

Building Budgetary Transparency and Accountability for the US Nuclear Weapons Program

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Why Don't We Know What We Spend?

For the more than 68 years the US nuclear weapons program has existed, there has never been an official comprehensive accounting of its expenditures, either an annual or cumulative basis. Neither has Congress demanded such an accounting as a prerequisite for future funding.

- When the AEC sought to present its first budget to Congress in 1947, chairman **David Lilienthal** lamented the inability to justify the request because “we did have a set of books showing costs, since the Army’s Manhattan District didn’t have or keep any.” When the situation had not improved three years later, **Representative Francis Case** (R-SD) admonished the AEC: “No other agency of the Government has been able to get by the Appropriations Committee with the lax presentation of detailed estimates that the [AEC] has. No other agency of the Government, so far as I know, has been able to come up and cloak itself with the aura of a scientific subject and get by with such general justifications.” In 1952, AEC Commissioner **T. Keith Glennan** warned his colleagues that the agency was then spending more than \$100 million a month (about \$940 million today) yet, “I am continuously at sea as to the

status of our budgets, of our expenditures and particularly of any real basis for judging the quality of the financial performance of our various offices.”

- In 1950, **Senator Brien McMahon** (R-CN), chairman of the powerful Joint Committee on Atomic Energy (JCAE) and a vigorous proponent of an accelerated nuclear weapons program, grew concerned that insufficient funding was being allocated to nuclear armaments, even though the “cost of military fire power based upon atomic bombs is hundreds of times cheaper, dollar for dollar, than conventional explosives.” An analysis by committee staff indicated that just three cents out of each military spending dollar was being expended on atomic bombs (a figure derived by looking at the AEC’s budgets alone and *excluding* any of the significantly larger expenditures by the military itself, which were then one quarter to one third of the entire DOD budget). In September 1951, McMahon introduced a resolution calling on the United States to “go all-out in atomic development and production.” (One day after this speech, on September 19, 1951, McMahon was finally briefed by the AEC for the first time on the size and disposition of the US nuclear stockpile.) McMahon’s efforts alarmed some military officials. As an official Air Force history of the period records, the resolution “focused attention on the fact that *there existed no itemized record of the military expenditures, either direct or indirect, for the atomic energy program.*” The Air Force, at the request of the DOD controller, began to compile data to disprove McMahon but: “At once it became apparent that it was difficult to draw sharp lines between those activities which pertain to the atomic energy program and those which were outside its limits. This lack of clarity was one of several factors which made it impossible to arrive at exact

sums either spent or to be spent for atomic energy.” Although the secretary of defense directed the services to show nuclear costs itemized and broken out in its fiscal 1954 budget, Air Force officials continued to find the exercise “inherently impossible” given the overlap between programs, the scope of the effort, and the fact that nuclear weapons were not a discrete budgetary category. Having demonstrated to the JCAE that the military was hardly lackadaisical in its atomic endeavors, the effort to provide a clear accounting was discontinued. Nevertheless, even the broad estimates it produced are revealing. They show, among other things, that the first \$1 trillion on nuclear weapons was spent within fifteen years of the end of World War II.

- Although most in Congress were relatively complacent about the high costs of nuclear weapons (not least because those costs were never fully presented to or understood by them), some members occasionally voiced concern and frustration. On May 24, 1957, **Representative Errett P. Scrivner** (R-KS), a leading member of the House Appropriations Committee, called for some explanation—either by the Defense Department or “perhaps some outsiders”—of the current and long-term costs of nuclear weapons: “One plane today can carry more potential death and destruction by 1 drop in 1 bomb than all of the planes carried in all of the sorties during all of World War II in both the Pacific and the Atlantic. . . . Somebody ought to tell us how much it is going to cost to deliver a megaton bomb, whether it is an atom bomb or a hydrogen bomb, by missile, by bomber, by carrier, by submarine. Somewhere, some place, there ought to be an answer as to which is the best and the most economical method. You know and I know that all of our services cannot be

kept perpetually at peak effort to fight an atomic war all the time, one which may never come. . . . When you see some of these figures for a 10-year program I would expect your hair to sizzle.”

