

Department of Energy's FY 2017 Nuclear Weapons Budget Request

(All numbers in thousands of US dollars)

National Nuclear Security Administration (NNSA is the semi-autonomous nuclear weapons agency with DOE)	<i>FY 2015</i> <i>Enacted</i>	<i>FY 2016</i> <i>Enacted</i>	<i>FY2017</i> <i>Request</i>	<i>FY16-FY17</i> <i>±%</i>
Total Weapons Activities (Planned to increase to \$10.5 billion by FY 2021. In comparison, Cold War annual average was \$5.2 billion.)	8,180,359	8,846,948	9,243,147	4.5%

Directed Stockpile Work (Physical work on the nuclear weapons themselves.)	2,692,588	3,387,792	3,330,527	-1.7%
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Life Extension Programs and Major Alterations (Life extension of existing weapons while giving them new military capabilities)	1,076,986	1,302,532	1,340,341	2.9%
B61 Life Extension Program (World's first nuclear "smart" bomb; soon to begin production)	643,000	643,300	616,079	-4.2%
W76 Life Extension Program (ramping down)	259,168	244,019	222,880	-8.7%
W78/88-1 Life Extension Program (AKA "interoperable" warhead) (Delayed 5 years; the Navy doesn't want it; nevertheless the Los Alamos Lab is tooling up for production of plutonium pits (bomb cores))	0	0	0	-
W88 ALT 370 (high explosives "refresh" & new fuze) (The W88 ALT 370 further undermines the need for the Interoperable Warhead.)	165,400	220,176	281,129	27.7%
W80-4 Life Extension Program (AKA Long Range Standoff (LRSO) nuclear weapon; controversial warhead for new air-launched cruise missile)	0	195,037	220,253	12.9%

Stockpile systems (Nuclear weapons maintenance, including replacement of limited life components)	531,107	482,426	443,676	-8.0%
B61 Stockpile Systems	109,615	52,247	57,313	9.7%
W76 Stockpile Systems	45,728	50,921	38,604	-24.2%
W78 Stockpile Systems	62,703	64,092	56,413	-12.0%
W80 Stockpile Systems	70,610	68,005	64,631	-5.0%
B83 Stockpile Systems	63,136	42,177	41,659	-1.2%
W87 Stockpile Systems	91,255	89,299	81,982	-8.2%
W88 Stockpile Systems	88,060	115,685	103,074	-10.9%

Weapons Dismantlement and Disposition (Obama Administration has averaged around 300 dismantlements per year, less than half its predecessors, with a ~2,500 weapons backlog)	50,000	52,000	68,984	32.7%
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Stockpile Services (Provide capabilities and capacity)	1,034,495	938,580	899,689	-4.1%
Production Support	350,942	447,527	457,043	2.1%
Management, Technology, and Production	226,000	264,994	251,978	-4.9%

Strategic Materials (Nuclear materials to maintain the enduring stockpile)		612,254	577,837	-5.6%
Uranium Sustainment (de-inventory old buildings at Y-12)	-	32,916	20,988	-36.2%
Plutonium Sustainment (Developing Interoperable Warhead pits and conceptual planning for the "Plutonium Modular Approach" for expanded production)	-	174,698	184,970	5.9%
Tritium Sustainment (tritium, a radioactive gas, "boosts" nuclear weapons)		104,600	109,787	5.0%

(All numbers in thousands of US dollars)

NNSA Total Weapons Activities (continued)

