

# U.S. NUCLEAR DETERRENCE POLICY

## TODAY'S STRATEGIC ENVIRONMENT: INCREASINGLY COMPLEX AND DANGEROUS

For decades, the United States led the world in efforts to reduce the role and number of nuclear weapons. Successive treaties enabled reductions in accountable strategic U.S. nuclear warheads, first to 6,000, and ultimately to 1,550. Thousands of shorter-range nuclear weapons not covered by any treaty were almost entirely eliminated from the U.S. nuclear arsenal. Overall, the U.S. nuclear weapons stockpile has drawn down by more than 85 percent from its Cold War high. Many hoped conditions had been set for even deeper reductions in global nuclear arsenals.

Unfortunately, the United States and our allies now face a security environment with increased complexity and worsening strategic threats. Today's central challenge to our security is the reemergence of long-term strategic competition with Russia and China. While the United States has focused on maintaining its existing nuclear systems, Russia and China have increased the role of nuclear weapons in their strategies and have been actively increasing the size and sophistication of their nuclear forces. Further, North Korea's nuclear capabilities threaten our allies and homeland and add to an already complex strategic picture.

★ **RUSSIA** has been developing, testing, and fielding new systems for its nuclear triad over the past decade. This includes new road-mobile and silo-based ICBMs, ballistic missile submarines and missiles, bomber aircraft, and cruise missiles. Russia is also actively testing never-before-seen nuclear weapon capabilities, such as hypersonic glide vehicles, nuclear-powered cruise missiles, and nuclear-powered unmanned underwater vehicles.

★ **CHINA** is developing, testing, and fielding new generations of land-based ballistic missiles, increasing the range of its submarine-launched ballistic missiles, and pursuing a new bomber. China is also expending significant resources on advanced nuclear-capable systems and hypersonic vehicles.

★ **NORTH KOREA** has conducted six increasingly sophisticated nuclear tests and three ICBM flight tests that demonstrated its ability to strike the U.S. homeland.

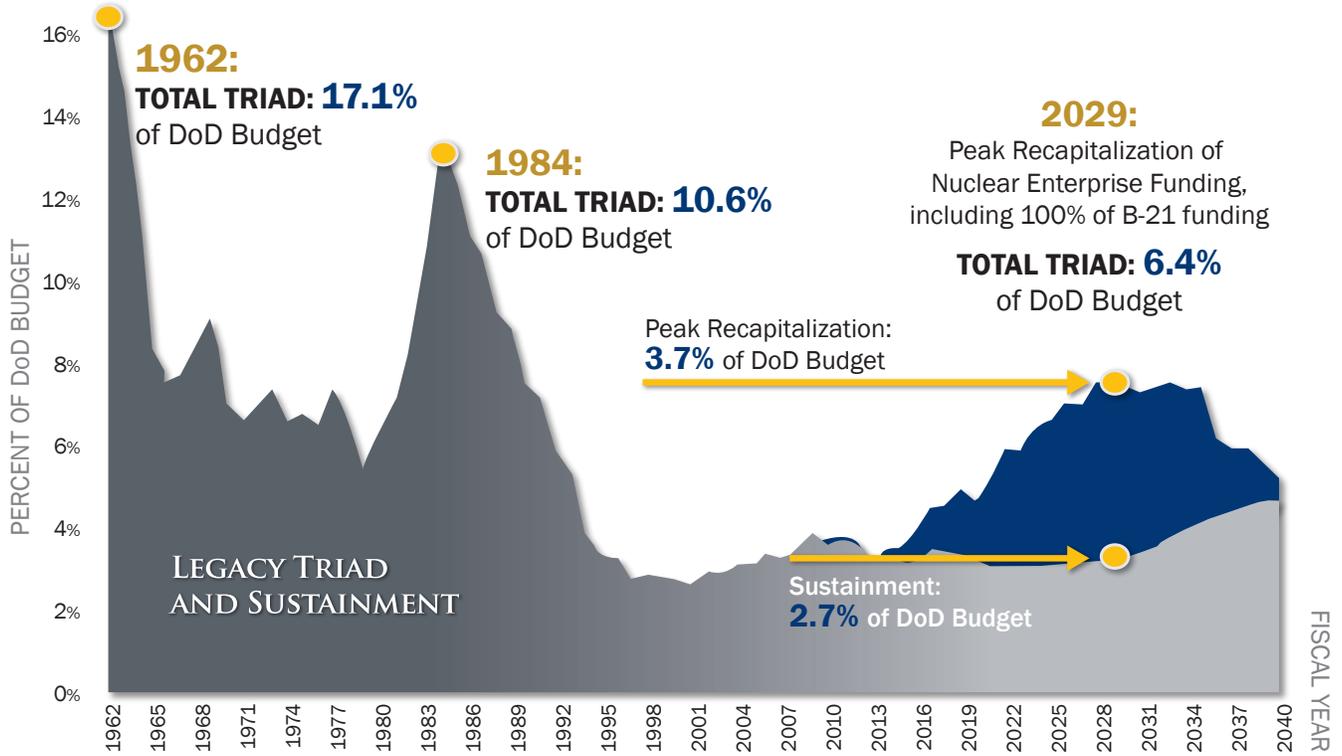
## NUCLEAR DETERRENCE IS THE BEDROCK OF U.S. NATIONAL SECURITY

