

Making Sense of Cents

Parsing the U.S. Department of Defense's
FY 2022 Budget Request

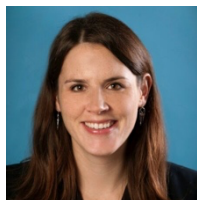
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Table of Contents

EXECUTIVE SUMMARY	4
INTRODUCTION.....	6
OVERVIEW OF THE FY 2022 TOPLINE AND TRENDS.....	7
AREAS OF INVESTMENT: CONVENTIONAL AND NUCLEAR COMPETITION WITH CHINA	8
Pacific Deterrence Initiative.....	8
Long-Range Fires	8
Naval Shipbuilding	11
Research & Development and Readiness	12
Nuclear Modernization	14
TRANSNATIONAL THREATS	15
BALANCING THE BOOKS: DIVESTMENTS AND LOOKING BEYOND 2021	16

Executive Summary

This report contextualizes the Biden administration's discretionary funding request for the U.S. Department of Defense (DoD) in fiscal year (FY) 2022, referred to as the "skinny" budget request. The report considers what this initial request—which has not yet been touched by Congress—may mean for the full FY 2022 Presidential Budget Request, given the identified priorities and available resources. The only detailed figure included in the defense budget request is the topline of \$715 billion, which is higher than former President Donald Trump's \$705 billion FY 2021 budget request. However, when adjusted for inflation, it amounts to a flat budget.

This report identifies several strategic objectives from the skinny budget request, the Biden administration's interim national security strategic guidance, and the priorities publicly laid out by DoD leadership for which the U.S. government will need to allocate resources. These objectives have implications for ongoing departmental efforts and resourcing. The authors assert that:

- The continued prioritization of China means the DoD must simultaneously modernize its conventional and nuclear forces to strengthen deterrence.
- The budget prioritizes additional missions for the DoD, like countering transnational threats—particularly climate change and biothreats such as COVID-19—but it does not resource these missions.
- There will be fewer resources for modernization due to pressure from the growing military personnel budget, as well as the operations and maintenance budget.
- The department will undertake these activities with fewer resources and less budgetary flexibility since the overseas contingency operations account has been terminated. However, this move will enhance long-term planning and should make it easier to align future budget requests with the strategy.

The FY22 defense budget request identifies a number of planned activities and areas of emphasis, but it does not specify how much money will be allocated toward each area. This report focuses on six key areas of interest—the Pacific Deterrence Initiative (PDI), long-range fires, naval shipbuilding, research and development for technological innovation and readiness, nuclear modernization, and transnational threats—where the United States will need to make the greatest investments or tradeoffs.

- **Pacific Deterrence Initiative:** China remains the dominant challenge, requiring the United States to bolster conventional deterrence through PDI, which cuts across resourcing priorities.
- **Long-range fires:** Buying standoff missiles, especially proven technologies, is a relatively quick and affordable way to improve the joint force's combat capability and therefore should be a core part of the Biden administration's strategy for countering China. Yet the Pentagon will be stretched to afford all of the services' long-range strike programs in development, suggesting that it may need to prioritize some standoff weapons programs over others.

- **Naval shipbuilding:** While the budget request affirms the importance of maritime power, it emphasizes the development of an affordable shipbuilding plan and undersea and unmanned vessels, which likely means fewer surface combatants—a change to Trump administration-era shipbuilding plans.
- **Research & development and readiness:** As these are often in tension with each other, it will be challenging to fund both simultaneously with a flat topline, suggesting that the DoD might need to embrace a new definition of readiness such as the one promoted by Air Force and Marine Corps leaders.
- **Nuclear modernization:** Sustainably modernizing nuclear forces suggests that all legs of the triad are likely safe for now, but the department may conduct a new analysis of alternatives before the FY 2023 budget, making this a temporary reprieve.

Because the defense budget is not going to grow in real terms, the DoD is going to need to realign resources to support all of the priorities identified above—and to support its broader effort of competing with China. Without sizable divestments, there will be insufficient resources to fund the modernization required to meet the China challenge, as well as the newly prioritized missions of countering biothreats and climate change. The Biden administration has a narrow window in the FY22 and FY23 budget requests to make hard choices in defense that will ultimately set the United States on a path to succeed against the most pressing national security challenges. If it fails to make these difficult changes or realign finite resources to its strategic vision by the next budget cycle, future attempts may be too late to effectively counter the rapidly growing threats posed by China and climate change.