- In February 1960, recently retired army chief of staff, **General Maxwell D. Taylor**, testified before a Senate subcommittee that the DOD made little effort to assess its over- all needs and that both its planning and budgeting were haphazard: “We never look at our forces; we never build our forces in a budget sense in terms of military functions such as atomic retaliation, limited war capability, antisubmarine warfare, continental air defense. We don’t case our books in that form. So as a result, I never know, and I doubt personally that anyone knows, exactly what we are buying with our budget.”
- This began to change in 1961, when Secretary of Defense **Robert McNamara** introduced the Five-Year (now Future Years) Defense Program and assigned unique program element numbers to every major program in the DOD budget. Building on a system that previously grouped programs by service, McNamara created a set of eleven Major Force Programs (MFPs). For the first time, officials were able to make accurate, long-range forecasts of budgetary expenses and assess historical trends. Still, no provision was made to account for nuclear weapons as a separate category. The closest approximation comes from MFP 1, Strategic Forces. But MFP 1 does not include: tactical nuclear weapons; most research and development costs for delivery systems and supporting equipment; airlift and sealift costs for strategic and tactical nuclear weapons programs; most centralized command, control, communications, and intelligence programs associated with nuclear weapons; some training; most

overhead and support costs; nuclear-related civil defense efforts; and the costs of monitoring, verifying, and complying with various nuclear arms control and reduction agreements. And today, MFP 1 includes most costs associated with strategic bombers, even though those aircraft now fulfill an increasingly conventional role.

- On May 3, 1962, **President John F. Kennedy**, during a meeting on nuclear weapons requirements, “stressed the extreme importance of holding down expenditures and requests for additional appropriations” even as a large nuclear buildup was well underway, and called on the Bureau of the Budget, in cooperation with the Secretary of Defense, to develop a procedure for compiling “a statement of the costs of nuclear weapons provided for the national defense, including both the cost of delivery systems provided in the Defense budget and costs of weapons funded in the budget of the Atomic Energy Commission.” Despite a direct presidential request, no such procedure was ever developed.

Why Does This Matter?

There are many reasons why the US nuclear weapons program has consumed at least \$8.7 trillion in FY 2010 dollars since its inception and why it grew as large as it did, as quickly as it did, from a handful of hand-built weapons in 1945 to 31,255 advanced warheads and bombs 22 years later (or, to put it another way, from a total explosive yield of 40 kilotons in 1945 to a peak of nearly 20,500 megatons in 1960, equivalent to *1.7 million* Hiroshima-sized bombs): perceptions of the Soviet and Chinese threat, the indeterminate nature of deterrence, redundant targeting, technological advances and obsolescence, interservice

and inter-laboratory rivalry, nuclear weapons as “free goods” for the military services, pork barrel politics, corporate lobbying, secrecy, political considerations, and arbitrary decision making, to name a few. But the profound lack of financial accountability and transparency from the very beginning was a critical factor.

The entire rationale behind Sen. McMahon’s call for an “all out” nuclear weapons program in 1951—as well as the Eisenhower’s subsequent “New Look” approach—was that nuclear weapons were significantly less expensive than conventional ones. McMahon, Eisenhower, and others strongly believed that the United States could not compete with the Soviet Union on the conventional level without risking a national economic collapse. In a 1951 floor speech, McMahon said: “Money spent upon the atomic bomb could pulverize a dozen enemy war plants at no more expense than destroying a single plant with TNT, to say nothing of the fact that one plane can deliver one A-bomb as against the huge armadas needed to deliver an equivalent cargo of blockbusters. . . . If we mass-produce this weapon, as we can, I solemnly say to the Senate that the cost of a single atomic bomb will become less than the cost of a single tank.” According to McMahon, relying on nuclear weapons would be economically advantageous because “in all logic and common sense, an atomic army and an atomic navy and an atomic air force ought to mean fewer men under arms. They ought to mean a major reduction in the tens of billions of dollars we would otherwise spend upon stacks and stacks of conventional armaments. They ought to mean a sloughing off of outmoded operations and outdated expenses.”