Given the strategic environment, nuclear deterrence is more important now than at any time since the end of the Cold War. A potential nuclear attack against the United States and its allies is the most serious threat to our security. Our nuclear arsenal is the nation's ultimate insurance policy against such an attack. Nuclear forces, along with our conventional forces and other instruments of national power, also help prevent competition and conflict from escalating to large-scale conventional warfare. For these reasons, nuclear deterrence is the #1 priority mission of the Department of Defense.

For any President, the use of nuclear weapons is contemplated only in the most extreme circumstances to protect our vital interests and those of our allies and partners. Effective deterrence requires a credible nuclear posture—a credibility based on effective nuclear capabilities and the resolve to use them if required. Our nuclear posture does not imply we seek to fight or win a nuclear war, but rather strengthens deterrence and helps ensure nuclear weapons are never employed.

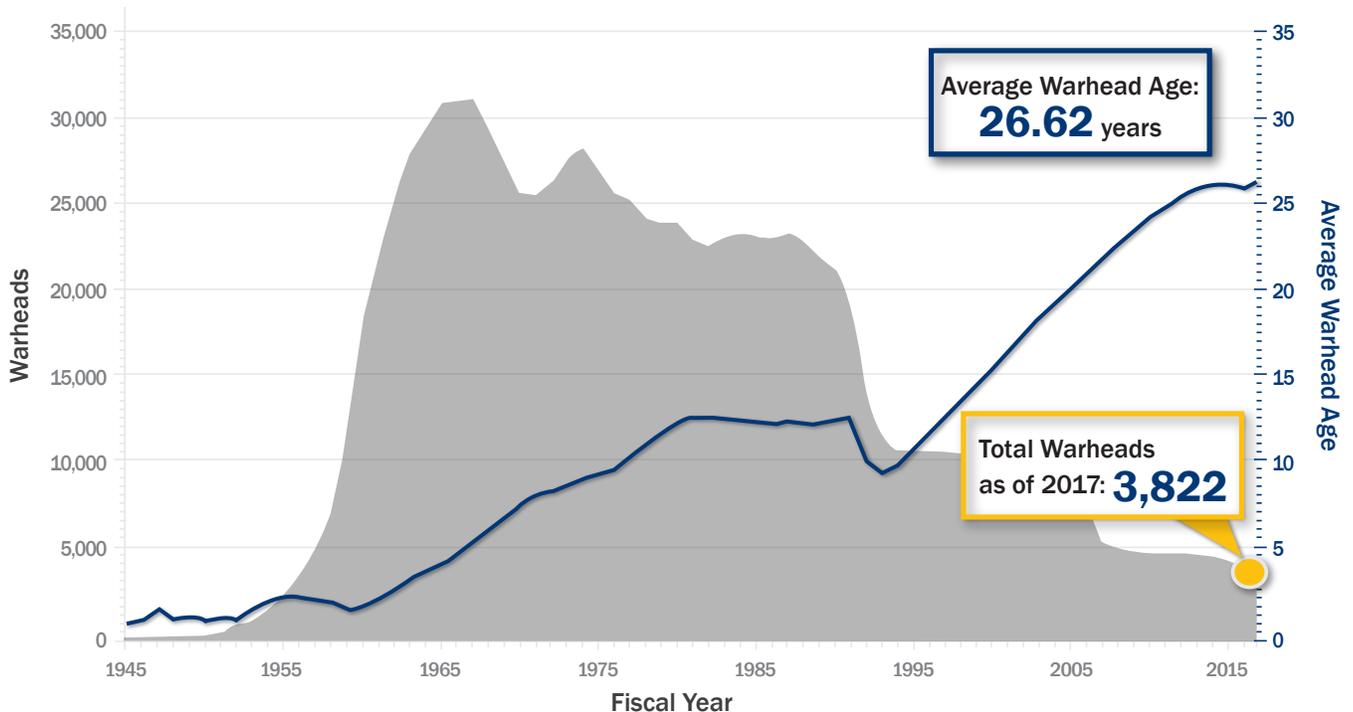


## DoD NUCLEAR ENTERPRISE FUNDING



**REPLACING THE TRIAD WILL COST 3.7% OF THE DOD BUDGET AT ITS PEAK**

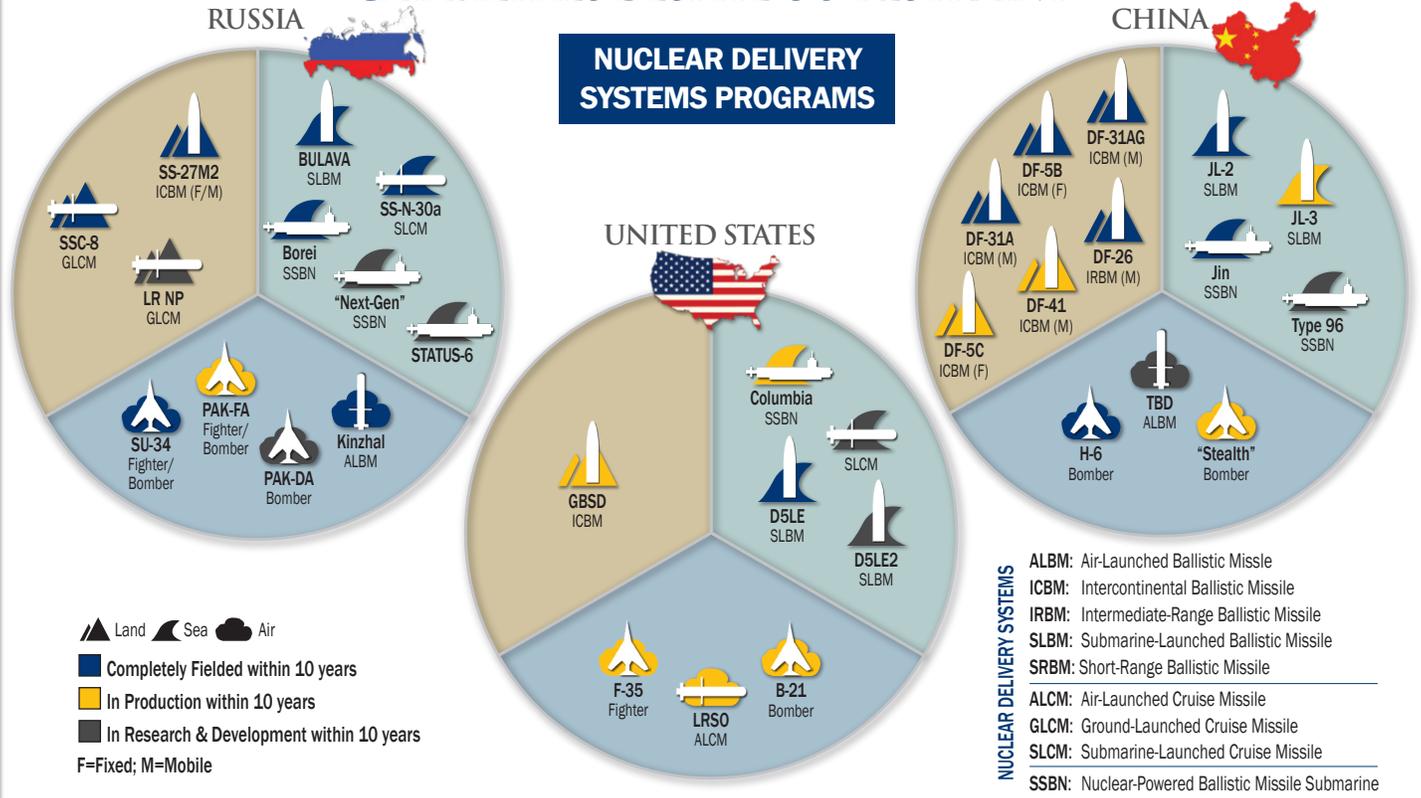
## SIZE AND AGE OF THE U.S. NUCLEAR WEAPONS STOCKPILE, 1945-2017