Introduction

A newly elected government has a clear opportunity to revise the national strategy, including its defense priorities, and to realign resources to support its new approach. Annually, the U.S. president submits a budget request and the Future Years Defense Program (FYDP), a defense plan outlining projected manpower, funding, and programs for the next five years, to Congress by early February.¹ An incoming president typically makes minor adjustments² to the annual budget request developed by his predecessor and submits a detailed budget in the spring.³ The Trump administration's obstruction during the transition significantly hampered the Biden administration's efforts to prepare a budget, resulting in additional delays.⁴

Given the compressed timeline, one should expect President Joe Biden's fiscal year 2022 (FY22) budget request for the Department of Defense (DoD) to focus on only a few areas and defer making many other decisions until the fiscal year 2023 budget, when the new administration has had sufficient time to complete its ongoing reviews, develop a strategy, and fill key leadership positions. Nevertheless, the president's FY22 budget request will provide insight into the new administration's defense priorities and hint at more dramatic shifts that may be coming in the future.⁵ This report contextualizes the Biden administration's discretionary defense budget request—referred to as “the skinny” budget because it is a lean, interim placeholder for a more complete request that includes itemized costs—and considers what this means for the full FY22 Presidential Budget Request and beyond, given the identified priorities and available resources.

Overview of the FY 2022 Topline and Trends

The only detailed figure included in the skinny defense budget request was the topline of \$715 billion—the total amount of discretionary resources—that the president is requesting for the Department of Defense. This figure is higher than former President Donald Trump's \$705 billion FY21 budget request. However, when adjusted for inflation, it amounts to a flat defense budget—even amid major force modernization efforts.⁶ Both Democrats and Republicans in Congress have expressed dissatisfaction with this outcome. A group of progressive Democrats called on the president to “significantly” cut defense spending, while Republicans urged the president to increase the Pentagon's budget by 3 to 5 percent to keep pace with China.⁷ During the first three years of the Trump administration, Pentagon budgets significantly increased and resources were reallocated to the development and maturation of new technologies to prepare the joint force for great-power competition.⁸ Nevertheless, critics pointed out that the Trump administration's budgets were not always well aligned with the stated strategic priorities and that more changes needed to be made to shift resources and effectively fund great-power competition.⁹

This year's overall discretionary budget request reflects President Biden's promise to elevate the non-military tools of statecraft with a national security budget that provides “robust funding for national defense as well as for other instruments of national power.”¹⁰ The Departments of State, Treasury, and Commerce, as well as United States Agency for International Development (USAID) and other non-military international programs received a significant boost. While the Biden administration's strategy seeks to deemphasize the military, it does not redirect the Pentagon's focus away from great-power competition, as it continues to consider China, and to a lesser extent Russia, the primary threats.

Consequently, the Department of Defense must simultaneously modernize its conventional and nuclear forces so that it can strengthen deterrence. Moreover, there will be fewer resources for modernization due to pressure from the growing military personnel and operations and maintenance budgets.¹¹ Newly prioritized missions, like climate change and countering transnational threats, especially biothreats such as COVID-19, will also need to be accounted for. The department will have to undertake all these activities with fewer resources and less budgetary flexibility, as the overseas contingency operations (OCO) account has been terminated. OCO was a supplemental appropriation that was created after 9/11 to fund the global war on terrorism, and in particular the wars in Afghanistan and Iraq.¹² Although intended as a mechanism to bankroll emergency war-related needs, OCO was increasingly used to resource enduring activities that were unrelated to ongoing operations and should have been in the base budget.¹³ Because OCO was not subject to the Budget Control Act's discretionary spending caps, it facilitated difficult political compromises over the budget, but it also impeded long-term planning and eroded strategic discipline. Going forward, the absence of OCO may increase the challenges of passing a budget and intensify the competition for resources, but it also may limit spending that is not guided by strategy.

How does the Pentagon do more with less? What are the tradeoffs that will have to be considered to fund the president's priorities? What does the FY22 budget portend for some high-profile defense initiatives? Does the skinny budget request truly align with the administration's equally skinny strategy?

Areas of Investment: Conventional and Nuclear Competition with China

The FY22 defense budget request identifies a number of planned activities and areas of emphasis, but it does not specify how much money will be allocated toward each area. Nevertheless, the majority of the issues, including the Pacific Deterrence Initiative (PDI); long-range fires; naval shipbuilding; research and development for technological innovation and readiness; and nuclear modernization, are critical for countering China's military rise in the Indo-Pacific and bolstering strategic stability.

