists and advocates that characterized the spending limits in the BCA as disastrous.

Analysts without a vested interest in higher defense spending did not share these concerns. For example, a GAO report regarding the sequester cut of 7% in 2013 pointed out that there was little indication of significant harm from the sequester—cancellation of some training exercises and delays in some contracts.[80] Similarly, a CRS report found that the DOD had considerable flexibility in implementing the sequester to protect readiness and key programs.[81]

Yet, critics cited the sequester threat as an 800-pound gorilla lurking in the shadows and used this threat as justification to ensure that the BCA caps were never fully adhered to after 2013. Alarmed by the 2013 sequester, Congress promptly revised the 2014 and 2015 caps by modest amounts to permit higher spending levels—an increase of $17.9 billion in 2014 and $9.2 billion in 2015. Then, still convinced that the DOD was suffering grievously from lower future levels, Congress again raised caps for 2016 and 2017—$25.0 billion in 2016 and $15.0 billion in 2017. Finally, after a long, drawn-out battle over spending levels, Congress passed the Bipartisan Budget Act of 2018, which raised spending from the original caps that were in effect by enormous amounts—$80 billion, or a 14% increase above the caps in 2018, and $85 billion, or 15.1% above the caps in 2019 (see Figure 4 below).

War Spending Subsidizes the Base Budget

Raising the BCA caps isn't the only way Pentagon spending has remained high throughout the BCA decade. In order to avoid the spending decreases in the original BCA sequester caps, the Administration, the Pentagon, and Congress colluded to exploit a loophole in budget law governing emergency or war spending. Designed to give budgetary flexibility to meet natural and other disasters, current law does not count spending that is designated by the President and Congress as for "emergencies" or "Overseas Contingency Operations" (OCO) against budget or spending caps.[82]

War spending has not only allowed DOD to skirt BCA spending limits but has also subsidized DOD's day-to-day defense spending. Since the early years of the Afghan and Iraq

wars, defense spending designated for emergencies or OCO that actually funded base budget priorities has totaled $149 billion based on DOD data.[83] This "non-war" war funding has financed a variety of base budget activities, from unanticipated higher fuel prices or base housing costs to implementing a new modular design for Army brigades and additional depot maintenance. Because there are no statutory criteria for what is designated as "emergency" or "OCO," Congress and the Administration can choose to include spending not related to wars within the war budget. In other words, if the President and Congress chose to characterize painting the walls of the Pentagon pink as war spending, that would not be subject to BCA caps.

In recent years, DOD has also funded new programs costing billions of dollars under war spending, like the European Reassurance Initiative, designed to counter Russian threats to the Ukraine with additional exercises and pre-positioning of activities for NATO allies. With these 'regular' activities funded as war expenses, Congress created 'headroom' for additional weapon systems, RDT&E, or other favored activities within the BCA spending limits.

In addition, Congress has explicitly transferred activities requested in the base budget to war spending despite the fact that there's no connection to war needs. As the crowning blow to the legitimacy of war spending, DOD included $98 billion in base budget costs as OCO in its 2020 request in order to pretend that the base budget request complies with the BCA cap. The Department makes no pretense that the funds are for war purposes, leaving it to Congress to either raise the caps or accept the mockery of the war designation.[84]

By including activities and programs that are expected to last after the United States leaves Iraq and Afghanistan, commonly referred to as "enduring" costs, the size of DOD's regular budget has been under-stated, and war costs over-stated. Until the 2020 request, DOD argued that the defense budget should be raised to accommodate these ongoing expenses. Regardless of where these activities are funded, this transfer suggests that the apparent 'pain' from BCA limits has been much less than appears and that defense spending for its regular programs is substantially higher.

Ostensibly to replace war losses, procurement of weapons systems and RDT&E have been used as another war fund subsidy to DOD's base spending. The rationale used is that replacing weapon systems improves the quality of DOD's inventories by reducing the age of weapon systems, accelerates modernization, and contributes to capability. In the same way, RDT&E to counter Improvised Explosive Devices (IEDs), financed with war monies, in fact, contributes to the military mission of countering insurgents wherever that occurs in the future.
Perhaps the most dramatic example of war funding subsidizing modernization is the reliance of the Army on war funding to replacing the Army's entire primary ground combat fleet rather than the partial replacement originally planned. This wholesale modernization would not have been possible without the "unexpected bonuses from the supplemental war funding," according to a Stimson Center analysis by Russell Rumbaugh.[85]

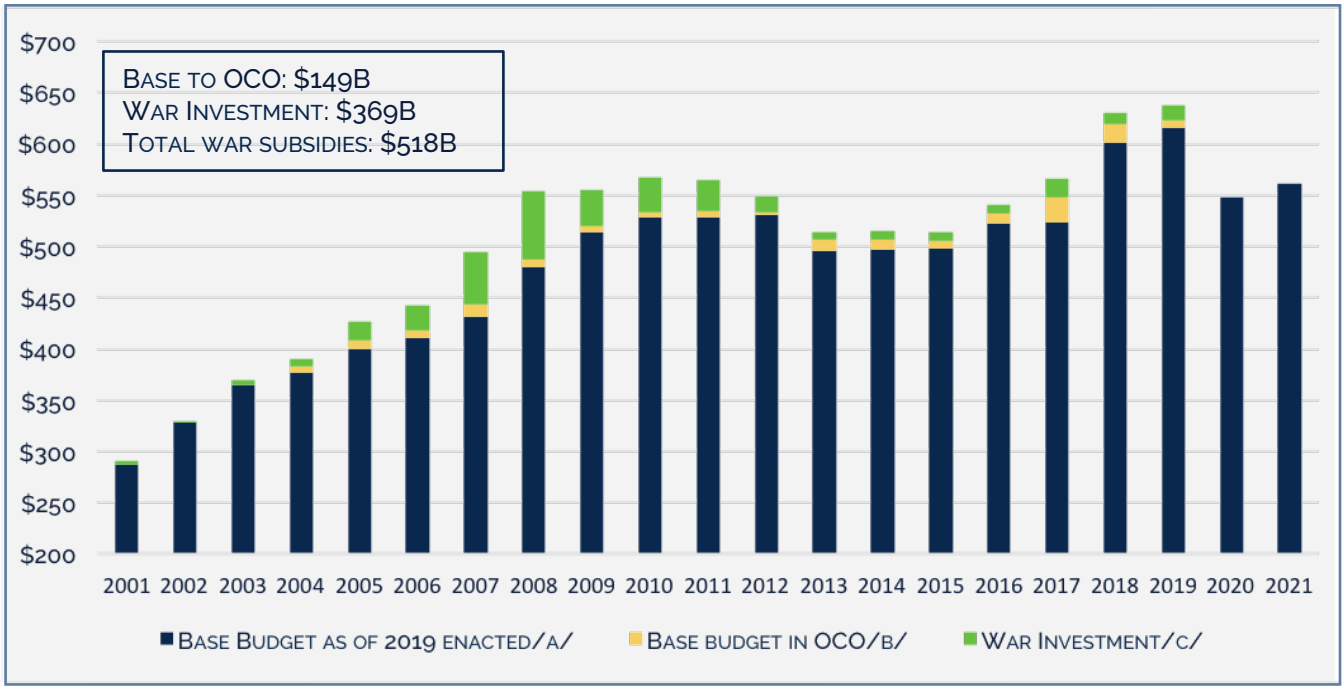
Counting investment funded in the war budget adds $370 billion in procurement and

RDT&E activities since 2001 to DOD's base budget, which contributes to military modernization and effectively subsidizes the base budget.

Together, these subsidies totaled $518 billion since 2001, equivalent to an additional year of defense spending. For the annual contribution to base budget funding of these war-designated monies, see Figure 4 below.

Figure 4: DoD Base Budget with and without War Subsidies, FY2001-2021

IN BILLIONS OF DOLLARS



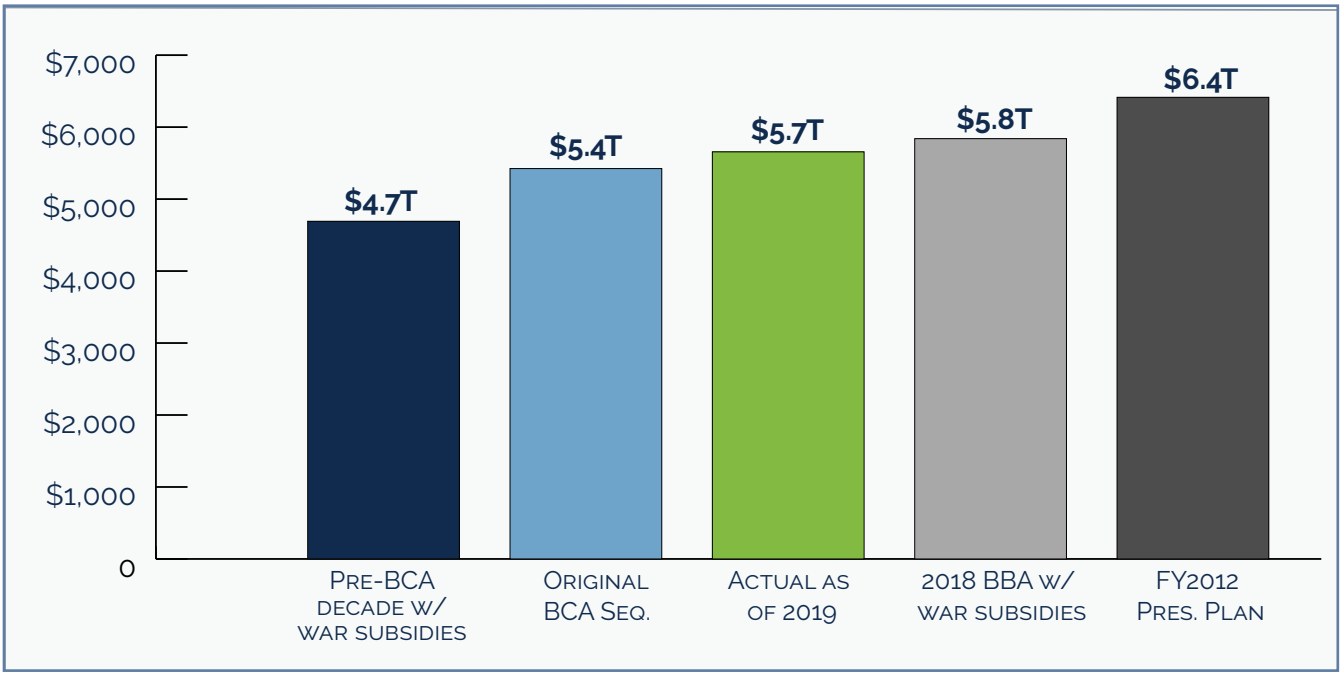
The BCA Decade: A Good One for DOD

Despite the vociferous complaining and ominous warnings from DOD spokesmen and defense hawks in Congress, the BCA decade has turned out to be a very well-funded decade for DOD, undermining the argument that substantial increases are needed to offset the BCA cuts.