**U.S. NUCLEAR ARSENAL REDUCED BY 85% SINCE END OF COLD WAR**

# RUSSIA AND CHINA ARE EXPANDING THEIR NUCLEAR CAPABILITIES DESPITE U.S. RESTRAINT

## NUCLEAR DELIVERY SYSTEMS PROGRAMS



## FY 2020 BUDGET REQUEST FOR NUCLEAR FORCES HIGHLIGHTS (PROCUREMENT, RDT&E, AND MILCON)

PROGRAM	FY2020	FYDP (2020-24)	INITIAL FIELDING
F-35 Dual-Capable Aircraft (certification)	\$71M	\$246M	FY2024
B-21 Strategic Bomber	\$3B	\$20.1B	Mid-2020s
Ground Based Strategic Deterrent (GBSD) ICBM	\$678M	\$11.3B	FY2029
B61-12 Tailkit Assembly	\$108M	\$157M	-
Long Range Standoff (LRSO) Cruise Missile	\$713M	\$2.4B	Early-2030s
Columbia Class SSBN	\$2.2B	\$20.2B	FY 2031
Low-yield Ballistic Missile	\$19.6M	--	-
Sea-launched Cruise Missile	\$5M	\$5M	TBD

After 25 years of primarily sustaining our Cold War-era systems as we steadily reduced their number, recapitalizing U.S. nuclear forces will require an increase in spending over the next 20 years. Most of the nation's nuclear delivery systems, built in the 1980s and prior, will reach their end-of-service life in the 2025-2035 timeframe and cannot be sustained further. If not recapitalized, these forces will age into obsolescence. Our choice is not between replacing our Cold War systems or keeping them, but between replacing them or losing them altogether.

WARHEADS	FIRST PRODUCTION UNIT (FY)
W76-1 (SLBM)	Complete
W76-2 (SLBM)	FY2019
B61-12 (Bomber/DCA)	FY2020
W88 Alt 370 (SLBM)	FY2020
W80-4 (LRSO)	FY2025
W87-1 (ICBM)	FY2030

### RUSSIAN NON-STRATEGIC NUCLEAR WEAPONS

Russia has approximately 2,000 non-strategic nuclear weapons—of over a dozen different types—including nuclear torpedoes, nuclear air and missile defenses, nuclear depth charges, nuclear landmines, and nuclear artillery shells. None of these are limited by any arms control treaty. In contrast, the U.S. retains a small number of just one type—the B61 nuclear gravity bomb.



# U.S. NUCLEAR WEAPONS CLAIMS AND RESPONSES

## NO FIRST USE

**CLAIM.** Adopting a no-first-use policy avoids miscalculation and reduces the likelihood of nuclear war.

**RESPONSE.** A no-first-use policy could invite attack or coercion and incentivize U.S. allies to pursue their own nuclear weapons. Such a policy increases the risk of nuclear war by changing how adversaries and allies view the credibility of the U.S. nuclear deterrent and our resolve to use it when threatened. It would undermine the U.S. nuclear umbrella we extend to our allies and signal to potential adversaries that the U.S. may not defend our allies and vital interests with every means at our disposal.