	<i>FY 2015 Enacted</i>	<i>FY 2016 Enacted</i>	<i>FY2017 Request</i>	<i>FY16-FY17 ±%</i>
Research, Development, Test and Evaluation	1,766,191	1,818,548	1,854,719	2.0%
(Processes needed to support research and production; formerly called "Campaigns")				
Science (Provide assessments of weapon performance)	412,091	423,059	441,984	4.5%
Advanced Certification	58,747	58,747	58,000	-1.3%
Primary Assessment Technologies	109,000	95,512	99,000	3.7%
Dynamic Materials Properties	109,000	100,400	106,000	5.6%
Advanced Radiography	47,000	45,700	50,500	10.5%
Secondary Assessment Technologies	0	49,800	52,484	5.4%
Engineering (Tools and capabilities necessary to maintain the stockpile)	136,005	131,377	139,487	6.2%
Enhanced Surety	52,003	50,821	37,196	-26.8%
Inertial Confinement Fusion Ignition & High Yield	512,895	511,050	522,959	2.3%
(Validation of nuclear weapons design codes)				
Ignition (the National Ignition Facility failed to meet its 2012 ignition goal)	77,994	76,334	75,432	-1.2%
Support of Other Stockpile Programs	23,598	22,843	23,363	2.3%
Diagnostics, Cryogenics and Experimental Support	61,297	58,587	68,696	17.3%
Facility Ops and Target Production (NIF, OMEGA, & Z)	335,882	339,423	340,360	0.3%
Advanced Simulation and Computing Campaign	598,000	623,006	663,184	6.4%
(Computer simulation of nuclear explosions)				
Advanced Manufacturing Development	107,200	130,056	87,105	-40.1%
(Development of new manufacturing and production capabilities)				
Component Manufacturing Development	75,000	99,656	46,583	-70.8%
Infrastructure and Operations	2,033,400	2,279,124	2,721,952	19.4%
Operating	1,608,400	1,568,015	1,895,282	20.9%
Operations of Facilities	896,000	830,790	824,000	-0.8%
Kansas City National Security Campus	125,000	100,250	101,000	0.7%
Lawrence Livermore National Laboratory	71,000	70,671	70,500	-0.2%
Los Alamos National Laboratory (LANL)	198,000	196,460	196,500	0.0%
Nevada National Security Site	89,000	89,000	92,500	3.9%
Pantex	75,000	58,021	55,000	-5.2%
Sandia National Laboratory	106,000	115,300	118,000	2.3%
Savannah River Site	81,000	80,463	83,500	3.8%
Y-12 National Security Complex	151,000	120,625	107,000	-11.3%
Safety and Environmental Operations	-	107,701	110,000	2.1%
Maintenance and Repair of Facilities	227,000	277,000	294,000	6.1%
Recapitalization (deferred maintenance; transfer of Kansas City Plant)	224,600	352,524	667,282	89.3%
Infrastructure and Safety	-	253,724	554,643	118.6%
Capability Based Investments	-	98,800	112,639	14.0%

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(All numbers in thousands of US dollars)

NNSA Total Weapons Activities (continued)

	<i>FY 2015</i> <i>Enacted</i>	<i>FY 2016</i> <i>Enacted</i>	<i>FY2017</i> <i>Request</i>	<i>FY16-FY17</i> <i>±%</i>
Construction	425,000	711,109	826,670	16.3%
TA-55 Reinvestment Phase III (LANL)	19,062	21,195	24,455	15.4%
Transuranic Waste Facilities (LANL)	10,518	3,322	702	-78.9%
TA-55 Reinvestment Phase II (LANL)	11,208	6,918	1,025	-85.2%
Radioactive Liquid Waste Treatment Facility (LANL)	868	15,274	259	-98.3%
Transuranic Liquid Waste Facility (LANL)	8,154	43,010	18,553	-56.9%
Uranium Processing Facility (UPF) (Y-12)	335,000	430,000	575,000	33.7%
<i>Total UPF design and site prep costs at the end of FY 2015 are \$1.5 billion with another billion expected before construction even begins. NNSA promises to complete the UPF for \$6.5 billion but has radically downscoped the project to even begin to make that claim. Moreover, the agency appears intent on illegally proceeding without a supplemental environmental impact statement for the many major planned changes from its original proposal.</i>				
Chemistry & Metallurgy Research Replacement Project (LANL)	35,700	155,610	159,615	2.6%
CMRR Main	35,700	0	159,615	-
RLUOB ("Rad Lab") Equipment Installation, Phase 2 (REI2)	0	117,000	0	-100.0%
Plutonium Facility-4 Equipment Installation (PEI)	0	38,610	0	-100.0%
<i>CMRR now consists of four subprojects in FY 2017, the REI2 and PEI mentioned above, plus PEI Phase 2 and recategorizing the Rad Lab to a Hazard Category 3 nuclear facility, expected all together to cost \$2 billion by 2024. NNSA did not include line item funding as expected for two underground modules for high-risk plutonium operations at a billion dollars each, but probably will next or the following year. All of this is for unneeded expanded production of up to 80 plutonium pits per year.</i>				
Secure Transportation Asset	219,000	237,118	282,732	19.2%
Operations and Equipment	121,882	140,000	179,132	28.0%
Program Direction - Albuquerque	97,118	97,118	103,600	6.7%
Defense Nuclear Security (guards, guns, gates and security systems)	636,123	682,891	670,133	-1.9%
IT & Cybersecurity	179,646	157,588	176,592	12.1%
Legacy Contractor Pensions	307,058	283,887	248,492	-12.5%