Figures 5 and 6 below show how defense spending levels have changed for the decade, starting with the President's plan in 2012, cited by many BCA critics as the desirable level. That plan projected $6.4 trillion in spending for the BCA decade, FY2012-FY2021. Counting the subsidies to the base budget provided by war spending along with current caps, DOD is slated to receive $5.8 trillion. This reflects both higher caps enacted by Congress in 2013, 2015 and 2018, which provided $5.7 trillion for the decade and $183 billion in war subsidies. This level of spending for the base budget with war subsidies is over one

trillion higher than the prior decade of $4.7 trillion before enactment of the BCA, when hostilities in both Iraq and Afghanistan were at their peak. In other words, despite the U.S. military significantly drawing down from, though not yet ending, the wars in Iraq and Afghanistan, DOD actually received a trillion dollars more in the BCA decade than in the prior decade while these conflicts were raging.

Figure 5: Changing Defense Spending Before and for the BCA Decade

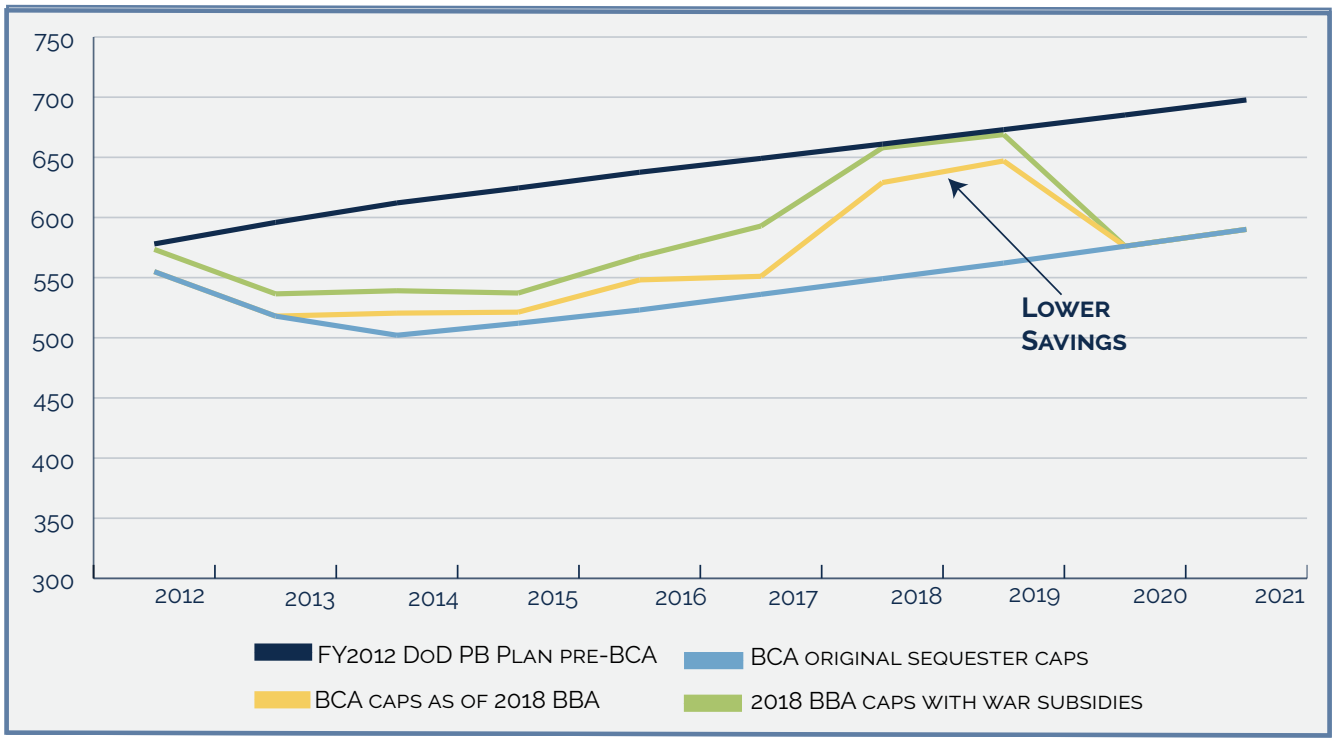


This suggests that the critics – citing threats to readiness and modernization – have greatly overstated their case. If there is a readiness or modernization issue it is not because the DOD hasn't been given ample taxpayer money – it's because the DOD bureaucracy has not been spending that taxpayer money effectively. Even factoring in low inflation levels, defense spending is at very healthy levels, as Figure 6 also shows. In fact, including war subsidies, by 2018, DOD's base budget under the revised BCA limits and with the war subsidies equals the 2012 plan.

While the above-mentioned issues fester, the original BCA caps for FY2020 and FY2021 still remain in effect. It could be argued that the substantial increases received by DOD over the past decade make such increases unnecessary, even more so because the additional spending has been ineffectual.

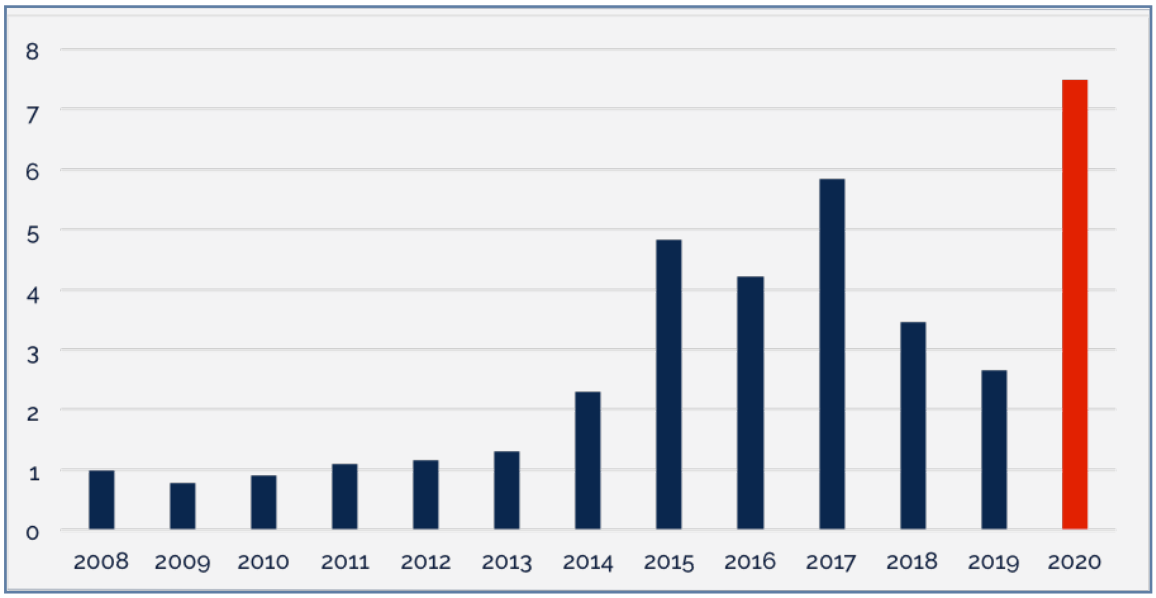
The gimmick of using OCO to pay for base budget expenses has been exploited in the Pentagon's FY2020 Budget Request to an extent never before seen, with nearly $100 billion in OCO funding explicitly tied to the base budget. As Figure 7 shows, this provides a radically distorted view of the cost per troop in these overseas contingency operations.

Figure 6: Alternate Defense Spending Paths, FY2012-2021 Base Budget



Costs per troop overseas have risen since 2013, as the Pentagon placed more base budget requirements in the OCO account. However, the FY2020 budget would raise the cost per troop in these contingency operations to unprecedented levels.

Figure 7: Cost Per Troop in OCO (in millions of $/Troop)



Deficits and the National Debt at Historic Highs

It goes without saying that defense spending has been, and will continue to be, a significant contributor to annual budget deficits and the national debt. As the original Sustainable Defense Task Force report noted nearly ten years ago, the national debt threatens our economic solvency and could ultimately limit our governments' ability to pay its bills, including those of the military.[86] In 2010, then Chairman of the Joint Chiefs of Staff,

Admiral Mike Mullen, declared, "our national debt is our biggest national security threat."[87] In the nine years since Admiral Mullen made this declaration the nation's public debt has not shrunk. In fact, it has increased by more than $5 trillion, to nearly $16 trillion, and remains one of the greatest threats to U.S. national security.[88] Under the President's FY2020 plan, this situation will only get worse. In fact, if the President's budget is fully implemented, annual budget deficits will exceed all defense spending within five years.

A History of Deficit Spending

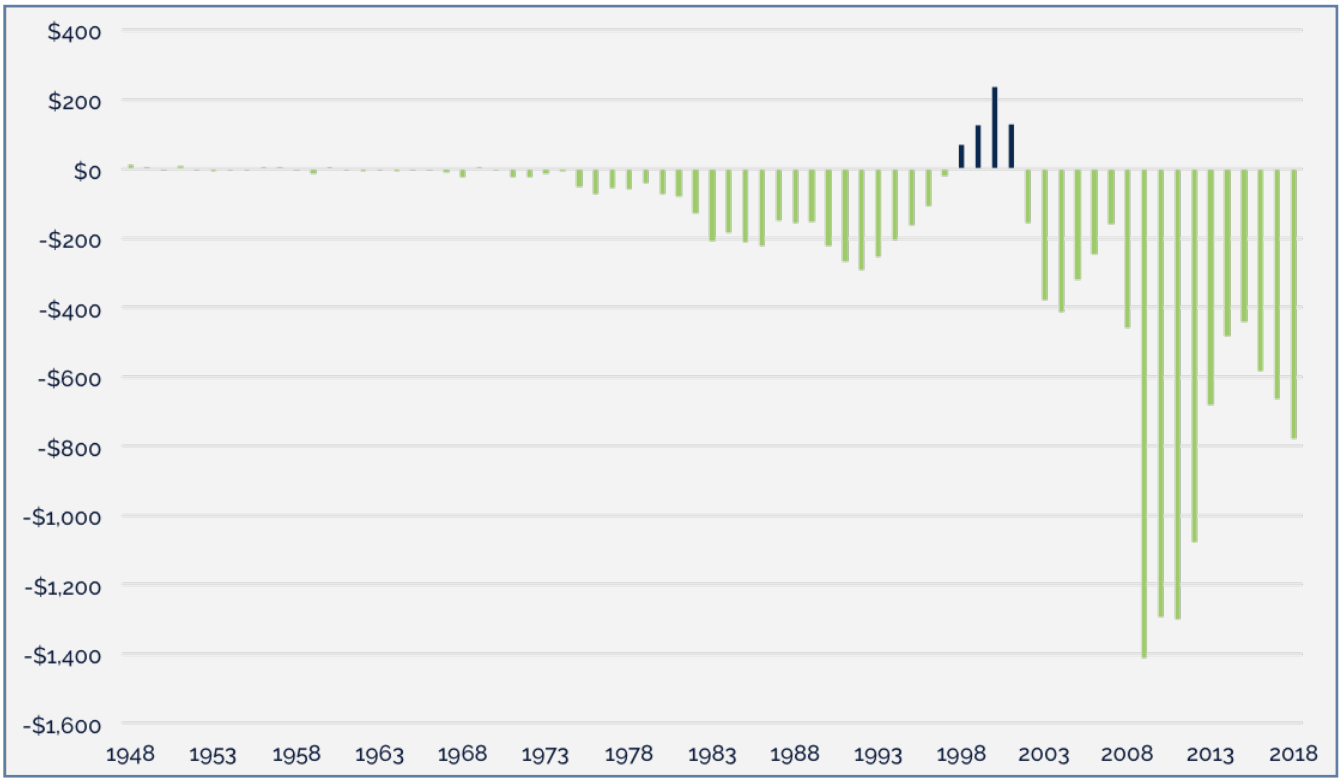
Debt and deficits are nothing new for the federal government. In fact, in the last fifty years the federal government has run an annual budget deficit in all but five years—1969 and 1998 through 2001.[89] Figure 8, illustrating data from the Office of Management and Budget, shows deficit spending has been a bipartisan affair, with the national debt growing under both Republican and Democratic control of Congress and the Presidency.[90]

