

Nuclear Weapons Budget Fact Sheet

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Reducing Department of Defense Nuclear Weapons Spending

On Jan. 5, President Obama and Defense Secretary Panetta unveiled a new military strategy to guide a \$487 billion reduction in defense spending over the next decade. The strategy document states that “It is possible that our deterrence goals can be achieved with a smaller nuclear force, which would reduce the number of nuclear weapons in our inventory as well as their role in U.S. national security strategy.”¹

Current Pentagon plans call for building 12 new nuclear-armed submarines to carry more than 1,000 nuclear warheads into the 2070s, at a total cost of almost \$350 billion; a new fleet of strategic bombers that will cost at least \$68 billion; a new ground-based ballistic missile; and more.

That’s more than the United States can afford or needs in the 21st century. As Gen. James Cartwright, then-vice chairman of the Joint Chiefs of Staff, said in July, “The challenge here is that we have to recapitalize all three legs [of the nuclear triad], and we don’t have the money to do it.”

Below are recommendations for how the United States can save roughly \$36 billion over the next decade from the submarine and bomber programs while still maintaining a formidable nuclear force.

1. Rightsizing the Strategic Submarine Fleet

Rightsizing the U.S. ballistic missile submarine fleet from 12 to eight operational boats would save roughly \$18 billion over 10 years and still allow the Pentagon to deploy the same number of sea-based warheads as planned under New START.

The Navy plans to purchase 12 new submarines, the SSBNX, to replace the current Ohio class fleet. Procurement of the first SSBNX was originally scheduled for 2019 but in January, Secretary of Defense Leon Panetta announced a

two-year delay, pushing back the first purchase to 2021. With this delay, the U.S. will deploy 10 submarines between 2030 and 2040, as Ohio class submarines are replaced by new SSBNX boats (see Table 1).



A fleet of eight strategic submarines would allow the Pentagon to deploy more than 1,000 nuclear warheads at sea, the same number as planned under New START.

The SSBNX program would cost \$347 billion over its lifetime (roughly \$29 billion per boat), according to the Pentagon, including operations and maintenance.² According to the Congressional Budget Office, the procurement of the first submarine would cost \$13.3 billion and each thereafter would cost \$6.5 billion,³ although the Pentagon is trying to lower these costs. Each SSBNX is planned to carry 16 Trident II D5 missiles.

Shifting to eight submarines would save at least \$18 billion over ten years

- Shifting from 12 to eight currently operational (plus two in overhaul) Ohio class submarines would save at least \$3.15 billion in operating costs.
- Shifting from 12 to eight new SSBNX submarines would save \$13.3 billion in procurement costs over the next ten years. Procurement of the first SSBNX submarine can be delayed from 2021 until 2023 because an eight-boat Ohio class fleet would not require replacements for retiring ships until 2033, saving \$13.3 billion.
- An additional \$2 billion in research and development is likely to be saved over the next 10 years by delaying the replacement program.

Shifting from 12 to eight submarines would save \$122 billion over the 50-year lifecycle of the ballistic missile submarine program

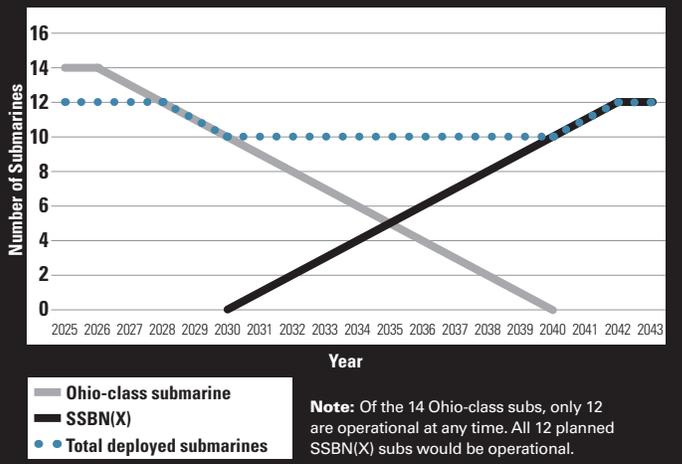
- Deploying eight Ohio class submarines over the duration of their lifecycles saves nearly \$5.8 billion, including personnel costs.
- Procurement and operations costs for eight SSBNX submarines would save \$116 billion over the lifecycle of the program (see Table 2).