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Defense Nuclear Nonproliferation	1,839,281	1,940,302	1,807,916	-6.8%
Global Material Security	424,244	426,751	337,108	-21.0%
Material Management and Minimization	272,919	316,584	341,094	7.7%
Nonproliferation and Arms Control	125,859	130,203	124,703	-4.2%
Defense Nuclear Nonproliferation R&D	393,401	419,333	393,922	-6.1%
Nonproliferation Construction	345,000	340,000	270,000	-20.6%
MOX Fuel Fabrication Facility at the Savannah River Site	345,000	340,000	270,000	-20.6%
<i>(NNSA is terminating the boondoggle MOX program in favor of diluting plutonium and disposing at the presently closed WIPP facility)</i>				
Nuclear Counterterrorism and Incident Response	224,033	234,390	271,881	16.0%
Legacy Contractor Pensions	102,909	94,617	83,208	-12.1%
Naval Reactors	1,233,840	1,375,496	1,420,120	3.2%
(Reactors in nuclear-powered submarines and aircraft carriers)				
Federal Salaries and Expenses	369,587	363,766	412,817	13.5%
Total NNSA	11,399,034	12,526,512	12,884,000	2.9%

Note: Columns do not add up to totals because not all budget subcategories are included here, including Use of Prior Year Balances

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Department Of Defense Funding For NNSA Activities

(in millions)

DoD funding for NNSA's nuclear weapons programs, which funds future large increases. There is no DoD support for nonproliferation programs.	Total Future Funds from DOD	DOD Support of		
		Naval Reactors (Included in Future Funds from DOD)	Total Weapons Activities including DOD funds	NNSA Total Weapons Activities w/o DOD funds
FY 2017	0	0	9,285	9,285
FY 2018	1,665	393	9,661	8,389
FY 2019	1,698	402	9,863	8,567
FY 2020	1,735	411	10,118	8,794
FY 2021	1,770	419	10,518	9,167

<https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/doe.pdf>

Projected Total NNSA Funding Levels

(Budget Authority in billions of dollars)

year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017-2021	2017-2026
NNSA	10.6	11.2	11.4	12.5	12.9	11.9	12.4	12.6	13.0	13.3	13.5	13.8	14.1	14.4	62.8	131.9

<https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/budget.pdf> Table S-11

(In millions of US dollars)

DOE Defense Environmental Cleanup

<i>FY 2015 Current</i>	<i>FY 2016 Enacted</i>	<i>FY 2017 Request</i>	<i>FY16-FY17 ±%</i>
5,468	5,290	5,382	1.74%

Figures are for nation-wide cleanup of the nuclear weapons complex by the DOE Office of Environmental Management (EM). See the following tables for site-specific budget figures.

DOE eliminated cleanup lifecycle costs and dates in the FY 2017 budget, while total estimated costs increase faster than the amount of money actually spent each year. This further decreases government and contractor accountability in DOE's already deeply troubled cleanup programs.