Historically speaking, there has been a correlation between defense spending and federal budget deficits. As shown in Figure 8, it's readily apparent that the largest budget deficits occurred during the height of President Reagan's Cold War military buildup in the mid 1980's, and during the height of spending for the wars in Iraq and Afghanistan in the first years of the President Obama administration. To be sure, the extraordinary budget deficit in 2009, that was nearly 10% of Gross Domestic Product (GDP) had many contributing factors, not the least of which was the $700 billion bank bailout following the financial crisis in 2008.[91] However, the DOD budget was also nearly $700 billion in 2009, so at least numerically, the two contributed almost equally to the extraordinary budget deficit in that year.

Debt and Deficits Today and Tomorrow

As Figure 8 above indicates, annual budget deficits remain well above historical averages. The budget deficit in FY2019 is projected to be $900 billion according to the Congressional Budget Office (CBO), and federal debt held by the public will top $16.6 trillion by

Figure 8: Annual Federal Budget Deficits in Billions of 2019 $



year's end.[92] Over the next ten years, America's deficit and debt problem will get much worse. Annual budget deficits will exceed $1 trillion by 2022 and continue to increase the remainder of the next decade. By 2029 the public debt will be nearly $29 trillion, or 93% of GDP, which is "its highest level since World War II," according to CBO's projections.[93]

According to the President's FY2020 budget, beginning in 2024 and continuing every year after, interest payments on the national debt alone will exceed annual spending on the military.[94] This debt burden will significantly impede the government's ability to respond to unforeseen crises and could seriously limit the amount of government funds available to the military if a true surge were actually needed.

Box 3: The Value of a War Tax

Democracies like the United States are supposed to fight fewer wars, win when they do fight, and exit them quickly if victory is unattainable.[95] Why has the opposite been the case for the United States thus far in the twenty-first century? Part of the explanation lies in the way the United States has paid for its post-September 11th wars, namely via the nation's credit card—the national debt. To address this problem, the United States should adopt a special purpose tax to pay for the use of military force. Put more simply: the country needs a war tax.

A war tax is a matter of fiscal responsibility, economic stability, and political accountability. First, wars are costly. The bills for them can be paid up front or passed on to future generations. The budgetary costs of America's post-September 11th wars are estimated to be around $5.9 trillion. War-related interest on the debt thus far makes up $716 billion of the estimated cost, while another $420 billion is projected through fiscal year 2023.[96]

Second, debt-financing wars can lead to economic instability. Unless offset by taxes, rapid upsurges in borrowing to facilitate military buildups act as a form of procyclical stimulus that fuels boom-bust cycles.[97] Even under a strategy of

Box 3 Cont.

restraint, there will be circumstances in which the United States might need to engage in a military buildup, and because economic downturns are rare, when such buildups occur, they are likely to be procyclical.[98]

Third, and most important, debt-financing disconnects the public from the consequences of government policies. In theory, in democracies, the need for public consent to go to war should act as a constraint on elected leaders—who will be wary of passing the costs of the war on to the public through increased taxes.[99] In reality though, elected officials choose how to finance wars based on their political needs. When public support for the use of military force is low, and fears of inflation are too, wars are more likely to be

debt-financed.[100] While the public laments accumulating debt, it has little immediate impact.[101] Taxation, on the other hand, is one of the most intrusive activities governments engage in vis-à-vis their citizens.[102] An intrusive tax would make the costs of wars more transparent to the public and more likely to be subject to democratic accountability.[103]

Should the United States pursue a war tax, several principles should guide its implementation. First, a war tax needs to cover both the immediate and long-term costs of a conflict. As discussed above, the overall price tag for America's post-September 11th wars will include more than military operations. It will also include interest on the debt and post-conflict medical care for military personnel.[104] The latter will prove particularly costly now and in future conflicts due to advances in military medicine that allow for life-saving treatment of those wounded in combat.[105]

Second, a war tax needs to be automatic. The Truman administration increased taxes at the outset of the Korean war, when public support for the conflict was high. The public remained connected to the war, and popular support declined as the conflict seemed to lack resolution.[106] While the Vietnam War was not unpopular at its outset, it lacked robust public support. The Johnson administration avoided direct taxes to finance the war for fear of the political repercussions of greater public involvement. Only when the administration became concerned about inflation stemming from domestic borrowing did it call for a surcharge on income in 1967, though it struggled to build political consensus around the tax as support for the war declined.[107] If tax increases automatically accompany the use of military force, political leaders may be less likely to initiate conflicts that have only tenuous public support.

Third, and related, the instrument used for a war tax is important. A direct tax will maintain the link between the American public and the costs of a conflict. Indirect taxes, such as sales taxes, can be avoided by consumers who choose to forgo purchases of products being taxed.[108] The tax can also be progressive or broad-based, but the latter is more likely to be effective. Elite, partisan cues tend to influence public sentiment on both taxes and the use of military force.[109] Republicans' decades-long opposition to progressive taxation, and hawkishness on national security issues suggests a progressive war tax may therefore be more effective under certain conditions.[110] However, it is unclear whether cues against progressive taxation

would outweigh cues in favor of the use of military force when given by a Republican president. Moreover, progressive taxation and inequality distributes the cost of war upward in society.[111] While it is reasonable to believe the wealthy should pay for a higher proportion of the financial cost of war, the broader American public might remain disconnected from the policy as a result.

Fourth, any war tax should also be accompanied by a pay-as-you-go (PAYGO) rule. A PAYGO rule is a statutory mechanism to ensure new spending is deficit neutral.[112] Elected officials may attempt to offset a tax increase to pay for a conflict with tax cuts elsewhere. Including a PAYGO provision for spending on new military operations would mean that political leaders' only option to ameliorate the impact of a war tax would be to make politically unpalatable budget cuts.

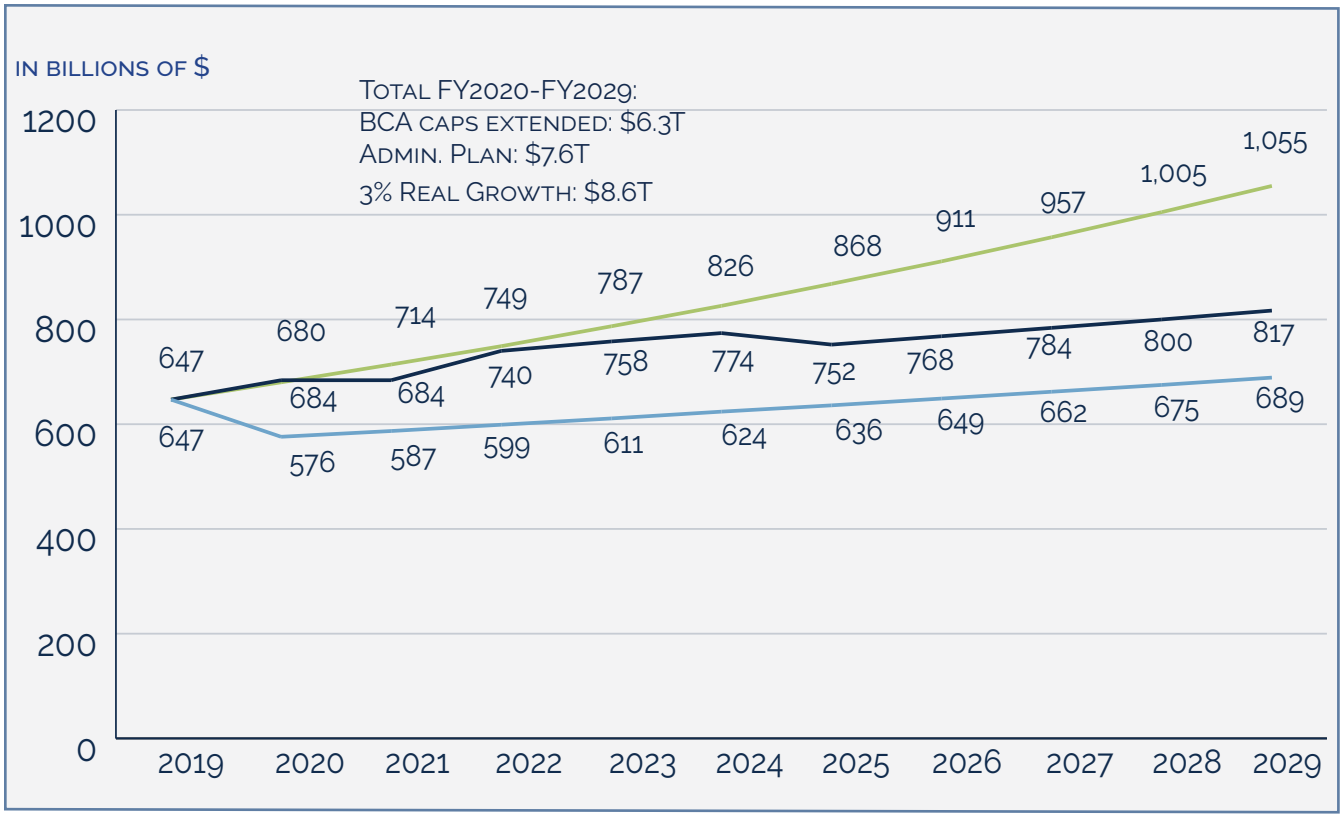
Finally, it is important to understand the limits of what a war tax can accomplish. The lack of tax increases to pay for America's wars since 2001 is one reason they continue with little chance of achieving their aims. However, a war tax is not a silver bullet. Declining global norms regarding the need to affirmatively declare war, fewer battlefield deaths as a result of improvements in military medicine, and new technologies that enable a "light footprint" approach to war contribute as well.[113] A war tax cannot address all of these contributors. It can, however, help reestablish the connection between the American people and the wars fought in their name while limiting their impact on the national debt, and in doing so, the risk debt-financed military buildups pose to the economy.