A fleet of eight strategic submarines would allow the Pentagon to deploy more than 1,000 nuclear warheads at sea, the same number as planned under New START

- Eight Ohio class submarines (24 missiles each) can carry 192 Trident II D5 missiles, with up to 1,536 warheads.
- Eight SSBNX submarines (16 missiles each) can carry 128 Trident II D5 missiles with up to 1,024 warheads.

Eight submarines provide an adequate deterrent
 From a national security perspective, a shift to eight strategic submarines would provide a more than adequate nuclear deterrent. Under the New START Treaty, which entered into force in February 2011, the Pentagon

Table 1: Planned U.S. Ballistic Missile Submarine Deployment



Source: U.S. Department of the Navy fiscal year 2013 budget request.

plans to deploy approximately 1,000 nuclear warheads on strategic submarines. Eight fully armed Ohio class or SSBNX submarines can meet this target. Therefore, a shift to eight operational submarines would not affect the Pentagon's planned warhead deployment levels.

This budget-saving approach takes advantage of the excess capacity that currently exists on each D-5 missile (which is designed to hold eight warheads but is currently loaded with four or five). Although each missile and submarine would carry more warheads under this plan, the submarines—unlike land-based missiles—would still be invulnerable to attack when deployed at sea.

An Office of Management and Budget (OMB) analysis in November 2011 reportedly recommended

Table 2: Eight SSBNX Submarines: Same Fire Power for \$116 Billion Less

	Maximum Warhead Capacity	First SSBNX Purchased	10 Year Procurement Costs	Total Lifecycle Costs
12 SSBNX Plan	1,536	2021	\$13.3 B	\$347 B
8 SSBNX Plan	1,024	2023	0	\$231 B
Budget Savings			\$13.3 B	\$116 B

Sea-based warheads planned under New START: ~1,000

that the Navy should purchase only 10 submarines and increase the number of missile tubes from 16 to 20 on each boat.⁴ Congress has directed the Navy to prepare a report on more economical options for the new fleet, to be completed by mid-2012.⁵

2. Delaying the New Strategic Bomber

Delaying the new bomber would save \$18 billion over 10 years and still allow the Pentagon to deploy the same number of bombers as planned under New START.

The new long-range bomber is the next nuclear-capable bomber being developed by the Air Force. The current nuclear-capable bomber force is composed of 91 B-52Hs and 20 B-2s.⁶ The Air Force plans to keep the current bombers in service into the 2040s and beyond. There is no rush to develop a new bomber, and the program can be delayed into the 2020s. Sen. Tom Coburn's (R-Okla.) July 2011 "Back in Black" deficit reduction plan also recommends delaying the new bomber.

Delaying the new bomber would save \$18 billion over the next ten years

- The Air Force plans to spend \$18 billion in research and development for the new bomber over the next ten years, according to the Pentagon.⁷ There are no procurement plans in this timeframe.

Canceling the bomber would save roughly \$68 billion over the next thirty years

- The Air Force plans to purchase between 80-100 new bombers at an estimated per unit cost of \$550 million,⁸ or roughly \$50 billion.
- Cancelling the new bomber also would save \$18 billion in research and development costs.
- Additional costs accrued from operations and maintenance of the bomber would also be saved, but cannot be estimated at this time given that the program is still in its early stages.

The Pentagon's plan to deploy 60 strategic bombers under New START will be achieved using existing bombers

- The current fleet of strategic bombers is not scheduled for retirement until 2040 for the B-52 and 2058 for the B-2.
- The Pentagon plans to spend more than \$4 billion to refurbish and extend the life of the B-52s and B-2s over the next four years.
- The Office of Management and Budget initially cancelled the new bomber program because the current fleet was performing well and was able to meet foreseeable future threats.

Background

The bomber component of the U.S. nuclear triad is currently composed of 91 B-52Hs and 20 B-2s. From FY 2001-2010, Congress appropriated over \$6 billion to refurbish and extend the life of the B-52 and B-2. From FY 2013-2017, the Pentagon plans to request an additional \$4.2 billion for this purpose.