## LOW-YIELD SUBMARINE LAUNCHED BALLISTIC MISSILE (SLBM) WARHEAD (W76-2)

**CLAIM.** The W76-2 warhead will lower the threshold for nuclear use.

**RESPONSE.** By providing the U.S. an assured ability to respond in kind to a low-yield nuclear attack, the W76-2 discourages an adversary from pursuing such an attack and therefore strengthens deterrence. Having credible response options to a nuclear attack of any magnitude ensures no adversary mistakenly believes the U.S. would be deterred from responding to a low-level nuclear attack for fear of escalation. Although low-yield capabilities are not new, the W76-2 strengthens deterrence by ensuring these options remain effective in the face of improving air and missile defense capabilities. By deploying the W76-2, we deter the use of low-yield weapons by adversaries and help ensure conflict is prevented in the first place.

## ARMS RACE

**CLAIM.** The U.S. is creating—or accelerating—an arms race by pursuing its nuclear modernization program.

**RESPONSE.** The U.S. is not engaging in an arms race. It is replacing aging, Cold War-era systems with modern systems—largely on a one-for-one basis. Our current nuclear forces deterred war for decades, but are well beyond their original design lives. While Russia and China have been developing and fielding new nuclear capabilities for a decade, the U.S. has focused on maintaining its existing systems. To ensure the continued credibility of the U.S. nuclear deterrent, our nuclear forces must be modernized or they will become ineffective.

## THE TRIAD

**CLAIM.** The ability of U.S. ICBMs to quickly respond to an attack is dangerous and risks miscalculation or accidental launch. We should eliminate ICBMs and rely on submarines and bombers.

**RESPONSE.** Eliminating or de-alerting ICBMs may create incentives for adversaries to attempt a first strike. U.S. nuclear forces—including our ICBM force—are configured to maximize their deterrent effect and minimize the possibility of accident or mistake. The three legs of the U.S. nuclear triad are complementary, with each component offering unique strengths. Together, the triad ensures the U.S. can effectively withstand and respond to any attack. Tightly controlled command and control means that ICBMs, like all U.S. nuclear weapons, can only be launched upon direction from the President. And with 400 deployed ICBMs, no adversary can disarm the U.S. nuclear deterrent without attacking hundreds of targets simultaneously—helping ensure no adversary is tempted to try.

## THE COST AND SCOPE OF NUCLEAR FORCES

**CLAIM.** The U.S. nuclear modernization plan is unaffordable and needs to be scaled back to only what we need. We need a more narrow and sensible approach to nuclear deterrence.

**RESPONSE.** The U.S. has reduced the size of its nuclear weapons stockpile by 85% from its Cold War high, has eliminated many types of nuclear weapons entirely, and spends less than 3% of DoD's budget on sustaining its nuclear forces. The annual cost for modernizing and sustaining our nuclear forces will peak at 6.4% of the DoD budget in 2029. The U.S. has only what it needs for a credible nuclear deterrent, and has no plans to pursue certain exotic nuclear capabilities still fielded by Russia. Our posture and modernization program reflect much more continuity than change. Nuclear attack is the only existential threat to the U.S.—we can afford to spend a small fraction of our military budget to deter it.

## ARMS CONTROL

**CLAIM.** The Administration opposes arms control, is unwilling to pursue new arms control agreements, and is undermining existing agreements.

**RESPONSE.** The U.S. has always desired and pursued arms control that enhances the security of the U.S. and its allies—this policy has not changed. Arms control can be an effective tool for managing competition and reducing risk of war. The United States remains committed to pursuing verifiable measures that effectively promote our security, but believes that remaining in treaties that are brazenly violated by the other parties, or do not otherwise contribute to peace or security, only increases the risk of miscalculation and conflict.