Even after the Army conducted two-sided war games during the winter of 1952-53 and discovered, in the words of the commander of the Seventh Army Corps, General James M.

Gavin, that “*more* rather than less manpower would be required to fight a nuclear war successfully” (findings that were confirmed in subsequent war games in 1955 and 1958), the nuclear buildup based on the assumption of “a bigger bang for a buck” continued. The lack of readily available data to validate or disprove that assumption, along with a surprising lack of inquisitiveness on the part of government and military leaders across the board, enabled this approach to continue far longer than might otherwise have been the case. Far from being inexpensive, nuclear weapons consumed 29 percent of all military spending and almost 11 percent of all government expenditures from 1940-1996. Nuclear weapons were the third largest government program, after all non-nuclear national defense and social security, and just ahead of income security, or welfare spending.

Neither is this just ancient history. For several years in the mid-1990s, the DOD produced two charts in the annual report of the secretary of defense purporting to show total expenditures on strategic nuclear weapons, over time and as a percentage of the entire DOD budget. But these charts were highly misleading, in that they only counted the readily available but incomplete costs found in MFP 1. The charts in the 1999 report showed total strategic costs falling from \$18 billion in 1990 to less than \$6 billion in 1999, while their percentage decreased from a little over six percent to a little more than two percent over the same period of time (in reality, the costs and percentage were at least three times higher). It might be a coincidence, but after *Atomic Audit* was published in mid-1998 and we challenged these figures by pointing out how much they excluded, they disappeared from the reports.

This matters today because the weapons we still have, and our assumptions about them, are all colored by what has come before. Although the total size of the nuclear stockpile has declined significantly over the last 20 years, and while nuclear weapons now account for some seven percent of the DOD budget (versus 67 percent of the DOE budget), until recently most observers expected spending on both delivery systems and warheads to increase over the next decade by almost \$200 billion as a consequence of the ratification of the New START agreement. But the new financial outlook brought on by the state of the economy and the Tea Party's insistence on cutting deeply into government spending to reduce the budget deficit has upended budgetary assumptions across the board. Among the more radical approaches is Sen. Tom Coburn's (R-OK) proposal to slice \$79 billion out of nuclear delivery systems over 10 years. In July, the House passed a bill cutting \$100 million from the budget for a new plutonium processing plant at Los Alamos, and zeroing out funding an associated waste facility, after raising concerns about their necessity and safety. And the Senate Energy and Water Development appropriations subcommittee just cut the administration's requests for nuclear weapons by about \$400 million and nonproliferation and threat reduction programs by \$167 million (the amounts approved, however, still mark an increase over FY11 funding).

Budgetary transparency and accountability is a particular problem for the DOD. At least 65 percent of all US nuclear weapons and weapons-related spending (\$34 billion) flows through DOD. Not only are there few good numbers available from DOD about what it spends on nuclear weapons, but what numbers there are can be inconsistent and contradictory. Ask what it costs, for example, to operate the Trident submarine fleet, and

you're likely to get different answers from the submarine base, submarine command, Chief of Naval Operations, US Strategic Command, and the DOD.

Financial ignorance impedes accountability and facilitates waste. We can no longer afford this, in the literal sense. The long-term viability of nuclear weapons and weapons-related programs will be jeopardized if this state of affairs is allowed to continue. In a fiscally constrained world, Congress, and the taxpayers it represents, must know what it is paying for.

This applies to threat reduction and incident preparedness programs as well, programs with lower costs but significant benefits. In its frenzy to cut federal spending, Congress may inadvertently scale back or eliminate highly effective programs in these areas. Program managers and supporters need to be able to demonstrate the value of these programs to skeptical lawmakers, but that is difficult to do if one-half of the equation, the costs, is not readily available or well understood.