PACIFIC DETERRENCE INITIATIVE

The Biden administration's request affirmed that China remains the dominant challenge and that there are plans to leverage the PDI to bolster conventional deterrence in the Indo-Pacific region.¹⁴ Similar to the European Deterrence Initiative created to strengthen NATO's defenses after Russia's invasion of Crimea, PDI was established in the FY21 National Defense Authorization Act (NDAA) in response to ongoing Chinese military modernization and assertive behavior.

Seeking to make near-term improvements, U.S. Indo-Pacific Command (INDOPACOM) is asking for proven, off-the-shelf capabilities to enhance the resiliency of U.S. forces in the region while augmenting their firepower. INDOPACOM Commander Admiral Philip Davidson laid out his steps to "regain the advantage" by establishing a "forward deployed, defense-in-depth posture" at the cost of \$27 billion over the next five years in a report to Congress that outlined INDOPACOM's assessed requirements for PDI.¹⁵ The plan centers on robust integrated air and missile defenses on Guam, Hawaii, and Palau to protect U.S. territories from Chinese air and missile attacks, while further dispersing U.S. forces across a network of resilient airbases and ports. The focal point of these air defenses and the command's number one priority is an Aegis ashore missile defense system on Guam, which will cost \$1.6 billion. Additionally, INDOPACOM seeks to create a layered joint precision strike network, including previously prohibited long-range ground-based missiles, in the first and second island chains.

Stressing the urgency of the situation, Davidson warned that if the United States fails to redress the increasingly unfavorable balance of power in the Indo-Pacific, China could decide to attack Taiwan in the next six years.¹⁶ To quickly reverse these unfavorable trends and close this window of growing vulnerability, INDOPACOM has requested \$4.6 billion in FY22, which is more than double the \$2.2 billion it received in FY21.¹⁷ The Biden administration's decision about PDI will be related to another priority area—investing in long-range fires.

LONG-RANGE FIRES

While a part of INDOPACOM's PDI request, long-range fires are a focal point of all of the services' modernization plans and a critical element of the Joint Staff's joint warfighting concept (JWC).¹⁸ The Pentagon wants increasingly capable, longer-range weapons that enable U.S. forces to launch strikes outside of the worst threat rings of China and Russia's anti-access/area-denial (A2/AD) networks. Moreover, China and Russia are investing heavily in developing long-range hypersonic missiles, forcing the DoD to keep pace with its adversaries.

Long-range fires are the Army's number one modernization priority, but all of the services are vying for a piece of this mission. The Army is seeking not only to acquire a family of long-range weapons

to replace legacy artillery and missile systems, but also to field new longer-range missiles, some of which were previously prohibited by the Intermediate-Range Nuclear Forces (INF) treaty, as well as hypersonic weapons.¹⁹ Similarly, as a part of the U.S. Marine Corps Commandant's 2030 redesign initiative, the Marine Corps is transforming its force so it can conduct expeditionary operations in support of the U.S. Navy fleet in the contested Indo-Pacific region.²⁰ This cost neutral modernization effort plans to divest of legacy systems so that the Marine Corps can acquire capabilities that enable it to conduct sea denial and sea control operations, most notably long-range anti-ship cruise missiles.²¹ The Marine Corps' plan encountered some setbacks in FY21, as Congress did not fully fund the Marines' request for long-range fires.²²

The U.S. Navy and Air Force have fielded long-range missiles for years, and they are now focused on acquiring more advanced standoff weapons, including low observable cruise missiles and hypersonic missiles, which would be necessary for fighting a near-peer adversary. While the Biden administration's request "invests in the development and testing of hypersonic strike capabilities while enhancing existing long-range strike capabilities," it is not clear that it can afford to procure all of these weapons if budgets remain flat.²³ Hypersonic missiles, which are hard to intercept because they maneuver and travel at speeds of at least Mach 5, are of course more expensive than traditional ballistic and cruise missiles. While none of the services have yet fielded a hypersonic weapon, the Air Force, Army, and Navy all have programs for which they collectively requested \$3.2 billion in FY21.²⁴