An Unsustainable Defense: The President's Pentagon Spending Plan

The coming debt crunch on funds available to the government will be made significantly worse if the President's FY2020 Pentagon budget projections come to fruition.

In Figure 9 we chart the Administration's FY2020 plan, along with the National Defense Strategy Commission's minimum recommendation of increasing Pentagon spending at least 3% above inflation, and an estimate of Pentagon spending if the BCA caps were extended and increased at the rate of inflation. In this chart the President's budget includes the large "base for OCO" funds in FY2020 and FY2021, which the Administration designates as OCO to pretend that they are meeting BCA Caps, and excludes "true" war costs. In FY2022 the base budget heightens, as the Administration plans to abandon the gimmick of hiding base budget funding in OCO, and return base budget funds to the actual base budget. This results in a base budget increase of 8%, from $684 billion in FY2021 to $740 billion in FY2022. After that, the President's budget basically increases with inflation. It's worth noting that nowhere in the Administration's plan or the National Defense Strategy Commission's plan are there reductions in spending to account for the U.S. fully withdrawing from Iraq and Afghanistan.

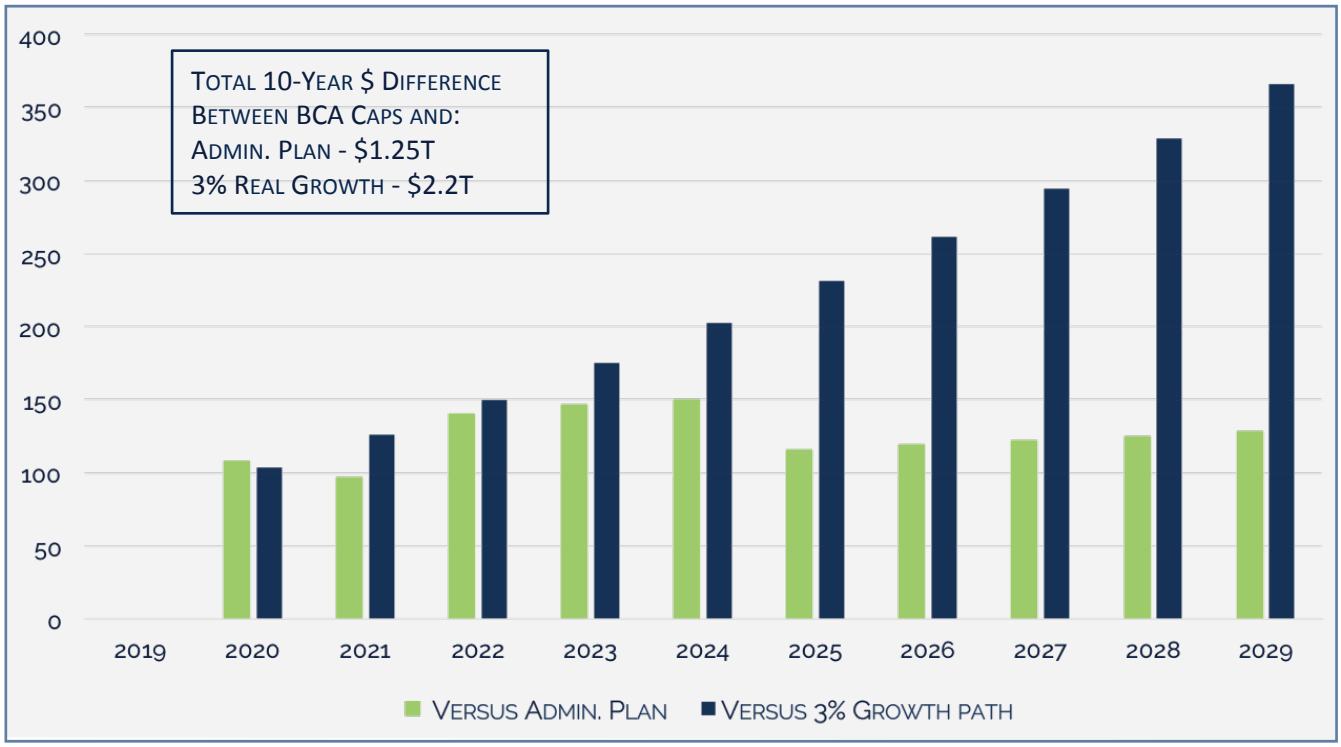
Figure 9: Alternate National Defense Spending Paths: FY2020-FY2029



There are a few possible metrics to help put the Administration's ten-year plan in context. First, the Administration plan calls for approximately $7.6 trillion in Pentagon spending over the next ten years, which would be nearly two trillion more than the approximately $5.8 trillion the Pentagon received in the previous decade. Second, this $7.6 trillion would be roughly $1.25 trillion higher than extending the BCA caps plus inflation, as shown in Figure 10 below. Third, the Administration's plan would be approximately one trillion below the National Defense Strategy Commission's minimum recommendation of a 3% annual real (above inflation) increase in Pentagon spending.

Needless to say, adhering to the Administration's plan would lead to a considerable increase in the national debt, and following the National Defense Strategy Commission's recommendation would be extraordinarily fiscally irresponsible. Moreover, at a time when the United States is planning to end the two longest wars in U.S. history—as President Trump has already announced—there is ample justification for Pentagon spending decreasing, not increasing. As we discuss in the following section, there are myriad options for doing exactly that and adopting spending levels that adhere to BCA cap levels, plus inflation, for the next ten years.

Figure 10: Gaps Between BCA Caps Extended and FY2020 Administration Plan and 3% Real Growth (in billions of $)



Box 4: Pentagon Spending is a Poor Jobs Creator

One of the most powerful arguments against reducing the military budget is that all those dollars create a lot of jobs. They do. But this is not the end of the story.

Year after year, the military and its army of private contractors receive over half of the federal funds Congress votes to spend. The contractors and their military and congressional allies then take care to spread this money into every congressional district. The jobs that depend on this spending serve as political protection for maintaining or even expanding the current allocation of taxpayer dollars to the Pentagon.

Yet, that doesn't mean that this huge job creator is the best job creator. Actually, studies have repeatedly found the opposite: that military spending is one of the poorest ways to generate employment.[114] The most recent work by economists at the University of Massachusetts found that a million dollars invested, for example, in wind energy would create 21% more jobs than the same amount spent on the military. Investing the money in elementary and secondary education would produce 178% more jobs. Military spending also does more poorly than a range of other investments, including health care and infrastructure.

The difference comes in part from the greater capital investment, on average, required by military production than by these other kinds of economic activity. In addition, military production steers an unusually higher percentage of jobs outside the U.S., through the international co-production deals that contractors negotiate to promote their arms exports. For example, Lockheed Martin predicted that a recent deal with Saudi Arabia for Black Hawk helicopters would "support" 900 jobs. But as Jonathan Caverley pointed out, half of those jobs would go to Saudis.[115]

Similar findings have come from government sources. Caverley notes that in 2016 the Commerce Department estimated that a billion dollars worth of U.S. arms exports would produce 3,918 jobs, as opposed to the 5,700 that could be expected from U.S. exports in general.[116]

We all want our federal dollars to create the jobs that America actually needs doing. Every year the Pentagon budget includes millions of dollars of appropriations for weapons the military itself says it doesn't want or need. The pushback is always: Maybe the military doesn't want them, but so many jobs depend on building them anyway. This is a textbook argument for waste.

This report makes the case for paring back wasteful spending like this, and redirecting it to where it's needed. As we note elsewhere, the military itself sees climate change as a "growing and urgent" security threat. It should be clear that more future jobs should be focused on building the structures of climate change mitigation and adaptation into the American economy.

Crucially, creating the new jobs of the future requires a fiscal shift: Redirecting the portion of our federal budget now devoted to make-work military projects toward investments in the jobs America needs, including those focused on climate security.[117] Military producers, like nearly all others, tend to follow the money. Tip the balance of federal financial incentives in a new direction, and many of the producers, and the jobs they control, will follow. Macroeconomic benefits will accrue. A cohort of jobs wholly supported by federal taxpayer dollars will transition to one in which federal dollars join forces with those from state, local and private sources.

Yet, the transition from military to civilian production can be hard, and done poorly, it can backfire. A job in the hand is worth two in some other bush. Change is hard, and inertia is a powerful force. How can we overcome that force to create the jobs America needs?

After the Cold War, U.S. military spending was cut by a third. Federal and state governments created an array of programs in response. Among them were adjustment assistance programs for displaced defense workers, including specific retraining initiatives such as Troops to Teachers; technology development programs teaming military and commercial manufacturers to commercialize defense technologies; manufacturing assistance programs for small businesses; and loan programs helping businesses finance diversification beyond defense.

To overcome resistance to a transition from make-work jobs to productive ones, we should consider building job bridges with pillars like these.

Part Three: Options for Reducing Spending

As Part One of this report explained, U.S. national defense strategy has been characterized by military overreach, which has had disastrous consequences. The two longest wars in U.S. history have cost us extraordinary amounts of blood and treasure. The United States continues to subsidize the security of the world as we play world policeman, with U.S. troops on the ground in most countries around the globe. A strategy of restraint would upend this paradigm, bring many of our troops home, and end the policy of asking U.S. taxpayers to foot the bill for other nations' security. It is thus clear that Pentagon spending should be reduced considerably.

As Part Two of this report explained, cries of underfunding are belied by the simple fact that Pentagon budgets are already near historical highs, despite the number of troops in Afghanistan and Iraq/Syria being a small fraction of what they once were. With the President promising to end these wars and reduce the military's role in subsidizing the security of other nations, the Pentagon budget should be going down, not up. It is thus also clear that Pentagon spending can be reduced considerably.