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Selected DOE Site Tables

(Funding by DOE office in parentheses)	<i>FY 2015 Current</i>	<i>FY 2016 Enacted</i>	<i>FY2017 Request</i>	<i>FY16-FY17 +%</i>
Argonne National Laboratory	587,203	599,856	585,279	-2.43%
Weapons Activities (NNSA)	4,010	510	0	-100.00%
Science (DOE Science)	446,331	442,011	429,507	-2.83%
Nonproliferation (NNSA)	38,622	49,196	52,491	6.70%
Fernald Environmental Management Project (DOE EM)	1,500	1,300	1,000	-23.08%
Defense Environmental Cleanup	1,500	1,300	1,000	-23.08%
Hanford (DOE EM)	2,301,655	2,479,673	2,383,151	-3.89%
Hanford Site	987,529	970,952	780,299	-19.64%
Defense Environmental Cleanup	984,967	968,390	778,059	-19.65%
Central Plateau Remediation	543,511	632,179	641,304	1.44%
River Corridor & Other Cleanup Operations	377,788	270,710	64,755	-76.08%
Office of River Protection	1,220,009	1,368,022	1,458,939	6.65%
Defense Environmental Cleanup	1,220,009	1,368,022	1,458,939	6.65%
Tank Farm Activities	522,000	649,000	733,965	13.09%
Waste Treatment Plant	667,000	690,000	693,000	0.43%
Richland Operations Office	94,117	140,699	143,913	2.28%
Defense Environmental Cleanup	84,688	138,174	135,829	-1.70%
Idaho National Laboratory	1,105,586	1,199,335	1,099,903	-8.29%
Weapons Activities (NNSA)	6,187	6,030	3,065	-49.17%
Nonproliferation (NNSA)	75,854	123,125	74,774	-39.27%
Nuclear Energy (DOE Nuclear Energy)	450,953	488,154	464,871	-4.77%
Naval Reactors (NNSA)	131,460	148,115	150,976	1.93%
Defense Environmental Cleanup (DOE EM)	380,203	396,000	362,088	-8.56%
Kansas City National Security Complex (NNSA)	414,871	435,992	405,820	-6.92%
Weapons Activities	412,447	416,030	376,338	-9.54%
Directed Stockpile Work	300,949	331,385	323,669	-2.33%
Environment, Health, Safety and Security	10	10	10	0.00%
Nonproliferation	2,414	19,952	29,472	47.71%
Kansas City Site Office	181,768	187,183	346,862	85.31%
Infrastructure and Operations (NNSA)	174,772	179,655	339,112	88.76%
[The majority of the increase is for transfer of the old Kansas City Plant to the private sector without full and complete cleanup.]				
Lawrence Berkeley National Laboratory	651,466	690,884	643,876	-6.80%
Energy Efficiency and Renewable Energy (DOE EERE)	56,330	63,152	62,071	-1.71%
Science (DOE Science)	561,531	576,617	564,009	-2.19%
Lawrence Livermore National Laboratory (NNSA)	1,251,466	1,255,933	1,239,440	-1.31%
Weapons Activities	1,043,750	1,094,073	1,069,973	-2.20%
Directed Stockpile Work	135,886	202,052	181,444	-10.20%
Nonproliferation	63,864	103,003	113,307	10.00%
Cleanup	1,128	1,128	1,147	1.68%

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Selected DOE Site Tables (continued)

	<i>FY 2015 Current</i>	<i>FY 2016 Enacted</i>	<i>FY2017 Request</i>	<i>FY16-FY17 +%</i>
Los Alamos National Laboratory	1,953,616	2,201,726	2,104,443	-4.4%
Weapons Activities (NNSA)	1,486,250	1,695,685	1,575,842	-7.1%
Directed Stockpile Work	501,090	611,735	580,868	-5.0%
Energy Efficiency and Renewable Energy (DOE EERE)	14,734	11,982	14,036	17.1%
Nonproliferation (NNSA)	165,977	219,800	246,247	12.0%
Cleanup (DOE EM)	187,245	181,606	189,000	4.1%
Miamisburg Site	8,408	9,500	0	-100.0%
Non-Defense Environmental Cleanup (DOE EM)	8,408	9,500	0	-100.0%
National Energy Technology Lab	306,551	292,274	325,743	11.5%
Energy Efficiency and Renewable Energy (DOE EERE)	162,338	205,546	367,014	78.6%
Weapons Activities (NNSA)	14,086	9,857	8,216	-16.6%
Directed Stockpile Work	11,066	8,101	8,216	1.4%
Fossil Energy Research and Development (DOE Fossil Fuel)	476,399	555,762	529,690	-4.7%
Nevada National Security Site (NNSA)	414,636	414,714	438,551	5.75%
Weapons Activities	296,558	266,329	315,141	18.33%
Directed Stockpile Work	38,247	47,885	47,964	0.16%
Nonproliferation	71,634	109,825	81,223	-26.04%
Cleanup	46,444	38,560	42,187	9.41%
NNSA Albuquerque Complex (NNSA)	466,495	675,702	617,224	-8.65%
Weapons Activities	339,415	545,452	472,691	-13.34%
Directed Stockpile Work	76,008	234,609	169,233	-27.87%
Secure Transportation Asset	183,178	183,438	210,040	14.50%
Nonproliferation	108,098	115,029	129,754	12.80%
Oak Ridge National Laboratory	1,074,535	1,087,990	1,058,672	-2.69%
Weapons Activities (NNSA)	7,740	36,348	5,828	-83.97%
Directed Stockpile Work	0	32,083	2,353	-92.67%
Energy Efficiency and Renewable Energy (DOE EERE)	102,646	105,663	115,205	9.03%
Science (DOE Science)	715,613	687,085	691,824	0.69%
Nonproliferation (NNSA)	96,394	81,025	76,358	-5.76%
Defense Environmental Cleanup (DOE EM)	39,858	81,795	87,720	7.24%
Paducah Gaseous Diffusion Plant	284,643	283,477	290,251	2.39%
Non-Defense Environmental Cleanup (DOE EM)	52,866	52,866	50,345	-4.77%
Uranium Enrichment Decon. & Decom. Fund (DOE EM)	209,590	202,300	207,916	2.78%
Pantex Plant (NNSA)	551,230	661,417	707,744	7.00%
Weapons Activities	549,220	654,182	698,866	6.83%
Directed Stockpile Work	222,324	316,897	369,106	16.48%
Environment, Health, Safety and Security	10	10	10	0.00%
Nonproliferation	2,000	7,225	8,868	22.74%
Portsmouth Gaseous Diffusion Plant	279,928	295,070	326,820	10.76%
Non-Defense Environmental Cleanup (DOE EM)	49,517	51,517	50,959	-1.08%
Uranium Enrichment Decon. & Decom. Fund (DOE EM)	215,819	226,961	256,945	13.21%
Rocky Flats Site	58,242	57,049	50,994	-10.61%
Legacy Management (DOE LM)	54,853	53,460	42,605	-20.30%
Defense Environmental Cleanup (DOE EM)	3,389	3,589	8,389	133.74%