Major Long-Range Strike Weapons under Consideration in the Joint Portfolio

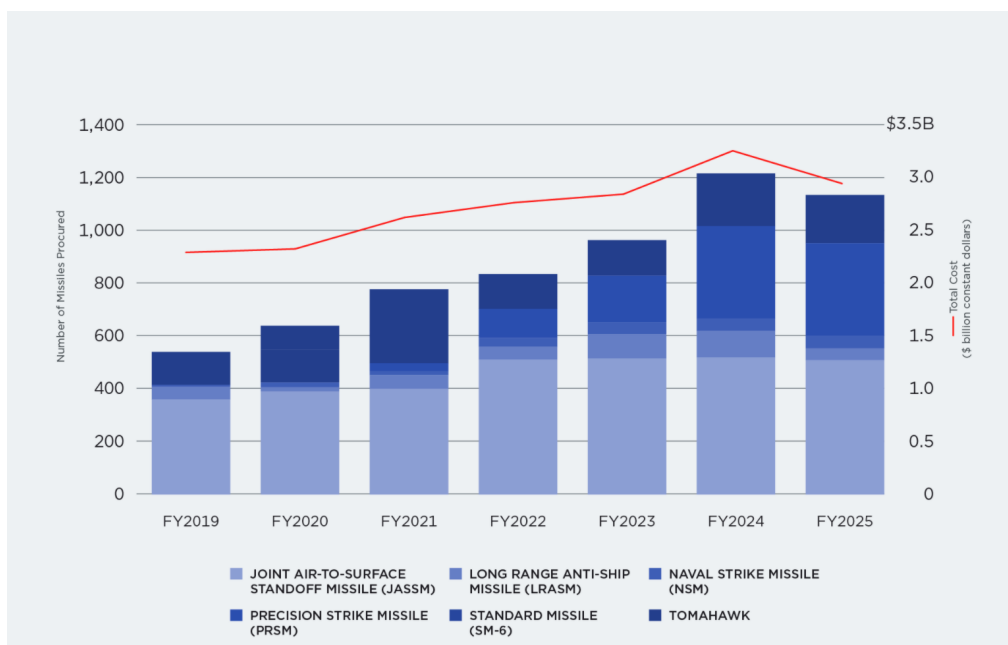
Ranges	100-500 km	501-1000 km	1000+ km
U.S. Navy	Naval Strike Missile	LRASM	Conventional Prompt Strike
	SM-6 Block I & II	Tomahawk Block IV & V	
		SM-6 Block IB	
U.S. Marine Corps	Naval Strike Missile	Maritime Strike Tomahawk	
U.S. Army	PrSM	Tomahawk Block V	LRHW
		SLRC	
		SM-6 Block IB	
U.S. Air Force		JASSM-ER	
		LRASM	
		ARRW	
		Hypersonic Attack Cruise Missile	
		Mayhem	

Legend: SM-6 (Standard Missile 6); PrSM (precision strike missile); LRASM (Long-range Anti-ship Missiles); SLRC (strategic long-range cannon); JASSM-ER: (Joint Air-to-Surface Standoff Missile extended range); LRHW (long-range hypersonic weapon); ARRW (air-launched rapid response weapon); Mayhem is a solid rocket-boosted, air breathing, hypersonic cruise missile. The ranges for Mayhem and the Hypersonic Attack Cruise Missile are estimates.

The long-range strike mission has fueled inter-service rivalries, especially between the Army and the Air Force.²⁵ There is not enough time for a thorough review of the roles and missions issue before the FY22 budget submission, so it will be interesting to see if the Biden administration favors a particular service's long-range strike program, funds the Army's newest long-range strike programs—SM-6 and Tomahawk—or if it defers these decisions until a comprehensive analysis can be conducted for the FY23 budget.²⁶

While most of the long-range strike programs are munitions—not major weapons systems—they are still expensive. For instance, the stealthy long-range anti-ship missile that would be needed to sink hundreds of Chinese ships transporting invasion forces to Taiwan costs \$3.9 million per missile.²⁷ The Air Force's land-attack cruise missile, JASSM-ER, costs about \$1.26 million per missile, while Tomahawk missiles cost between \$1.4 to \$2.5 million each, depending on the variant.²⁸ To be effective against great-power adversaries, weapons need adequate range to reach the target, advanced sensors that guide them toward elusive enemy forces, and attributes that enable them to evade enemy air defenses. There is one additional cost consideration for the Army—the potential doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) costs associated with creating new fires units. Since the Army is planning to field new weapons, it may have to create new units to operate these systems. Even if the Army converts existing units into new fires units and doesn't increase its overall size, it is likely to incur additional DOTMLPF costs associated with creating new force structure.²⁹

The services, which tend to prioritize ships, aircraft, and vehicles, have typically failed to stockpile as many high-end munitions as the joint force would need to prevail in a conflict against China or Russia. Buying standoff missiles, especially proven technologies, is a relatively quick and affordable way to redress some of the joint force's current deficiencies and therefore should be a core part of the Biden administration's strategy for countering China.³⁰ As shown in Figure 1, which details past and projected joint long-range cruise and ballistic missile procurement, the joint force has not bought more than 800 of these weapons in a year and its procurements have been heavily weighted toward land attack versus anti-ship weapons. If China is the priority threat, the Pentagon will need to invest in more anti-ship standoff missiles for the maritime-dominated Indo-Pacific theater in addition to land attack weapons. Although the department undoubtedly needs to make significant investments in its long-range strike capabilities—both in its cruise and ballistic missile stockpiles, as well as in hypersonic weapons—there are considerable redundancies in this area and funding all of these weapons will come with a significant price tag.