Due to the early nature of the new bomber program, estimated costs are uncertain. According to the Fiscal Year 2013 Department of Defense Budget request overview, the bomber will be optionally manned. The Air Force also has indicated that early aircraft may not be certified as nuclear-capable.

The 2012 Aircraft Procurement Plan estimates the



The new bomber program should be delayed for at least the next decade, saving \$18 billion over the next ten years.

cost of 80-100 bombers at \$40-60 billion, with an average per unit cost of \$550 million. Air Force Chief of Staff General Norton Schwartz made a statement on Feb. 29, 2012, that the \$550 million per unit cost is the upper ceiling. Schwartz said if the cost rises above that “we don’t get a program.”

The 2012 Plan, which lays out aircraft procurement through 2021, does not include any purchases of the new bomber, and costs within the next ten years almost certainly would be for research and development only. The Air Force plans to spend \$18 billion on the program over the next ten years.

The incoming Obama administration initially cancelled the new bomber program in its FY2010 budget request. At the time, the Office of Management and Budget (OMB) decided not to pursue a new bomber “because the current fleet is performing well” and “as a result of ongoing efforts to upgrade the existing bomber fleet with new electronic and weapons systems, current aircraft will be able to meet the threats expected in the foreseeable future.” OMB found “no urgent need to begin an expensive development program for a new bomber,” and said that the Pentagon would take its time to “develop a better understanding of the requirement and to develop the technologies most suitable for a long-range bomber.”

Potential Budget Savings

OMB’s conclusions from 2010 are still true today. The new bomber program should be delayed for at least the next decade, saving \$18 billion over the next ten years.

Postponing development would allow more time to better define the program. Many of the specifications are yet to be decided upon, and delay would allow for further consideration as to how the new bomber could best meet national security needs as part of the nuclear triad or as a conventional bomber within the Air Force fleet. Part of that deliberation would involve addressing concerns raised in July by then-Vice Chairman of

the Joint Chiefs of Staff Gen. James Cartwright. “I’m worried that what we’re doing is kind of pricing ourselves out of the market,” Gen. Cartwright said, “at least in the [bomber acquisition] approach that we’re taking.”

Moreover, the Obama administration is currently undertaking a review of U.S. nuclear weapons targeting policy, and one of the issues on the table is whether to keep all three legs of the nuclear triad, or to phase out long-range bombers from the nuclear mission. The outcome of this process could have significant implications for the new bomber program. As Gen. Cartwright noted in July, “we haven’t really exercised that mental gymnastics, the intellectual capital, on that [what is required for deterrence] yet... I’m pleased that it’s starting, but I wouldn’t be in favor of building too much until we had that discussion.”

ENDNOTES

1. Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, Department of Defense, January 2012, p. 5.
2. Christopher Castelli, defenseneewsstand.com, “New Nuclear Subs Will Cost \$347 Billion to Acquire, Operate” February 16, 2011.
3. Congressional Budget Office, “An Analysis of the Navy’s Fiscal Year 2012 Shipbuilding Plan” June, 2011.
4. Colin Clark, AOL Defense, “OMB Pushes More Tubes, Fewer Boats for Ohio Replacement Subs,” Nov. 4, 2011. <http://defense.aol.com/2011/11/04/omb-pushes-more-tubes-fewer-boats-for-ohio-replacement-subs/>
5. National Defense Authorization Act for FY 2012, sec. 242.
6. New START Treaty Aggregate Numbers of Strategic Offensive Arms, State Department Fact Sheet, Dec. 1, 2011. <http://www.state.gov/t/avc/rls/178058.htm>
7. Letter from Secretary of Defense Leon Panetta to Senator John McCain and Lindsay Graham on the economic effects of sequestration. http://mccain.senate.gov/public/index.cfm?FuseAction=PressOffice.PressReleases&ContentRecord_id=a4074315-fd3e-2e65-2330-62b95da3b0e9
8. Aircraft Procurement Plan, Fiscal Years (FY) 2012-2041. http://www.airforce-magazine.com/SiteCollectionDocuments/Reports/2011/May%202011/Day25/AircraftProctPlan2012-2041_052511.pdf
9. Office of Management and Budget. “Terminations, Reductions, and Savings: FY2010 U.S. Budget,” <http://www.gpoaccess.gov/usbudget/fy10/pdf/trs.pdf>.

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