A re-thinking of military strategy and a history of defense budget trends show that there are ways to reduce spending and still keep the United States safe and secure. In this section we provide a list of options to make that possible. Taken collectively the list offers more than $1.25 trillion dollars in possible reductions to Pentagon spending. This is far from an exhaustive list of all the possible ways in which savings could be found at the Pentagon, but it would allow the Pentagon budget to return to the level of the BCA caps plus annual adjustments for inflation, as we outlined in the previous section. To be sure, some of the options presented in this section overlap with others and thus the potential savings cannot simply be added. Instead this list is a menu of options for those seeking to reduce wasteful spending at the Pentagon and provide a sustainable level of defense spending that will reduce the national debt, curb the reliance on U.S. taxpayers to subsidize the world's security, and keep U.S. troops out of conflicts where U.S. interests are not at stake. In short, this lower level of spending will actually provide a higher level of security.

The list is broken out into three general categories—force structure and weapons procurement reductions, overhead and efficiencies, and nuclear weapons, missile defense, and space reductions. The discussion under each of the options provides an explanation for why the cut is recommended and how the estimate was derived. Additionally, Appendix B provides a detailed account of the methodology used to estimate savings from the force structure recommendations.

Force Structure and Weapons Procurement Reductions

U.S. Ground Forces - Army and Marine Corps

The proposed Sustainable Defense Task Force (SDTF) alternative force structure significantly reduces U.S. ground forces—the U.S. Army and Marine Corps. While these comprise about 50% of America's military personnel, they would bear about 60% of the total reduction in end strength in this alternative proposal.

There are several reasons for the relative emphasis on ground force reductions. Foremost is the strategic decision to abstain from future regime change, counterinsurgency, and nation-building campaigns. Also for this reason there is an emphasis on the reduction of regular or light infantry forces, not mechanized ones. With regard to fulfilling alliance commitments in Europe, Asia, and elsewhere, the proposed alternative would put greater emphasis on rapidly surging those capabilities that embody our armed forces' greatest competitive advantages - air, naval, space, and special operations forces. Nonetheless, under the SDTF proposal America's ground forces would remain as large as Russia's and twice as large as those of the UK, France, and Germany combined.

Army Reductions and Restructuring Savings: $160 Billion Over Ten Years[118]

U.S. Army reductions would include six of 31 planned active-component brigade combat teams, five of 27 planned reserve component brigade teams, and two of 11 planned active-component Combat Aviation Brigades. Matching this would be a more modest reduction in combat support, combat service support, and infrastructure personnel.

All told, the Army active-component would see a 13% reduction in planned end strength, from 488,000 to 426,000. The Army reserve components would decline by 42,000, from a combined strength of 520,000 to 478,500, an 8.6% reduction. Total savings over ten years would be approximately $156.9 billion. Of this, approximately $26.8 billion would be due to reduced modernization costs, as planned equipment acquisitions, upgrades, and improvements are partially scaled back. These changes could be implemented over a period of years to limit the hardship on military personnel separating from service.

Marine Corps Reductions and Restructuring[119]
Savings: $60 Billion Over Ten Years

Reductions would encompass six of 24 planned active-component infantry battalions along with a proportionate slice of other combat and support units, as well as combat aviation assets that would combine with these infantry battalions to form Marine Expeditionary Units. All told, the U.S. Marine Corps would see a 15.6% reduction in planned end strength from 186,000 to 157,000 troops, and see its aircraft inventory reduced from 270 to 240, including reduced reliance on the much maligned V-22 Osprey.[120]

Total savings over ten years would be approximately $60 billion. Of this, approximately $13.6 billion would be due to cuts in major modernization programs. Another $3.3 billion would be saved by cuts to other procurement programs commensurate with the reduction in tactical units. Just as with the Army, these changes could be implemented over a period of years to limit the hardship on military personnel separating from service.

U.S. Navy Personnel and Weapons Procurement Reductions
Savings: $193 Billion Over Ten Years

The proposed restructuring of the U.S. Navy would achieve $193 billion in savings over the next ten years as measured against the currently projected ten-year Navy budget (which is set to exceed $2.1 trillion). Central to the proposal would be a reduced emphasis on maintaining a large-scale rotational presence overseas. The SDTF option would instead place greater emphasis on capacities to surge power as needed. This would enable a rollback in the battle fleet from its current size (~297 ships) to 264 vessels, contrasting with the Navy's goal of building up to a 325-ship fleet by 2028.[121]

Today, between 90 and 100 Navy ships are often deployed at any one time.[122] This fact figures prominently in arguments for a much larger fleet. Commensurate with a shift toward a surge strategy, the smaller fleet could comfortably sustain between 65 and 75 ships routinely deployed. A greater proportion of those deployed would be Small Surface Combatants, thus reducing operations and support costs. However, the Navy should end production of the troubled Littoral Combat Ship (LCS) as soon as possible, and avoid developing a larger-version LCS to serve as a frigate, turning instead to existing, reliable frigate designs to serve as Small Surface Combatants.[123]

Resizing the fleet would occur through a process of "build-down" whereby new ships will be acquired but at a rate slower than the pace of retiring older members of the fleet. Older ships will be retired first, resulting in a significant reduction in the fleet's average age. While existing plans are to retire 83 vessels over the next ten years and procure 101 new ones, our alternative approach would retire 97 vessels while adding 60 new ones.

The option also involves a reduction from 11 planned aircraft carriers to nine. Along with

this would be a reduction from nine carrier air wings to eight, reducing the demand for additional F-35C and F/A-18EF combat aircraft, E-2D Hawkeye early-warning aircraft, and Osprey MV-22B variants (operating in the capacity of Carrier Onboard Delivery aircraft).

All told, the SDTF alternative would make the following changes to the U.S. Navy weapons portfolio:

- Reduce combat aircraft from ~450 to 400
- Reduce and cap the battle fleet at 264 by making the following changes:
    - Carriers: Reduce from 11 to 9
    - SSBN: Reduce from 14 to 9
    - Attack subs: Increase from 52 to 62
    - Surface combatants: Reduce from 123 to 108 (72 large and 36 small surface combatants)
    - Amphibious ships: Reduce from 33 to 24 (including landing docks)
    - Command, Logistics, and other Support ships: Reduce from 62 to 59.

Procurement savings due to the reduction in fleet size and retirement of one air wing would be approximately $84.45 billion over ten years. Another $18.7 billion would be saved by cuts to other Navy procurement programs commensurate with the reduction in tactical units. Reducing the fleet size will also enable the reduction of 36,000 personnel. The new USN end strength would be 299,000. Overall, operations and support savings for the decade would be $74 billion. Finally, another $16 billion is saved due to reductions in other procurement, research and development, construction, and family housing accounts commensurate with the rollback in force structure.

Although smaller, the proposed fleet would host proportionately more air power and attack submarines. Moreover, the cruise-missile and other land-attack capabilities of Virginia-class boats purchased after 2020 will be greatly enhanced by the addition of new payload modules (which add new large-diameter launch tubes).

U.S. Air Force Personnel and Aircraft Procurement Reductions Savings: $100.5 Billion Over Ten Years

Former Secretary of the Air Force Heather Wilson exemplified the current trend toward force expansion with her enthusiastic September 2018 pitch for 74 more squadrons (including seven fighter squadrons) and 40,000 more USAF personnel.[124] None of this is needed. A sober appraisal of threats and the adoption of a practicable set of roles, missions, and goals allows a cut in force size and end strength.

The SDTF alternative involves two key savings. First, reducing the primary mission aircraft inventory to approximately 1,050 air force fighter and attack aircraft. While the Air Force often touts the need for 1,200 aircraft, looking back on the 2003 Iraq war shows that the initial conventional phase of that conflict was fought and quickly won with a deployment of only 293 Air Force fighters, as well as 51 bombers and 362 USN and USMC combat air-

craft.[125] Even with a 1,050 inventory, the USAF could support 600 combat aircraft overseas at any one time, twice the Iraq standard. This reduction would amount to six U.S. fighter squadron equivalents. For our purposes, these squadrons comprise 108 primary mission aircraft in aggregate, and these are matched by another 62 aircraft that normally serve in other, non-combat roles. Thus, the total recommended reduction is approximately 170 aircraft. By reducing the demand for F-35A fighters, this rollback will save $15.5 billion in acquisition expenditures over ten years. The six squadron reduction will also save $31 billion in Operations and Support spending over the decade, partly by enabling a reduction in Air Force end strength of 15,000 personnel.

Second, the SDTF alternative would cancel the Long-range Strike Bomber (B-21) program and redirect a portion of its estimated cost. A high-cost penetrating bomber is not essential to the security of the United States. Its pursuit reflects not only threat inflation, but strategic misdirection. Moreover, the operational concept - attacking deep, well-defended targets by means of high-value piloted assets - seems anachronistic. It is certainly unproven against contemporary peer opponents. The most sensible way to hedge against critical deep threats and insure this mission generally is to invest in other less expensive standoff means, including UAVs and so-called arsenal planes (which may entail extending the life of existing bombers). In this light, we propose cutting the program back by $30 billion during the 2019-2028 period, and redirecting the remaining $18 billion to research and acquisition of less expensive alternatives.[126]

The aggregate effect of the proposal will be a reduction in USAF end strength of 15,000 personnel, which equals approximately a cut of 4.5%. The total ten-year budget savings would be approximately $100.5 billion.

Routine Peacetime Troop Deployments Overseas Savings: $17 Billion Over Ten Years

The SDTF alternative posture disputes the current policy that a large routine U.S. presence in Europe and Asia are necessary to protect American influence. In fact, we argue that this seemingly “everywhere, all the time” approach exacerbates the risks of inadvertent military confrontations.

The SDTF stance would reduce routine U.S. presence in Europe to 35,000 personnel over the decade. Our Asia presence would be scaled back to 50,000. And fewer than 25,000 troops (including those afloat) would remain in other areas. All told, U.S. troop presence abroad would comprise 110,000 troops - down from a routine presence of about 180,000.[127] Given gradual implementation over a five year period, total savings for the decade would be approximately $17 billion, which could be invested in improving capacities for rapid strategic deployment.[128]

Under present conditions deterrence does not heavily depend as it once did on very large-scale, permanent stationing or rotational presence of U.S. troops abroad. Reasons for this vary from region to region. In Europe and on the Korean peninsula, U.S. allies

have the capacity to counter-balance current and potential adversaries. American troops currently add a distinct edge to this, but one whose immediate tactical value can be supplanted by local forces over time, given sufficient motivation.

More generally, regarding big power competition, there are no intense territorial lines of confrontation that hinge on local force balances. Nor do any areas of contention figure as part of a broader existential contest. Instead, to the degree that big-power competition is military in character, deterrence depends mostly on the prospect of severe punishment, disruption, and destabilization in the case of a major clash.

Weighing against large-scale permanent military presence abroad are more than issues of cost and stress on America's armed forces. Presence also carries the risk of inadvertent involvement in local conflicts and it exposes U.S. forces to attack. Additionally, it can stir local resentment and contribute to impressions of U.S. imperialism. Finally, large-scale presence is not always beneficial for alliance relationships. It can encourage free-riding, subject America to moral hazard, and convey an impression of local weakness and dependency, rather than strength. There is nothing more reassuring than a strong local commitment to self-defense.