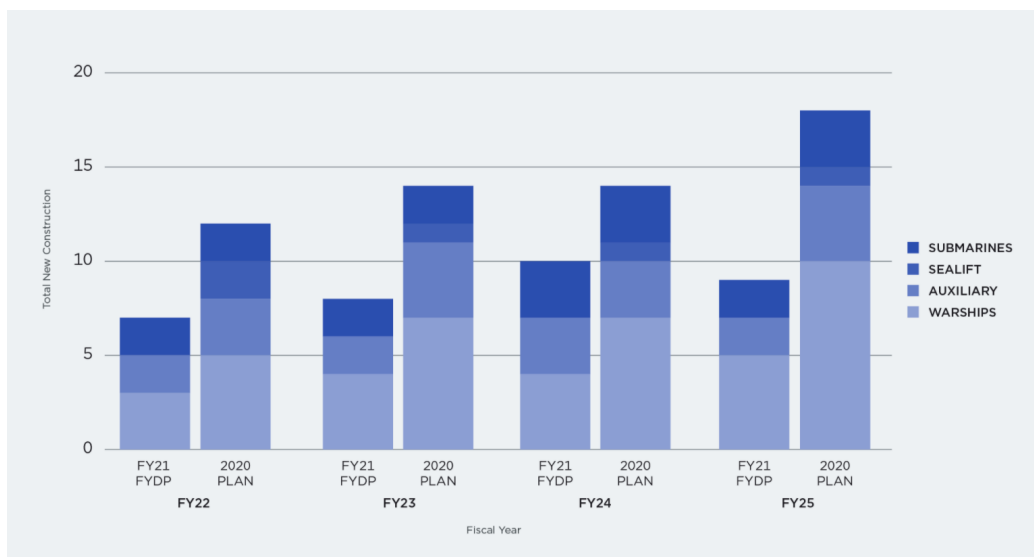
Figure 1: Joint Long-Range Cruise and Ballistic Missile Procurement

Past numbers come from the 2021 presidential budget request, while future projections come from the FY21 Future Years Defense Program. These projected buys do not include the Army's intended acquisition of SM-6 and Tomahawk missiles. (Data provided by Govini, derived from DoD budget justification books.)

NAVAL SHIPBUILDING

President Biden aims to make “executable and responsible investments in the U.S. Navy fleet” and identifies the importance of recapitalizing the ballistic missile submarine fleet, while also funding unmanned vessels and attack submarines.³¹ While the Biden administration’s budget request affirms the importance of maritime power, its emphasis on feasibility and responsibility suggests that the Trump administration’s December 2020 plan for an approximately 500-ship navy, referred to as Battle Force 2045, will be scrapped.³²

Nonetheless, the Navy’s modernization effort takes place against the backdrop of a shift to the Indo-Pacific and preparation for potential future conflict with China, where Navy ships would play a sizable role. Under the original FY21 FYDP, the Navy would fund the procurement of an additional seven new ships in FY22: Two Virginia class attack submarines; two Aegis destroyers; one guided missile frigate; one TATS towing, salvage, and rescue ship; and one TAGOS ocean surveillance ship.³³ Conversely, under the December 2020 plan, the Navy would procure 12 ships, including the seven outlined in the FY21 FYDP plus: one large deck amphibious assault ship, one light amphibious warship, one oiler, and two expeditionary fast transport ships.³⁴ Figure 2 compares these two plans, projects their construction pace and composition out to FY25, and clearly illustrates the greater requirements of the Battle Force 2045 plan.

Figure 2: FY 2021 and Battle Force 2045 Shipbuilding Plan Comparisons³⁵

The December 2020 shipbuilding plan not only increased the total number of ships built, but it also significantly increased the planned buy of surface warships.

