

TABLE 36. Federal research and development obligations, budget authority, and budget authority for basic research, by budget function: FY 1955–2009

(Millions of dollars)

Federal R&D obligations and authority	All functions	Budget function																
		Administration of justice	Agriculture	Commerce and housing credit	Community and regional development	Education, training, employment, and social services	Energy	General government	General science and basic research	Health	Income security	International affairs	National defense	Natural resources and environment	Space research and technology	Transportation	Veterans benefits and services	Other <sup>a</sup>
All R&D obligations																		
1955	2,533	NA	NA	NA	NA	NA	NA	NA	NA	67	NA	NA	2,151	NA	NA	NA	NA	315
1956	2,988	NA	NA	NA	NA	NA	NA	NA	NA	83	NA	NA	2,535	NA	NA	NA	NA	370
1957	3,932	NA	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	3,327	NA	NA	NA	NA	465
1958	4,570	NA	NA	NA	NA	NA	NA	NA	NA	177	NA	NA	3,801	NA	NA	NA	NA	592
1959	6,694	NA	NA	NA	NA	NA	NA	NA	NA	233	NA	NA	5,556	NA	NA	NA	NA	904
1960	7,552	NA	NA	NA	NA	NA	NA	NA	NA	305	NA	NA	6,107	NA	NA	NA	NA	1,140
1961	9,059	NA	125	NA	NA	NA	373	NA	137	405	NA	NA	7,005	73	777	55	NA	108
1962	10,290	NA	136	NA	NA	NA	448	NA	187	551	NA	NA	7,238	108	1,413	101	NA	107
1963	12,495	NA	146	NA	NA	NA	515	NA	246	626	NA	NA	7,764	120	2,812	142	NA	125
1964	14,225	NA	165	NA	NA	NA	571	NA	277	728	NA	NA	7,829	134	4,241	122	NA	160
1965	14,614	NA	195	NA	NA	NA	585	NA	304	792	NA	NA	7,342	159	4,887	147	NA	203
1966	15,320	NA	201	NA	NA	NA	575	NA	377	900	NA	NA	7,536	189	4,976	251	NA	315
1967	16,529	*	218	43	37	154	600	3	409	915	48	18	8,566	320	4,778	380	41	na
1968	15,921	1	217	48	44	166	657	5	437	1,021	50	17	8,275	331	4,304	304	45	na
1969	15,641	5	221	54	32	169	597	5	433	1,088	78	26	8,356	323	3,799	404	50	na
1970	15,339	9	238	79	47	164	574	6	452	1,084	136	32	7,981	340	3,606	535	59	na
1971	15,543	10	259	90	65	215	556	7	513	1,288	145	32	8,110	416	3,048	728	63	na
1972	16,496	23	294	50	66	235	574	8	625	1,547	106	29	8,902	479	2,932	558	69	na
1973	16,800	33	308	50	78	290	630	7	658	1,585	106	28	9,002	554	2,824	572	74	na
1974	17,410	35	313	51	82	236	759	9	749	2,069	71	24	9,016	516	2,702	693	85	na
1975	19,039	44	342	65	93	239	1,363	12	813	2,170	72	29	9,679	624	2,764	635	95	na
1976	20,780	35	383	69	109	255	1,649	12	858	2,351	48	42	10,430	683	3,130	631	98	na
1977	23,450	30	457	71	101	230	2,562	13	974	2,629	55	66	11,864	753	2,832	708	107	na
All R&D authority																		
1978	25,976	44	501	77	92	345	3,134	20	1,050	2,968	67	57	12,899	904	2,939	768	111	na
1979	28,208	47	552	93	127	354	3,461	23	1,119	3,401	57	117	13,791	1,010	3,136	798	123	na
1980	29,739	45	585	101	119	468	3,603	22	1,233	3,694	47	125	14,946	999	2,738	887	126	na
1981	33,735	34	659	106	104	298	3,501	22	1,340	3,871	43	160	18,413	1,061	3,111	869	143	na

TABLE 36. Federal research and development obligations, budget authority, and budget authority for basic research, by budget function: FY 1955–2009

(Millions of dollars)