End America's Endless Wars
Savings: $320 Billion Over Ten Years

In addition to routine overseas presence, we count another 60,000 U.S. troops currently deployed in support of America's present wars. The Pentagon should end these endless wars, as the President has suggested. With the absence of a roadmap by the Administration for doing this, the SDTF alternative calls for ending the wars and limiting U.S. presence to a small train and assist role only until local security forces learn to defend their own countries.

The President's recent ten-year budget provides for $420 billion in the Overseas Contingency Operations (OCO) account. This slush fund, unchained to BCA spending caps, replete with wasteful spending, and abused to fund Pentagon programs that have nothing to do with war, should be eliminated. It's long past time we stopped asking American taxpayers to foot the bill for other countries military defense. Ending America's seemingly endless wars now, but still allowing for some spending to safely return U.S. forces home and for a small, short-lived, train and assist role, would allow for at least a $320 billion reduction in the ten-year budget.

Overhead and Efficiencies

Every two years, the Congressional Budget Office (CBO) publishes a compendium of savings from changes in the size of the force, modernization, military benefits, and over-

head/efficiencies. This section includes just a few of the many options provided by CBO last year, along with several others developed by task force members.[129] Other recommendations not listed here, but contained in CBO's analysis, include reducing the salary and benefits of military personnel to be more comparable with those of civilians and by consolidating support activities across services. The listing here, then, is a conservative estimate of all the possible overhead and efficiency savings that could be found at the Pentagon.

Reduce Operations and Maintenance Spending by Reducing Service Contracting
Savings: $262.5 Billion Over Ten Years

According to the CBO, O&M spending grew by 45% in real terms from 2000 to 2018 at the same time that the size of the U.S. military decreased by 4%. The largest savings in the O&M budget would come from reducing civilian personnel and service contractors.[130] Another area of significant savings would be reduced fuel use – the Pentagon is the largest institutional user of fossil fuels in the world (see appendix on Pentagon fuel use and climate change).

For purposes of calculating savings, this section looks only at the savings yielded by reducing service contractors, and not replacing them with military or civilian personnel. Accounting for other areas where O&M savings could be reduced would yield a larger figure.

While many think of acquisition at the Pentagon in terms of hardware and goods, the Department of Defense spends roughly the same amount on services. Services encompass everything from professional and management support to providing intelligence analysis. In FY2018, the Department spent $175 billion in service contracting.[131] This is a marked increase even from 2000, when the Department spent approximately $73 billion on service contracts.[132] High levels of spending and the insufficient analysis that goes into decisions to outsource this work makes it an area ripe for reform and savings.[133] Our recommendation is to move the Department just a fraction of the way towards reducing its overreliance on service contractors by spending 15% less on them, which would save approximately $262.5 billion over ten years.[134]

Excessive spending and waste at the Pentagon involves not only overpriced aircraft, ships, and spare parts, but also private companies charging the Department for 100-hour workdays.[135] Proponents of service contracting routinely assert that outsourcing work will save money. Yet, numerous analyses have found that hiring private contractors to perform this work frequently results in increased costs, even without being compounded by issues like fraud.

The Pentagon's cost assessment office and the Project On Government Oversight have also found that contractor employees were most costly, sometimes costing two to three

times more than a federal employee performing the same work.[136] The Defense Business Board also identified contracted services as an area in which to significantly reduce costs.[137]

When it comes to major weapon programs, contractors seeking to profit from sustainment and support contracts frequently deliver overly complex and fragile weapons. Former DOD Comptroller Robert Hale estimated operating and support costs make up about two-thirds of the defense budget.[138] The DOD's Future Years Defense Program estimates that supporting just the software of weapon systems will cost $15 billion over the next five years, though Congressional auditors also raised concerns that the Department may not know the full costs of these systems.[139] While contractors benefit from these arrangements, our military suffers as the costs of reliability and maintainability increase.[140]

Reducing the Department's reliance on contractors to only those roles where they are most cost-effective would increase both savings and effectiveness.

Replace Some Military Personnel with Civilian Employees
Savings: $16.7 Billion Over Ten Years

This proposal would decrease the DOD's budget by replacing 80,000 active-duty military personnel in commercial-support functions with 64,000 civilian personnel over a four-year time period.

Replacing military personnel with civilians in commercial-support positions would provide ample savings and save time. As civilian jobs do not require as much training or require regular transfers, the DOD is able to use fewer civilians to deliver an equal quality and quantity of work. Military members receive higher benefits, and therefore replacing them with fewer civilians will create savings.[141]

Close Unnecessary Military Bases
Savings: $20 Billion Over Ten Years

The Pentagon estimates that its domestic infrastructure is nearly one-quarter larger than needed.[142] For several years the Department has asked Congress to authorize another Base Realignment and Closure (BRAC) round. Previous BRAC rounds saved a combined $13.6 billion per year, and another round could save an additional $2 billion per year.

Nuclear Weapons, Missile Defense, and Space

The nuclear weapons options outlined below are consistent with the "deterrence-only" approach proposed by Global Zero (see sidebar, above, for further details). As indicated, some of these nuclear cuts can be achieved with a less substantial shift in nuclear strategy.

In addition, the cancellation of the Ground-Based Missile Defense System and the Trump administration's proposed Space Force make sense with or without a shift in U.S. defense strategy.

Eliminate the New Nuclear Cruise Missile
Savings: $13.3 Billion Over Ten Years

The new nuclear-armed, air-launched cruise missile, known formally as the Long-Range Standoff Weapon (LRSO), is redundant even under current nuclear policy, and would have no role to play in a deterrence-only strategy. Current U.S. systems can penetrate Russian or Chinese radar in the unlikely event of a nuclear conflict. More importantly, the size and shape of the overall U.S. nuclear arsenal is more than enough to deter any nation from attacking the United States with nuclear weapons. This option represents savings from cancelling the missile system itself. The nuclear warhead planned for deployment on the nuclear cruise missile will be discussed below, alongside the nuclear warhead complex.

As Rep. Adam Smith (D-WA) and Sen. Dianne Feinstein (D-CA) have noted, "the LRSO creates unnecessary risks of miscalculation in a conflict, lowers the threshold for nuclear use, is not necessary to preserve nuclear deterrence, and will draw scarce resources away from other nuclear assets and advanced conventional capabilities."[143]

Cancel the New Intercontinental Ballistic Missile (ICBM)
Savings: $30 Billion Over Ten Years

The deterrence-only strategy eliminates the ICBM leg of the nuclear triad on the grounds that it is vulnerable, dangerous, and unnecessary.

The ICBM is dangerous because the President would have to decide whether to launch ICBMs within minutes in a crisis to avoid potentially losing them in an attack, which increases the risk of a rash, accidental or misguided resort to nuclear weapons. For this reason, former Secretary of Defense William Perry has described the ICBM as the most dangerous weapon in the U.S. arsenal.[144] Eliminating ICBMs makes sense even without a full revamping of U.S. strategy along the lines proposed by Global Zero.

Cancel Plans for a New "Space Force"
Savings: $10 Billion Over Ten Years

The Trump administration's plan to create a new Space Force – which the president has described as a "sixth armed service" -- would create a new bureaucracy and further militarize the U.S. approach to space. As former Secretary of Defense James Mattis put it with respect to an earlier iteration of the plan, "[a]t a time when we are trying to integrate the Department's joint warfighting functions, I do not wish to add a separate service that would likely present a narrower and even parochial approach to space operations."[145] House Armed Services Committee Chairman Rep. Adam Smith (D-WA) concurs: "It's too expensive and creates more bureaucracy. We don't want to just, you know, create more people. We want to figure out how to better emphasize space."[146]

While the administration is starting slowly – $306 million to establish a headquarters, a Space Command, and a new Space Development Agency – a full-blown Space Force could cost billions or tens of billions over the next decade. A recent report by the CBO estimates that establishing a new military service for space activities would result in $1.4 billion to $3.2 billion in startup costs and $1.1 billion to $1.5 billion per year in increased annual costs. Assuming that the additional annual costs would not kick in until the force is fully set up, the low end of the CBO estimate comes in at $10.2 billion over the next decade.[147]

A Space Force is unnecessary. With better coordination, existing bureaucracies within the Air Force and Army charged with developing space assets are more than adequate.

Cancel Research and Development on Space-Based Weapons
Savings: At Least $3 Billion Over Ten Years

Pentagon officials have revealed plans to fund research and development leading towards the possible testing of space-based lasers and/or particle beam weapons by 2023. The weapons would be designed to destroy enemy ballistic missiles in their boost phase. The FY2020 budget contains over $300 million to explore these options. Actually building and deploying such weapons would likely cost tens of billions more. Given that there is no proof yet that either technology could actually work, any estimate of future costs is speculative at best, but even if the budget stabilized at $300 million per year, taxpayers could save $3 billion over the decade if funding for space-based weapons were stopped now.

Placing weapons in space, or even announcing an interest in doing so, runs the risk of sparking an arms race in space, as well as potentially stimulating rivals to increase and improve their nuclear arsenals in order to overcome any capabilities the new anti-missile systems may have.

Kingston Reif of the Arms Control Association has given a succinct summary of the reasons not to deploy weapons in space:

"The deployment of interceptors in space would be a disaster for strategic stability. To ensure the credibility of their nuclear deterrents, Russia and China would likely respond by building additional and new types of long-range ballistic missiles as well as missiles that fly on non-ballistic trajectories. Russia and China could also take steps to improve their ability to destroy such U.S. interceptors, thereby greatly increasing the threat to U.S. assets in space."[148]

Cancel Ground-Based Midcourse Defense System (GMD) Savings: $20 Billion Over Ten Years

As its name indicates, the GMD is a land-based missile defense system that is currently deployed in Alaska and Southern California. It has failed half of its tests, and none of those tests have been conducted under realistic conditions. Rather than throwing more money at building a system that will not work as planned, the United States can depend on its nuclear deterrent – any country that attacks the United States with a nuclear weapon would risk a devastating retaliation that would destroy its society. Continued research on missile defense may be warranted, but deploying a system that does not work is a waste of time and effort that siphons funds from meeting more pressing needs.[149]

Cancel New Nuclear Warheads and Roll Back Modernization of the Nuclear Weapons Complex Savings: $15 Billion Over Ten Years

A smaller nuclear arsenal would require fewer nuclear warheads, and fewer critical components for maintaining the capability of warheads still deployed. Under a deterrence only strategy, total warheads in the U.S. nuclear arsenal would be reduced by roughly 75%, reducing costs for maintaining the stockpile considerably.