To build Battle Force 2045, shipbuilding would need to accelerate with the procurement of 15 ships in FY23, 16 in FY24, 19 in FY25, and 20 in FY26. This growth would require a significant boost in the annual shipbuilding budget to nearly \$34 billion by FY25—a nearly \$14 billion increase from the FY21 request.³⁶ The Congressional Budget Office estimated that the December plan would require on average \$28.8 billion per year for new ship construction, which is more than double the historical average and nearly 25 percent higher than the Navy's estimate.³⁷ Trump planned to fund this naval buildup by cutting legacy systems, Army end strength, and withdrawing from Iraq and Afghanistan, although it remains unclear whether these savings would offset the costs of the ambitious shipbuilding plan.³⁸

The Biden administration's budgetary request language indicates that the department is focused on developing an affordable shipbuilding plan and is heavily weighted toward undersea and unmanned vessels, which likely means fewer surface combatants. This does imply that the general contours of Battle Force 2045's force design have been embraced by the new administration, if not the specific fleet size. Battle Force 2045 aimed to improve the lethality, survivability, and sustainability of the fleet by reducing the number of large warships in favor of more small ships, unmanned surface vessels, and unmanned underwater vehicles, although as evidenced in Figure 2, it did not adhere to this particular fleet architecture in practice.

Nevertheless, many questions remain. Will the Biden administration continue the past practice of identifying a desired fleet size (e.g., 355-ship goal), which foolishly focuses on capacity instead of capability?³⁹ Will the Pentagon accept more near-term risk by reducing the size of the surface fleet so that it can invest more in future unmanned and autonomous systems? There have been rumors that the Pentagon is revisiting a 2019 proposal to retire the aircraft carrier USS *Harry S. Truman* (CVN-75) early rather than undertake a costly mid-life refit and refueling.⁴⁰ Finally, it is worth keeping in mind that the administration does not always get what it requests. Between 2012 and 2021, Congress appropriated \$1.9 billion per year more on average for shipbuilding than the president requested.⁴¹

RESEARCH & DEVELOPMENT AND READINESS

Two areas identified as Biden administration priorities—research and development and readiness—are often in tension with each other, as the former focuses on long-term investments for the future force and the latter on availability of units for current deployments and operations.

As a part of the 2018 National Defense Strategy (NDS), the Trump administration emphasized both restoring readiness for warfighting and maintaining the department's technological advantage. Over the last four years, the Department of Defense has consistently resourced research, development, test, and evaluation (RDT&E) in an effort to ensure the U.S. technological advantage over China. Oddly, however, over the same period, science and technology funding, a subset of RDT&E that funds longer-term revolutionary research, has declined.⁴²

Since the Biden administration has emphasized funding research in “breakthrough technologies” versus incremental improvements to existing technologies, one would expect more science and technology investments in FY22.⁴³

Figure 3: Total Department of Defense Research, Development, Test & Evaluation Request with Science & Technology Broken Out (Adjusted for Inflation)⁴⁴



At the same time, the Biden budget request also aims to fund the “best trained and equipped force in the world,” one that is “always ready to fulfill [its] obligation to protect the security of the American people.”⁴⁵ Joint doctrine defines readiness as “the ability of military forces to fight and meet the demands of assigned missions.”⁴⁶ Readiness is a difficult concept to measure and it is even more challenging to identify what parts of the budget have the greatest effect on readiness.⁴⁷ As Todd Harrison has argued, “nearly every part of the defense budget is related to readiness in one form or another.”⁴⁸ This ambiguity about which defense accounts fund readiness is reflected in the services’ budget requests as their submissions related to key readiness investments report their end strengths in addition to investments in different domains.⁴⁹

Key Service Investments in Readiness (\$ billions)

	U.S. Army	U.S. Navy	U.S. Marine Corps	U.S. Air Force	U.S. Space Force
FY19	22.2	27	9.8	32.6	
FY20	23.7	31.5	11.8	35.9	
FY21	23.8	29.7	9.6	30.9	2.3
Total	69.7	88.2	31.2	99.4	2.3

Key readiness investments vary by service: The Army includes ground readiness, aviation readiness, depot maintenance, and infrastructure; the Navy includes ship readiness, aviation readiness, and infrastructure; the Marine Corps includes ground readiness, aviation readiness, and infrastructure; the Air Force includes maintenance, flying hours and operations, and infrastructure; and the Space Force was only reported in FY21 and included space operations and space system sustainment.⁵⁰

