



APPENDIX TABLE 4-22 

Federal funding for R&D and R&D plant, budget authority versus obligations: FYs 1953–2016

(Millions of current and of constant 2009 dollars)

Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
Current \$millions						
1953	NA	NA	NA	2,167	1,920	248
1954	NA	NA	NA	1,918	1,762	156
1955	NA	2,533	NA	2,252	2,045	207
1956	NA	2,988	NA	3,267	2,988	279
1957	NA	3,932	NA	4,389	3,932	457
1958	NA	4,570	NA	4,906	4,570	336
1959	NA	6,694	NA	7,123	6,694	429
1960	NA	7,552	NA	8,080	7,552	528
1961	NA	9,059	NA	9,607	9,059	548
1962	NA	10,290	NA	11,069	10,290	779
1963	NA	12,495	NA	13,663	12,495	1,168
1964	NA	14,225	NA	15,324	14,225	1,099
1965	NA	14,614	NA	15,746	14,614	1,132
1966	NA	15,320	NA	16,179	15,320	858
1967	NA	16,529	NA	17,149	16,529	620
1968	NA	15,921	NA	16,525	15,921	604
1969	NA	15,641	NA	16,310	15,641	669
1970	NA	15,339	NA	15,863	15,339	524
1971	NA	15,543	NA	16,154	15,543	611
1972	NA	16,496	NA	17,098	16,496	602
1973	NA	16,800	NA	17,574	16,800	774
1974	NA	17,410	NA	18,176	17,410	766
1975	NA	19,039	NA	19,860	19,039	821



Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
1976	NA	20,780	NA	21,616	20,780	837
1977	NA	23,450	NA	24,818	23,450	1,367
1978	NA	25,976	NA	27,141	25,845	1,296
1979	NA	28,208	NA	29,621	28,145	1,475
1980	NA	29,739	NA	31,386	29,830	1,556
1981	NA	33,735	NA	34,590	33,104	1,486
1982	NA	36,115	NA	37,822	36,433	1,390
1983	NA	38,768	NA	40,009	38,712	1,297
1984	NA	44,214	NA	44,012	42,225	1,787
1985	NA	49,887	NA	50,180	48,360	1,821
1986	NA	53,249	NA	52,951	51,412	1,539
1987	NA	57,069	NA	57,100	55,254	1,846
1988	NA	59,106	NA	58,827	56,769	2,057
1989	NA	62,115	NA	63,572	61,406	2,165
1990	NA	63,781	NA	65,831	63,559	2,272
1991	NA	65,898	NA	64,148	61,295	2,853
1992	NA	68,398	NA	68,577	65,593	2,985
1993	NA	69,884	NA	70,415	67,314	3,101
1994	NA	68,331	NA	69,451	67,235	2,215
1995	NA	68,791	NA	70,443	68,187	2,256
1996	NA	69,049	NA	69,399	67,653	1,746
1997	NA	71,653	NA	71,753	69,827	1,927
1998	NA	73,569	NA	73,914	72,101	1,813
1999	NA	77,637	NA	77,386	75,341	2,046
2000	83,581	78,664	4,917	80,403	75,910	4,493
2001	91,505	86,756	4,749	88,562	84,493	4,070



Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
2002	103,057	97,624	5,433	98,013	93,709	4,305
2003	118,065	112,544	5,521	107,794	103,527	4,267
2004	126,270	121,867	4,403	116,069	112,074	3,994
2005	131,259	126,601	4,658	122,619	118,848	3,771
2006	136,019	131,624	4,395	123,855	121,730	2,125
2007	141,890	138,087	3,803	129,431	127,263	2,168
2008	144,391	140,113	4,278	129,050	127,106	1,944
2009 ^a	164,292	156,009	8,283	144,758	141,090	3,668
2010 ^a	148,962	146,596	2,366	146,968	140,355	6,613
2011	144,379	142,457	1,922	139,662	135,491	4,171
2012	143,737	141,450	2,287	140,636	138,485	2,151
2013	132,477	130,861	1,616	127,291	125,386	1,905
2014	136,159	133,547	2,612	132,496	130,279	2,218
2015	138,544	136,090	2,454	131,398	128,573	2,825
2016 (preliminary)	148,999	146,425	2,574	142,555	140,070	2,485
2009 constant \$millions						
1953	NA	NA	NA	14,335	12,695	1,640
1954	NA	NA	NA	12,536	11,515	1,021
1955	NA	16,427	NA	14,604	13,259	1,344
1956	NA	18,887	NA	20,650	18,889	1,762
1957	NA	23,961	NA	26,747	23,961	2,786
1958	NA	27,025	NA	29,013	27,024	1,989
1959	NA	38,987	NA	41,483	38,984	2,499
1960	NA	43,377	NA	46,410	43,376	3,034
1961	NA	51,326	NA	54,431	51,324	3,107
1962	NA	57,712	NA	62,081	57,711	4,370



Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
1963	NA	69,224	NA	75,695	69,222	6,472
1964	NA	77,860	NA	83,874	77,862	6,013
1965	NA	78,612	NA	84,701	78,613	6,087
1966	NA	80,674	NA	85,196	80,676	4,520
1967	NA	84,461	NA	87,630	84,461	3,169
1968	NA	78,661	NA	81,645	78,662	2,983
1969	NA	73,883	NA	77,043	73,882	3,160
1970	NA	68,754	NA	71,104	68,754	2,351
1971	NA	66,310	NA	68,915	66,308	2,608
1972	NA	67,166	NA	69,617	67,166	2,451
1973	NA	65,574	NA	68,597	65,574	3,022
1974	NA	63,448	NA	66,241	63,448	2,793
1975	NA	62,897	NA	65,608	62,897	2,711
1976	NA	64,195	NA	66,779	64,194	2,585
1977	NA	67,579	NA	71,520	67,580	3,940
1978	NA	70,130	NA	73,274	69,776	3,498
1979	NA	70,502	NA	74,033	70,345	3,688
1980	NA	68,366	NA	72,152	68,576	3,576
1981	NA	70,649	NA	72,439	69,328	3,111
1982	NA	70,772	NA	74,118	71,394	2,723
1983	NA	72,763	NA	75,092	72,657	2,435
1984	NA	80,156	NA	79,790	76,550	3,240
1985	NA	87,536	NA	88,051	84,856	3,195
1986	NA	91,352	NA	90,841	88,201	2,640
1987	NA	95,769	NA	95,821	92,723	3,098
1988	NA	96,092	NA	95,637	92,293	3,344



Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
1989	NA	97,115	NA	99,393	96,008	3,385
1990	NA	96,230	NA	99,323	95,895	3,427
1991	NA	96,019	NA	93,469	89,312	4,157
1992	NA	97,281	NA	97,535	93,291	4,245
1993	NA	97,088	NA	97,825	93,518	4,308
1994	NA	92,904	NA	94,427	91,415	3,012
1995	NA	91,587	NA	93,786	90,783	3,004
1996	NA	90,248	NA	90,706	88,424	2,282
1997	NA	92,028	NA	92,157	89,682	2,475
1998	NA	93,338	NA	93,776	91,475	2,301
1999	NA	97,265	NA	96,951	94,388	2,563
2000	102,591	96,556	6,035	98,691	93,176	5,515
2001	109,692	103,999	5,693	106,164	101,286	4,879
2002	121,572	115,163	6,409	115,623	110,545	5,078
2003	136,665	130,274	6,391	124,776	119,837	4,939
2004	142,630	137,656	4,973	131,107	126,595	4,512
2005	143,751	138,650	5,101	134,289	130,159	4,130
2006	144,271	139,610	4,662	131,369	129,115	2,254
2007	146,520	142,593	3,927	133,655	131,416	2,239
2008	146,071	141,743	4,328	130,551	128,584	1,966
2009 ^a	164,292	156,009	8,283	144,758	141,090	3,668
2010 ^a	147,663	145,317	2,345	145,686	139,130	6,556
2011	140,269	138,402	1,867	135,686	131,634	4,052
2012	137,141	134,958	2,182	134,182	132,130	2,052
2013	124,263	122,747	1,516	119,399	117,612	1,787
2014	125,573	123,164	2,409	122,195	120,150	2,045



Fiscal year	Federal budget authority			Federal obligations		
	Total, R&D and R&D plant	R&D	R&D plant	Total, R&D and R&D plant	R&D	R&D plant
2015	126,064	123,831	2,233	119,562	116,991	2,571
2016 (preliminary)	133,464	131,158	2,306	127,692	125,466	2,226

NA = not available; data collected for this table were not recorded at that level in that particular fiscal year. r = data significantly revised; replaces previously published data.

^a Includes obligations from the additional federal R&D funding authorized by the American Recovery and Reinvestment Act of 2009.

Note(s)

Beginning in FY 2000, the Department of the Air Force did not report Budget Activity (BA) 6.7 Operational Systems Development data because the agency misunderstood reporting requirements. During the Volume 57 data collection cycle, the Department of the Air Force edited prior-year data from FY 2000 to FY 2007 to include BA 6.7 Operational Systems Development data. These data revisions were derived from FY 2007 distribution percentages that were then applied backward to revise FYs 2000–06 data. In FY 2000, the National Aeronautics and Space Administration (NASA) reclassified the Space Station as a physical asset, reclassified Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant. In FY 2006, NASA reclassified as operational costs funding for Space Operations, the Hubble Space Telescope, the Stratospheric Observatory for Infrared Astronomy, and the James Webb Space Telescope previously reported as R&D plant. In FY 2000, the National Institutes of Health reclassified all its development activities as research.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, Federal Research and Development Funding by Budget Function