Producing fewer plutonium "pits" – a key component of all current nuclear warheads – could save a minimum of $9 billion over the next ten years. Abandoning several new warhead development production and upgrade projects would save billions more.[150] The $14 billion estimate for reduced costs of stockpile maintenance, reduced production of plutonium "pits," and cancellation of new warhead designs is conservative.[151]

Most importantly, the plan to build a "low yield" nuclear warhead for use on Submarine-Launched Ballistic Missiles (SLBMs) should be abandoned. While savings would be relatively modest – perhaps a few hundred million dollars – the security benefits of foregoing this option would be significant. Sixteen members of the U.S. Senate have rightly

described the development of "more usable low-yield nuclear weapons" as unnecessary and destabilizing.[152]

Include the Nuclear Weapons Complex in the Next Base Realignment and Closure (BRAC) Round
Savings: $10 Billion Over Ten Years

For several years the Pentagon has asked Congress to authorize another Base Realignment and Closure (BRAC) round. Previous BRAC rounds saved a combined $13.6 billion per year, and another round could save an additional $2 billion per year, as noted earlier.[153]

Savings from consolidating defense facilities would be even greater if the next BRAC round encompassed the nuclear weapons complex, which includes nine sites.[154] The combined annual operating budget of nuclear weapons complex facilities is about $13 billion.[155] Consolidating the dangerous nuclear materials these labs use for research and weapons production would reduce costs while significantly increasing security.

Removing nuclear material from just two facilities would save approximately $80 million per year. A removal allowing for the closure of even a single lab would save at least $1 billion annually.

While the public may think these labs are government agencies, they are actually managed and operated by contractors and overseen by the Department of Energy. In many ways they are even more wasteful and ineffective than traditional Pentagon contractors. Lab waste has spurred criticisms and longstanding advice to reduce unnecessary infrastructure. An Energy Department Task Force found "excess capacity in areas associated with nuclear weapons design and development," and that political concerns prevented needed downsizing and restructuring.[156] When the Department of Energy initially considered consolidating management and operating contracts for some of the labs, savings were estimated at nearly $900 million over 10 years.[157] Several studies also found nuclear labs were more expensive than they should be. A Stimson Center study found the labs cost "an average of two to three times more than private industry."[158] Furthermore, the JASON Science and Technology Advisory Panel found these labs were more expensive than government or private labs.[159]

A subsequent expert review echoed concerns about duplicate facilities. "The three design laboratories, consumers of approximately 2/3 of the nuclear weapons budget, routinely compete with each other and set their own requirements as justification for new facilities and redundant research funding in the fear that one laboratory may become superior," the review said. "The net result is that the Complex sites are competing for programmatic funds and priorities rather than relying upon their divergent and complementary strengths." The group recommended that a single laboratory be responsible for leadership and management of these materials.[160] Five recent weapons projects overseen by

the labs cost nearly eight times more than initial estimates, with a combined $28 billion in cost overruns.[161]

Removing dangerous nuclear materials from just one of the Department of Energy's national laboratories—Lawrence Livermore—saved taxpayers approximately $40 million per year.[162] Consolidation would also reduce maintenance costs, reduce the number of potential terrorist targets, and decrease security vulnerabilities.[163] Most notably, consolidation would significantly reduce the need to transport nuclear components from one end of the country to the other, which is almost always done on public highways. When the Department of Energy's Office of Inspector General recommended consolidation, it also found there could be significant cost savings through reducing the force necessary to protect these materials, minimizing administrative costs, and simplifying acquisition oversight.[164]

Appendix A: The Pentagon, Fuel Use, Climate Change, and the Costs of War[165]

The Pentagon holds two contradictory positions. On one hand, it has acknowledged that climate change poses a major national security challenge. On the other, the Pentagon is the largest single consumer of petroleum in the world –consumption used in part to defend access to petroleum. They therefore produce the very same greenhouse gases that will make the threats posed by climate change much worse until we act to reduce our petroleum consumption. Indeed, the Department of Defense (DOD) is the world's largest institutional user of petroleum and correspondingly, the single largest producer of greenhouse gases (GHG) in the world.[166] These greenhouse gases, combined with other U.S. emissions, will help guarantee that the nightmare scenarios that the military predicts and that many climate scientists say are possible come to fruition.

U.S. military greenhouse gas emissions, from 2001 through 2017 have been approximately 1,212 million metric tons of CO2 equivalent. Of those emissions, 766 million metric tons of CO2 equivalent were emitted in "non-standard" military operations, including overseas contingency operations in the major war zones of Afghanistan and Pakistan, and Iraq and Syria.[167] Another consequence of the mission to protect oil and to hedge against climate-induced conflict is a larger U.S. military.

Reductions in military fuel use would be beneficial in four ways. First, the U.S. military would reduce its greenhouse gas emissions. Second, if the Pentagon reduced the use of greenhouse gas emitting fuels, associated climate change threats to national security would be lessened. Third, the United States would reap political and security benefits, by reducing domestic and U.S. military dependence on oil and those who provide it, including reduced troop dependence in the field. Finally, if the United States dramatically reduced its imports of oil from the Persian Gulf, including fuel used to protect those imports, it could then reevaluate the size of the U.S. military presence in the region and the overall size of the military. As a consequence of spending less money on fuel and operations to provide secure access to petroleum, the United States could, in the long run decrease total U.S. military spending and the size of the military, and reorient its economy to other more economically productive activities.

The U.S. economy and the military are dependent on petroleum. The substantial U.S. military presence in the Persian Gulf and the larger Middle East is meant in part to ensure access to Persian Gulf oil – along with the ongoing fight against terrorism and concerns about the regional ambitions of Iran. The United States also supports friendly oil rich regimes with military force, foreign aid, and arms sales.

The U.S. military seems blissfully unaware of how much its efforts to protect access to Persian Gulf Oil, its other military operations including war, and consumption at installations are a major driver of greenhouse gas emissions, and ultimately of climate change. In sum, the DOD assumes that climate change will be a disaster no matter what they do, even as they believe that they must continue to protect access to Persian Gulf oil so that

the United States and the rest of the world can burn as much oil as it wants at the lowest price per barrel possible. Therefore, the Pentagon focuses their efforts on adapting to climate change, even as they continue to ensure that we can rely on relatively inexpensive access to imported oil. However, if it chose to do so the Pentagon could play a major role in reducing the worst effects of climate change, not just prepare to deal with its consequences.

A better strategy is available. The U.S. military could reduce its consumption of petroleum, including that portion of military operations used to ensure access to Persian Gulf petroleum. If the U.S. military and the overall U.S. economy were to decrease its dependence on oil, the United States could reduce the political and fuel resources it uses to defend access to oil. The U.S. economy has already reduced overall petroleum consumption and so has the military. Further cuts in military petroleum consumption are possible.

The concern about access to oil is twofold. The United States economy is obviously heavily reliant on oil. The military has defended against several scenarios regarding a cut-off of Persian Gulf Oil. The first scenario is the threat that a hostile power would gain control of oil in the Persian Gulf — for instance by occupying Saudi Arabia and Kuwait or by blocking the Strait of Hormuz — and be able to control world supply and increase the price of oil. In response to the first scenario, the United States created the Strategic Petroleum Reserve in 1975 and the Rapid Deployment force in 1980 (which became Central Command in 1983). This mission officially began in late 1979 with the creation of the Rapid Deployment Force whose specific mission was to defend U.S. interests in the Middle East, including oil. In January 1983, when U.S. commands were reorganized, the RDF became U.S. Central Command (CENTCOM).

When Iraq invaded Kuwait in 1990, the Bush Administration reiterated the importance of oil in the region in National Security Directive 45. "U.S. interests in the Persian Gulf are vital to the national security. These interests include access to oil and the security and stability of key friendly states in the region. The United States will defend its vital interests in the area, through the use of U.S. military force if necessary and appropriate, against any power with interests inimical to our own."[168] In 1991, the United States evicted Iraq from Kuwait because it feared that Iraq posed a threat to Saudi Arabia.

Since then, the United States has stationed large numbers of troops in the Persian Gulf at Army, Navy, and Air Force bases. In late 2008, President George W. Bush added a concern that extremists might control oil and try to blackmail the United States: "[Y]ou can imagine them saying, 'We're going to pull a bunch of oil off the market to run your price of oil up unless you do the following'. And the following would be along the lines of, well, 'Retreat and let us continue to expand our dark vision.'"[169]

While the idea that the United States must protect the global flow of oil, and more specifically oil from the Persian Gulf, has largely been taken for granted, it is no longer clear that a large presence in the Persian Gulf region, and the infrastructure in Europe that supports it, is necessary.[170] The Persian Gulf mission may not be as vital as the Pentagon assumes.

The military and intelligence community tend to cluster the national security implications of global warming induced climate change into three overlapping areas: how climate change will affect U.S. bases and military operations; how climate disasters will stress military operations; and how climate change poses political and national security threats, up to and including war.[171]

The military has emphasized how climate change challenges military systems, operations, and infrastructure, and in 2014 offered a "Climate Change Adaptation Roadmap" that stressed the necessity of preparing for and adapting to climate change.[172] A 2019 DOD report on issues arising from climate change highlights the fact that the U.S. military already experiences the effects of global warming at dozens of installations.[173] These include recurrent flooding (53 installations); drought (43 installations); wildfires (36 installations); and desertification (6 installations). The report states that vulnerability will only increase over the next twenty years.[174]

The most urgent threat to infrastructure has perhaps been the Navy's on-going concern that rising sea levels and major storms will inundate coastal infrastructure and limit the use of naval bases.[175] For instance, Norfolk Naval Base is sinking and Keesler Air Force Base regularly floods. This does not even address long-term threats, like the fact that an open Arctic Sea may lead to questions about the need to patrol it.[176]

The Pentagon's response to the infrastructural and operational challenges of climate change has been to urge military preparations — such as moving military bases, developing training and equipment to operate in hotter, wetter or drier climates — to meet climate change related threats to operations and resiliency.

National security officials, anticipating a growing role supporting civil authorities in disaster relief missions, are also concerned that natural disasters, made worse as a consequence of climate change, will stress the operational capacities of the U.S. military. As sea levels rise, critical civilian infrastructure will be at risk. In September 2016, President Obama issued a National Security Memorandum that said, "[c]limate change and associated impacts on U.S. military and other national security-related missions and operations could adversely affect readiness, negatively affect military facilities and training, increase demands for Federal support to non-federal civil authorities, and increase response."[177]

Finally, the military is concerned that climate change will lead to a more chaotic and dangerous world. The fact that the Arctic Ocean will now be open poses a risk to U.S. facilities there. National security analysts now frequently suggest that drought in Syria from 2007 to 2010 and the subsequent mass migration to the cities created the conditions that contributed to the emergence of their civil war in 2011.