Between FY19 and FY21, the Air Force and the Navy reported the largest key investments in readiness spending, \$99.4 billion and \$88.2 billion respectively, while the Army came in a distant third having invested only \$69.7 billion over the same period of time. The much smaller Marine Corps invested \$31.2 billion in readiness, while the Space Force, which was established in December 2019, reported spending \$2.3 billion on readiness. Despite these allocations, a recent Government Accountability Office report concluded that efforts to improve readiness have only been partially effective. Between fiscal years 2017 and 2019, readiness improved for ground forces, but declined for maritime forces and fluctuated for air, space, and cyber forces.⁵¹ Of the three large services, the Army, which invested the least in readiness, reaped the largest gains, while larger investments by the Navy and Air Force did not yield commensurate benefits. This suggests that readiness challenges are due to the mismatch between the available supply of forces and the insatiable demand of combatant commanders.⁵²

U.S. forces have been some of the busiest in the world since the end of the Cold War.⁵³ The Biden administration's decision to withdraw all U.S. forces from Afghanistan by September 2021 should reduce the tempo of current operations and save at least \$14 billion, which was the sum requested through OCO in FY21 for the war in Afghanistan.⁵⁴ Nevertheless, Chief of Staff of the Air Force General Charles Q. Brown and the Commandant of the Marine Corps General David H. Berger have argued that the department needs to redefine readiness, which currently is equated with availability for current deployments. In their view, readiness should mean a joint force capable of conducting all-domain combat operations against a peer adversary.⁵⁵ If budgets remain flat, the Biden administration may need to adopt the readiness framework proposed by Generals Brown and Berger to simultaneously fund all of its conventional and nuclear modernization priorities while also enhancing readiness. In large part, however, readiness depends on the policies chosen by civilian leaders and whether they are judicious in when they deploy and employ the military.

NUCLEAR MODERNIZATION

The interim national security guidance makes it clear that the Biden administration seeks to reduce the role of nuclear weapons while maintaining a “safe, secure, and effective” strategic deterrent.⁵⁶ It also highlights the importance of maintaining strategic stability amid competition with China, which is expanding the size of its nuclear arsenal and fielding new nuclear delivery systems.⁵⁷ U.S. nuclear forces and their supporting infrastructure are old and a comprehensive upgrade is overdue. The main decision will be whether to maintain the triad of nuclear delivery systems given that the entire nuclear enterprise, including delivery systems, the command-and-control system, weapons, and warheads, needs to be replaced or undergo a life extension. While senior DoD leaders expressed support for the triad in their confirmation hearings, constrained resources, a deemphasis of nuclear weapons, and the need for extensive conventional modernization suggest that the Biden administration will have difficult decisions to make about nuclear modernization efforts.⁵⁸

Since 1961, the United States has maintained three systems that can launch nuclear weapons, known as the triad—strategic bombers, land-based intercontinental ballistic missiles (ICBMs), and submarine-launched ballistic missiles. All three legs of the triad are scheduled to be modernized in the upcoming years. This dramatic spike in spending will absorb a growing percentage of the Pentagon’s investment budget.⁵⁹ In 2019, the Congressional Budget Office estimated that modernizing strategic nuclear delivery systems and weapons would cost approximately \$234 billion, which would require a 60 percent increase in spending between 2019 and 2028.⁶⁰ In FY21, the recapitalization of nuclear forces cost \$10 billion, and these costs are projected to increase to \$13.3 billion by FY25.⁶¹

The lion’s share of these expenditures is earmarked to fund the next generations of the sea- and ground-based legs of the triad. The department plans to spend \$24 billion over FY21–FY25 on the *Columbia*-class ballistic missile submarine (SSBN), which will relieve the retiring *Ohio*-class SSBNs, and \$13 billion on the Ground Based Strategic Deterrent (GBSD)—the replacement for the aging Minuteman III ICBM. The overall bill for nuclear modernization and the cost of GBSD, in particular, have fueled debates over whether the Minuteman III ICBM’s life can be extended, the number of missiles can be decreased, or the ICBM leg can be eliminated altogether.⁶²

Congressional Democrats have called for cuts to the planned nuclear modernization due to its cost and, in some instances, concerns that programs are unneeded or undermine strategic stability. In particular, Democrats in Congress have proposed cutting the GBSD and the submarine-launched, low-yield nuclear cruise missile developed by the Trump administration.⁶³ Yet, the president’s budget request “supports ongoing nuclear modernization programs while ensuring that these efforts are sustainable,” which suggests that all legs of the triad are likely safe for now.⁶⁴ The administration may be planning to maintain the triad, as both Secretary Austin and Deputy Secretary Hicks have indicated they favor, or may be buying time to conduct a more thorough analysis of alternatives to GBSD before the FY23 budget.