Significantly, the 1999 Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction, headed by former director of central intelligence, John Deutch, noted, "There is no system for tracking resource expenditures for combating proliferation. Doing so is essential to an effective interagency effort." Consequently: "No one in the Federal Government knows how much money we are spending to combat proliferation. The success of any campaign depends on the resources available to wage it, and on the ways in which those resources are brought to bear.

Currently, however, no one decides what level of resources should be devoted to proliferation-related efforts, there is no overall plan for how those resources should be

allocated and no consistent evaluation of the effectiveness of these expenditures.” If adopted, said the commission, such a system would result in a “more transparent process for tracking the application of resources to their intended purposes.” Twelve years later, we’re still waiting.

How to Fix It

If Congress (and the interested public) had a clear understanding of what it costs to sustain the nuclear arsenal, or of, for example, the annual expenditures required to secure vulnerable nuclear materials in the United States and overseas, we could have a rational and logical discussion about the costs and benefits of these programs. Unfortunately, we do not, which means that rhetoric and assumptions will most likely replace facts when it comes to making important decisions about the future of US nuclear security spending.

My proposal for creating financial transparency and accountability in the nuclear weapons program can be supported by politicians and analysts across the political spectrum.

Proponents of increased spending should support such a measure, not just because it’s good government but also because it will help them monitor spending and support their desire to invest heavily in sustaining the nuclear arsenal and its associated support infrastructure. Similarly, critics of nuclear weapons, and fiscal conservatives, will be better able to identify waste and demonstrate how reductions in the size of the arsenal, or changes in how weapons are deployed, can help reduce costs. And both advocates and critics of various nonproliferation and arms control measures will have new, consistent metrics to gauge the costs of a variety of programs relative to their actual benefits.

Simply put, Congress should pass a law requiring the executive branch to prepare and

submit each year, with the annual budget request, an unclassified and classified accounting of all nuclear weapons and weapons-related spending for the previous fiscal year, the current fiscal year, and the next fiscal year. (There are about a dozen members at present whose statements indicate at least general support for this approach. If such a proposal were attached to a defense authorization or appropriations bill and supported by the leadership, it would pass with little controversy.) As it already does, the DOD should project its nuclear weapons-related spending five or six years into the future. To ensure the bureaucracy does not ignore this, a senior White House official should oversee this annual exercise, in coordination with relevant officials of the Office of Management and Budget and senior budget officials of key departments and agencies.

Once completed, Congress should ask the Government Accountability Office and the Congressional Budget Office to audit the nuclear budget for accuracy and completeness, and then ensure that the executive branch incorporates its recommendations for future years. To the maximum extent possible, this accounting should be unclassified, just like the 2010 Nuclear Posture Review. There is little if any need to keep secret the specific amounts of money being expended for nuclear weapons and weapons-related programs. If the Obama administration can reveal for the first time the total number of nuclear weapons in the arsenal, as it did in May 2010, and if the intelligence community can now declassify its overall annual expenditures, there's no reason why the ongoing cost of these weapons must remain classified, or at least largely inaccessible, even to those inside the government. Executive branch officials will balk, of course, for bureaucratic reasons (It's hard work! It's not my job!), and also because many won't want the nuclear nooks and crannies exposed to

the light of day (for obvious but largely unpersuasive reasons).

Once a framework for identifying and allocating costs is agreed upon (and this will take some time, especially for programs that cross over areas of responsibility), it will be a simple matter to add the new numbers each year. Soon, trends will emerge, which should lead to more insightful and informed debates and rational decisions. At the very least, government officials, and the people they represent and work for, will have a significantly better understanding of what we are spending—and what we can afford—when it comes to allocating scarce funds for nuclear programs. A failure to reform our lax nuclear accounting now could lead to unnecessary and ill-advised cuts in critical programs, and to overall funding levels that jeopardize the sustainability of the stockpile and the weapons production complex, along with related efforts to reduce nuclear threats at home and abroad.

Sixty-six years after the creation of nuclear weapons, why should Congress and the public be continually in the dark about their true costs?