Indeed, strategists paint nightmare scenarios where climate change leads to armed conflict such as when crop failures and drought lead to conflicts over water and other natural resources. The White House said in 2016 that "[t]he national security implications of climate change impacts are far-reaching, as they may exacerbate existing stressors, contributing to poverty, environmental degradation, and political instability, providing enabling environments for terrorist activity abroad. For example, the impacts of climate change on

key economic sectors, such as agriculture and water, can have profound effects on food security, posing threats to overall stability."[178] Similarly, in September 2016, the National Intelligence Council listed a range of concerns from increased migration, to food shortages, to greater conflict and war caused by shortages of fresh water and access to arable land.[179]

The Pentagon does use other fuels. The U.S. military relies on nuclear power for some important tasks — most notably to power its fleet of 11 aircraft carriers. While the Pentagon has increased their use of renewable energy since 2009, so far, the savings in emissions offsets less than 1% of DOD Greenhouse Gas consumption.[180] It is possible to substitute some alternative fuels for military applications. There is even research on using bio-fuel in military vehicles, including jets. Many efforts to reduce the energy used at military installations, and to educate soldiers about the need to minimize idling vehicles — from Humvees to tanks, to jets – already exist. All of this could be accelerated to not only save money but also increase the resilience of the armed forces.[181] Still, the largest reductions in both budgets and greenhouse gas emissions would come from decreasing the overall size of the military and its operations to defend access to oil.

Appendix B: Methodology for Estimating Personnel and Spending Reductions

Operations and Support Savings

The calculation of Operation and Support savings is based on CBO's The US Military's Force Structure: a Primer,[182] which divides all Defense Department spending and personnel into three categories: Combat, Support, and Infrastructure (or Administrative). The CBO report proportionately associates costs and personnel in every category with combat units. This suggests how reductions in combat units might reverberate throughout DOD structures, affecting personnel rosters and costs in each category. Of course, while cuts in combat units would be closely correlated with reductions in combat unit personnel and O&S costs, these would not automatically result in proportionate reductions in support and infrastructure units and offices.

While accepting CBO's association of all support and infrastructure personnel and expenditures with combat units, we assume more modest reductions in the support and infrastructure categories as the number of combat units decline. We assume a 60% correlation between support and combat reductions, and a 33.3% correlation between infrastructure and combat reductions. Also notably, the Sustainable Defense Task Force (SDTF) calculation of O&S savings adjusts CBO's estimates to account for estimated inflation throughout the 2017-2029 period, using DOD deflators.

Modernization Savings

Major modernization programs are rolled back in accord with reduced demand due to retirement of combat units. Again, CBO's Primer serves as a basis for estimating the equipment holdings of tactical units. This information was supplemented by data from Service manuals and publications.[183] Cost estimates for reduced equipment were based principally on various Selected Acquisition Reports, congressional research agency reports, annual DOD program acquisition reports, and nongovernmental research institutions.[184]

Other procurement expenditures are reduced proportionately to the percentage reduction in combat, support, and/or transportation units. For instance, planned expenditures on some types of ammunition, missiles, and aviation support equipment are reduced in accord with reductions in relevant aviation assets - such as combat helicopters or fixed-wing combat aircraft. However, some areas of procurement are not reduced at all, notably purchases supporting Chemical Agents & Munitions Destruction. Also largely spared from cuts are purchases of communications and electronics equipment, which cannot be easily linked to the number of reduced combat assets.

Proposed cuts in Research, Development, Test, and Evaluation funding mostly relate to the B-21 bomber, Minuteman modernization, and Ground Based Strategic Deterrent

programs - all of which are discontinued. Apart from these specific cuts, the alternative would aim to reorient R&D toward more practical, cost-effective ends. While the Trump administration is supporting a qualitative leap in R&D spending, the SDTF force structure alternative sees no necessity to exceed $85 billion (2020 USD) in annual spending, adjusted for inflation. This level equals or exceeds most R&D spending over the past 35 years. It also implies a $52 billion reduction in 10 year R&D spending, including the reductions in the programs mentioned above.

Other Savings

Proposed family housing expenditures are reduced proportionately to the reduction in personnel end-strength. Funding for military construction overseas is reduced proportionately to the reduction in overseas presence. Military construction expenditures at home are rolled-back proportionately to the percentage cut in force structure - averaging about 10% across services. Funding related to Base Realignment and Closure is untouched. All told, funding for military construction is reduced by 22%.

Appendix C: SDTF Member Bios

Amy Belasco is a former Defense budget and policy specialist at the Congressional Research Service. Before that, she sampled other budget nerd havens, including the the Simpson-Bowles National Commission on Fiscal Responsibility and Reform as head of the defense team, the Congressional Budget Office, the Office of Management and Budget, and the General Accountability Office. From this experience, she's convinced that honest numbers matter because they tell a story that's hard to deny.

Gordon Adams is a professor emeritus of international relations at American University's School of International Service and is a distinguished fellow at the Stimson Center. From 1993 to 1997, he was the senior White House budget official for national security.

Carl Conetta is the director of the Project on Defense Alternatives (PDA) and a Senior Fellow at the Center for International Policy. His work has been published in The Washington Post, The Boston Globe, Defense News, and many other media outlets. Mr. Conetta has also made presentations at the Pentagon, US State Department, US House Armed Services Committee, Army War College, National Defense University, UNIDIR, and other governmental and nongovernmental institutions in the United States and abroad. He is a frequent expert commentator on radio and TV.

Neta Crawford is a Professor and Chair of the Department Political Science at Boston University and a Co-Director of the Costs of War Project based at Brown University.

Matt Fay is the former Director of Defense and Foreign Policy Studies at the Niskanen Center, and is currently pursuing a Ph.D. at George Mason University.

Benjamin Freeman, Ph.D., is the Director of the Foreign Influence Transparency Initiative at the Center for International Policy, and a Faculty member at the Institute for Defense and Business. His articles have appeared in the New York Times, the Washington Post, the Nation, and in numerous other media outlets. He previously worked at the Project On Government Oversight, where he testified before the Senate Armed Services Committee, and taught in the Political Science Department at Texas A&M University.

Benjamin H. Friedman is an adjunct lecturer at George Washington University's Elliott School of International Affairs, a graduate of Dartmouth College, and a PhD candidate in political science at the MIT. He previously worked as a Defense Analyst at the Cato Institute and a Researcher at the Center for Defense Information. He's edited three books on defense policy and strategy and has published academic essays in International Security, Political Science Quarterly, Orbis, Foreign Affairs, and World Affairs.

William D. Hartung is the director of the Arms and Security Project at the Center for International Policy and a senior adviser to the center's Security Assistance Monitor. He is the author of Prophets of War: Lockheed Martin and the Making of the Military-Industrial Complex (Nation Books, 2011) and the co-editor, with Miriam Pemberton, of Lessons from Iraq: Avoiding the Next War (Paradigm Press, 2008). articles on security issues have

appeared in the New York Times, the Washington Post, the Los Angeles Times, The Nation, and the World Policy Journal. He has been a featured expert on national security issues on CBS 60 Minutes, NBC Nightly News, the PBS Newshour, CNN, and Fox News.

Laicie Heeley is the founder and editor of Inkstick and the host of the PRI and Inkstick-produced podcast, Things that Go Boom. She is also a Partner with the Truman National Security Project.

John King is a retired civilian senior budget analyst who handled over $60 billion in Pentagon money performing financial due diligence on hundreds of R&D, procurement, operation and maintenance, military personnel, construction and housing, and contingency budget (both war budgets and disaster assistance/humanitarian aid) programs over 35 years. A volunteer on the Simpson-Bowles deficit commission defense budget team who wrote some of the $100 billion a year in cuts to the defense budget, he also teaches Navy staff on the Planning, Programming, Budgeting and Execution (PPBE) process. He recently started King Brown & Company LLC to advise government and companies how to use private finance to leverage public investment. He lives in Stafford, Virginia.

Lawrence J. Korb is a senior fellow at the Center for American Progress. He is also an adjunct professor at Georgetown University. Prior to joining the Center for American Progress, he was a senior fellow and director of national security studies at the Council on Foreign Relations. From July 1998 to October 2002 he was council vice president, director of studies, and holder of the Maurice Greenberg Chair. Prior to joining the council, Dr. Korb served as director of the Center for Public Policy Education and senior fellow in the Foreign Policy Studies Program at the Brookings Institution; dean of the Graduate School of Public and International Affairs at the University of Pittsburgh; vice president of corporate operations at the Raytheon Company; and director of defense studies at the American Enterprise Institute. Dr. Korb served as assistant secretary of defense (manpower, reserve affairs, installations, and logistics) from 1981 through 1985. In that position, he administered about 70 percent of the defense budget.

Lindsay Koshgarian is the Program Director of the National Priorities Project, where she oversees NationalPriorities.org. Lindsay's work on the federal budget includes analysis of the federal budget process and politics, military spending, and specifically how federal budget choices for different spending priorities and taxation interact. A particular area of focus is how a decades-long policy of outsized military budgets has eroded political will to invest in opportunity and human potential through greater federal support of education, health care, infrastructure and more. Prior to joining NPP in 2014, Lindsay was a researcher at the University of Massachusetts Donahue Institute, where she conducted state and regional economic development studies.

Miriam Pemberton is an Associate Fellow at the Institute for Policy Studies, working on military budget and military economy issues. With Lawrence Korb she led the task force that produced the annual "Unified Security Budget for the United States", as well as a series on military vs. climate security. She is at work on a book about the military economy (Routledge, forthcoming).

Mandy Smithberger is the director of the Center for Defense Information at the Project On Government Oversight (POGO). Previously she was a national security policy adviser to U.S. Rep. Jackie Speier (D-Calif.) and served as an analyst at the Defense Intelligence Agency and U.S. Central Command.

Lawrence Wilkerson is the Distinguished Visiting Professor of Government and Public Policy at the nation's oldest public university, The College of William & Mary in Williamsburg, Virginia, where he has taught for the past fifteen years. Previously, while serving in the US Army for 31 years, he also taught at the Naval War College in Newport, Rhode Island and the Marine Corps War College in Quantico, Virginia. Positions he has held outside teaching include in the military, special assistant to General Colin L. Powell when the General was chairman of the Joint Chiefs of Staff and, in civilian life, chief of staff to Powell when he served as U.S. Secretary of State.

Isaiah "Ike" Wilson III is the director of the Strategic Studies Institute at the Army War College. He is a colonel (retired) in the United States Army and an Army strategist. He served as chief, Commander's Initiatives Group (CIG), at U.S. Central Command from 2013 to 2016, with prior assignments as chief of plans, 101st Airborne Division (Air Assault) in Northern Iraq (2003-2004), as a theater war planner and strategic adviser in Afghanistan, and as professor and director of American politics, policy and strategy with the Department of Social Sciences at West Point. He has served as a visiting professor at George Washington University and a fellow with the New America Foundation.

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