Transnational Threats

Most of the areas identified in President Biden’s defense budget request were also Trump administration priorities and are linked to competition with China. The FY22 defense budget elevates one major mission that is a departure from the Trump administration’s policies—countering transnational threats and, in particular, the dangers posed by climate change and

biothreats. President Biden appears to be following through on his campaign pledge to make the U.S. military more resilient against natural disasters caused by climate change and to make the department more energy efficient.⁶⁵ This could involve boosting the military construction budget to enhance the resiliency of U.S. military installations and operations, as well as incentivizing the procurement of greener products.⁶⁶ Some believe that focusing on the climate could entail less new spending than incorporating climate considerations into existing procurement and budgetary decisions.⁶⁷

Not surprisingly given the ongoing COVID-19 pandemic, the FY22 budgetary request also identifies countering emerging biological threats as an area of emphasis. The Chemical and Biological Defense Program is primarily responsible for protecting against biological threats, and in the FY21 budget request, it asked for \$1.29 billion to fund basic research on biological threats; improvements to warning, surveillance, and detection; modeling and simulations to aid decision makers; medical countermeasures; and protective equipment for military personnel.⁶⁸ In light of the devastation caused by COVID-19, there have been some calls to invest dramatically more resources in biological defenses, as much as \$6 to \$7 billion annually.⁶⁹ It remains to be seen how many resources are funneled into countering these two transnational threats and whether these investments take from other areas.

Balancing the Books: Divestments and Looking Beyond 2021

Because the defense budget is not going to grow in real terms, the department needs to realign resources to support all of the priorities identified here—and to support its broader effort of competing with China. Toward that end, the FY22 request announces its plan to divest of legacy systems and programs because many of these forces are costly to maintain and not capable enough for great-power competition. But questions remain over what constitutes a legacy platform. More importantly, members of Congress have previously thwarted DoD and the services' attempts to retire aging weapons systems or ones that are not effective against great-power competitors to protect jobs in their districts. The Air Force, in particular, has been unable to retire A-10 attack aircraft, older KC-135 and KC-10 tankers, MQ-9 Reapers, and RQ-4 Global Hawks. Marines struggled to follow through on the Commandant's force design as Congress cut funding for long-range fires and reinstituted heavy transport helicopters. It remains to be seen whether the Army will be successful if it decides to retire Bradley vehicles.

It is abundantly clear that the Biden administration will need to make difficult tradeoffs in the defense space that may upset the services and Congress to fund all of its priorities. Moreover, it has the opportunity to make hard choices, especially in its first few years in office, and to set the nation on a course to succeed against the most pressing threats. This opportunity for change, however, may be fleeting as the next electoral cycle will quickly encroach on strategic considerations. If the Biden administration fails to seize the narrow window that it has in FY22 and FY23 budget requests to make hard choices and instead continues to try to fund everything, the nation is unlikely to be prepared to face key national security challenges.

This will be particularly tricky, as the president's request for discretionary funding will lie with Congress, which determines how much money it will give to the DoD and how the department can spend these funds. Looking ahead, it is difficult to imagine that PDI efforts will not be well funded, given that the idea originated in Congress and was mandated in the FY21 NDAA. Nuclear modernization, however, has been a hot button issue in Congress. If the administration decides to punt on making hard decisions about the nuclear triad this fiscal year, which appears likely, it will

face scrutiny on the Hill. However, a flat budget cannot cover the costs of everything the administration seeks to do. The department will need to make good choices and navigate the political forces and bureaucratic inertia that push against change. Figuring out how to do more within the confines of a flat topline may be even more politically challenging, as line items once hidden in OCO funds are now part of the base budget. At the same time, the elimination of the OCO slush fund may help the department discipline its spending and ensure that it aligns resources with its strategy.

Ultimately, the executive and legislative branches need to get on the same page to enable the department to effectively compete with China over the long run. For this to happen, however, the Biden administration needs to make the case to Congress and to the American people why these choices are necessary. Without divestment, there will be insufficient funding to cover the forward-looking modernization efforts to meet the China challenge or the newly prioritized missions of biothreats and climate change. This includes prioritizing longer-term research and development and key modernization programs that are relevant to a conflict with China and divesting of legacy systems that are becoming increasingly costly to operate. The Biden administration's skinny budget suggests that there is mismatch between strategy and implementation: the new administration may have a strategic vision, but implementing that vision with the resources it has is a different story.

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