Federal R&D obligations and authority	All functions	Budget function																
		Administration of justice	Agriculture	Commerce and housing credit	Community and regional development	Education, training, employment, and social services	Energy	General government	General science and basic research	Health	Income security	International affairs	National defense	Natural resources and environment	Space research and technology	Transportation	Veterans benefits and services	Other <sup>a</sup>
1982	36,115	31	693	104	63	228	3,012	10	1,359	3,869	32	165	22,070	965	2,584	791	139	na
1983	38,768	37	745	107	44	189	2,578	6	1,502	4,298	32	177	24,936	952	2,134	876	157	na
1984	44,214	24	762	110	46	200	2,581	8	1,676	4,779	26	192	29,287	963	2,300	1,040	218	na
1985	49,887	47	836	114	50	220	2,389	17	1,862	5,418	21	210	33,698	1,059	2,725	1,030	193	na
1986	53,249	41	815	111	88	248	2,286	14	1,873	5,565	14	211	36,926	1,062	2,894	917	183	na
1987	57,069	49	822	110	99	267	2,053	17	2,042	6,556	25	223	39,152	1,133	3,398	908	215	na
1988	59,106	51	882	122	108	285	2,126	17	2,160	7,076	23	224	40,099	1,160	3,683	896	195	na
1989	62,115	45	907	128	74	347	2,419	15	2,373	7,773	27	279	40,642	1,255	4,555	1,064	212	na
1990	63,781	44	950	140	67	374	2,726	17	2,410	8,308	33	375	39,925	1,386	5,765	1,045	216	na
1991	65,898	51	1,052	178	88	433	2,953	4	2,635	9,226	30	378	39,328	1,582	6,511	1,231	219	na
1992	68,398	51	1,155	192	127	365	3,099	4	2,659	10,055	37	371	40,083	1,688	6,744	1,523	245	na
1993	69,884	49	1,152	220	57	348	2,677	*	2,691	10,280	36	382	41,249	1,802	6,988	1,703	250	na
1994	68,331	46	1,193	380	68	373	2,873	0	2,712	10,993	45	254	37,764	2,062	7,414	1,888	265	na
1995	68,791	59	1,194	525	70	369	2,844	1	2,794	11,407	43	287	37,204	1,988	7,916	1,833	257	na
1996	69,049	56	1,176	432	50	331	2,521	2	2,846	11,867	16	252	37,801	1,802	7,844	1,795	259	na
1997	71,653	59	1,203	409	48	373	2,372	2	2,944	12,670	9	190	39,591	1,886	7,844	1,785	267	na
1998	73,569	72	1,249	398	42	444	948	2	4,360	13,576	18	163	39,823	1,855	8,198	1,833	587	na
1999	77,637	88	1,288	432	59	403	1,131	3	4,690	15,553	38	190	41,306	1,842	8,245	1,725	644	na
2000	78,664	73	1,426	406	46	418	996	6	4,977	17,869	25	200	42,580	1,999	5,363	1,636	645	na
2001	86,756	88	1,657	429	54	411	1,314	3	5,468	20,758	30	252	45,713	2,096	6,126	1,640	719	na
2002	97,624	91	1,606	467	50	411	1,327	3	5,753	23,560	37	279	53,016	2,160	6,270	1,838	756	na
2003	112,544	299	1,708	463	48	430	1,403	0	6,129	26,517	38	269	63,048	2,151	7,355	1,869	817	na
2004	121,867	684	1,750	454	47	459	1,343	0	6,466	28,251	47	264	69,593	2,168	7,612	1,863	866	na
2005	126,601	758	1,820	423	45	470	1,296	0	6,570	28,824	35	255	74,047	2,168	7,300	1,847	742	na
2006	131,624	1,008	1,869	390	55	495	1,195	0	6,691	28,797	27	255	78,037	2,120	8,204	1,711	769	na
2007	138,087	369	1,857	428	49	536	1,893	0	7,809	29,461	27	246	82,272	1,936	9,024	1,361	819	na
2008 preliminary	137,972	355	1,852	420	51	567	2,374	0	7,915	29,634	27	255	81,050	2,008	9,233	1,340	891	na
2009 proposed	142,605	356	1,616	448	55	546	2,463	0	9,012	29,783	35	255	84,091	1,987	9,728	1,345	884	na

TABLE 36. Federal research and development obligations, budget authority, and budget authority for basic research, by budget function: FY 1955–2009

(Millions of dollars)