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Selected DOE Site Tables (continued)

	<i>FY 2015 Current</i>	<i>FY 2016 Enacted</i>	<i>FY2017 Request</i>	<i>FY16-FY17 +%</i>
Sandia National Laboratories (NNSA)	1,875,289	1,898,607	1,913,937	0.81%
Weapons Activities	1,584,053	1,575,895	1,579,907	0.25%
Directed Stockpile Work	972,110	986,508	956,084	-3.08%
Nonproliferation	142,464	177,512	178,424	0.51%
Cleanup	2,801	2,500	4,130	65.20%
Savannah River Operations Office	553,973	531,632	468,833	-11.81%
Nonproliferation (NNSA)	348,106	334,006	259,400	-22.34%
Nonproliferation Construction/ Fissile Materials Disposition	337,304	330,000	255,000	-22.73%
Defense Environmental Cleanup (DOE EM)	193,738	185,972	193,372	3.98%
Safeguards and Security	138,235	128,145	134,000	4.57%
Savannah River Site	1,373,612	1,497,418	1,655,451	10.55%
Weapons Activities (NNSA)	238,591	241,904	250,175	3.42%
Directed Stockpile Work (tritium extraction and processing)	90,016	110,407	103,249	-6.48%
Nonproliferation (NNSA)	24,727	58,342	102,525	75.73%
Cleanup (DOE EM)	1,110,294	1,197,172	1,302,751	8.82%
University of Rochester	67,963	64,264	61,830	-3.79%
Weapons Activities (NNSA; Omega laser)	67,963	64,264	61,830	-3.79%
Internal Confinement Fusion Ignition High Yield Campaign	67,963	64,264	61,830	-3.79%
Washington Headquarters	4,119,761	4,584,175	5,739,895	25.21%
Weapons Activities (NNSA)	634,108	664,139	926,220	39.46%
Directed Stockpile Work	82,461	87,593	161,660	84.56%
Defense Environmental Cleanup (DOE EM)	569,945	108,435	271,609	150.48%
Nonproliferation (NNSA)	137,258	181,121	172,142	-4.96%
Waste Isolation Pilot Plant	322,061	300,029	266,196	-11.28%
Weapons Activities (NNSA)	2,061	0	0	-
Defense Environmental Cleanup (DOE EM)	320,000	299,978	266,140	-11.28%
Nonproliferation (NNSA)	0	51	56	9.80%
[WIPP, closed since February 2014 after a radioactive waste drum from Los Alamos ruptured, will cost at least a half billion dollars to reopen.]				
Y-12 National Security Complex (NNSA)	271,678	397,335	406,516	2.31%
Weapons Activities	258,321	397,335	406,516	2.31%
Directed Stockpile Work	250,628	388,016	397,358	2.41%
Nonproliferation	13,357	0	0	-
Y-12 Site Office	911,869	979,219	1,155,224	17.97%
Weapons Activities (NNSA)	844,354	858,605	1,057,304	23.14%
Infrastructure and Operations (the majority is for UPF design costs)	660,571	663,089	851,220	28.37%
Nonproliferation (NNSA)	34,198	51,736	51,558	-0.34%
Defense Environmental Cleanup (DOE EM)	33,297	68,858	46,342	-32.70%

Sources: <http://energy.gov/cfo/downloads/fy-2017-budget-justification>, Volume 1 and Laboratory Tables

A PDF of this compilation is available for download at:

<http://nukewatch.org/economics/NukeWatch-FY17-NNSA-Budget-Analysis.pdf>

Rev 4/15/16

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