Federal R&D obligations and authority	All functions	Budget function																
		Administration of justice	Agriculture	Commerce and housing credit	Community and regional development	Education, training, employment, and social services	Energy	General government	General science and basic research	Health	Income security	International affairs	National defense	Natural resources and environment	Space research and technology	Transportation	Veterans benefits and services	Other <sup>a</sup>
Authority for basic research																		
1978	3,665	10	197	9	8	57	157	0	962	1,246	2	*	320	207	412	70	9	na
1979	4,108	10	222	10	8	59	172	*	1,026	1,579	1	0	365	131	440	75	10	na
1980	4,716	9	246	15	8	61	200	*	1,152	1,761	1	0	552	136	482	79	14	na
1981	5,107	5	281	17	5	66	220	3	1,256	1,951	3	12	610	131	445	89	15	na
1982	5,305	4	295	17	7	78	260	2	1,296	1,953	0	10	696	139	434	102	13	na
1983	6,247	4	326	19	6	70	320	3	1,439	2,475	0	10	788	156	501	117	14	na
1984	7,072	5	353	20	5	77	365	3	1,606	2,813	0	3	845	192	646	125	15	na
1985	7,810	4	406	23	6	86	428	4	1,779	3,243	0	4	856	206	498	255	15	na
1986	8,193	5	390	26	6	83	456	5	1,795	3,324	0	5	960	204	737	184	15	na
1987	9,021	8	397	26	4	78	511	4	1,942	3,851	0	3	900	206	843	231	17	na
1988	9,553	8	428	28	7	83	571	5	2,061	4,087	0	3	905	210	944	197	17	na
1989	10,648	7	433	29	3	92	703	3	2,265	4,413	0	3	965	331	1,099	287	16	na
1990	11,288	9	456	31	3	106	761	3	2,306	4,661	0	4	964	336	1,389	242	16	na
1991	12,405	6	486	39	10	115	878	0	2,526	5,021	0	6	1,188	389	1,479	246	16	na
1992	12,973	5	528	35	11	118	921	0	2,532	5,506	0	6	1,147	383	1,499	266	16	na
1993	13,440	5	553	34	10	121	917	0	2,553	5,700	0	8	1,323	376	1,588	238	16	na
1994	13,552	5	567	38	9	145	921	0	2,542	5,889	0	6	1,174	224	1,796	220	16	na
1995	13,772	9	565	35	3	153	930	0	2,622	6,068	0	0	1,181	187	1,614	389	16	na
1996	14,442	12	547	37	0	140	1,182	0	2,662	6,395	0	2	1,165	147	1,685	456	13	na
1997	14,961	13	548	34	0	142	1,288	0	2,753	6,852	0	2	1,090	153	1,653	420	14	na
1998	15,523	16	571	35	0	133	34	0	4,121	7,356	0	1	1,067	145	1,610	411	23	na
1999	17,433	18	602	41	0	99	36	0	4,464	8,634	0	0	1,110	142	1,667	358	263	na
2000	19,470	20	651	39	0	107	36	0	4,722	10,099	0	42	1,184	146	1,616	542	266	na
2001	21,376	27	749	50	0	112	40	0	5,187	11,642	0	50	1,303	215	1,695	17	289	na
2002	23,848	30	762	56	0	115	45	0	5,561	12,957	0	53	1,404	471	1,912	17	465	na
2003	25,323	42	824	53	1	125	40	0	5,907	14,162	0	18	1,409	185	2,206	23	327	na
2004	26,529	58	780	46	0	125	32	0	6,198	14,850	0	18	1,380	201	2,473	20	347	na
2005	27,678	42	789	53	0	130	31	0	6,238	15,826	0	18	1,508	195	2,486	65	297	na
2006	27,336	68	805	66	0	131	8	0	6,406	15,532	0	18	1,490	195	2,299	0	318	na

TABLE 36. Federal research and development obligations, budget authority, and budget authority for basic research, by budget function: FY 1955–2009

(Millions of dollars)

Federal R&D obligations and authority	All functions	Budget function																
		Administration of justice	Agriculture	Commerce and housing credit	Community and regional development	Education, training, employment, and social services	Energy	General government	General science and basic research	Health	Income security	International affairs	National defense	Natural resources and environment	Space research and technology	Transportation	Veterans benefits and services	Other <sup>a</sup>
2007	28,166	106	821	92	0	149	7	0	6,887	15,637	0	18	1,533	260	2,318	2	335	na
2008 preliminary	28,694	125	798	94	0	153	19	0	7,024	15,883	0	18	1,641	265	2,311	3	361	na
2009 proposed	29,656	142	731	114	0	157	16	0	8,002	15,861	0	18	1,706	265	2,287	3	354	na

\* = less than \$500,000; na = not applicable; NA = not available, data were not collected for all budget functions in all years.

<sup>a</sup>Includes amounts for all functions for which data were not explicitly collected.

NOTES: Detail may not add to total because of rounding. In FY 2004 the Department of Homeland Security (DHS) changed its R&D portfolio to reclassify funding in general science and basic research and in agriculture as administration of justice. In FY 2007 DHS changed its R&D portfolio to reclassify funding in defense and most administration of justice as general science and basic research. In FY 2000 the National Aeronautics and Space Administration transferred funding for the space station program from R&D to R&D plant; change reflected in budget authority for space research and technology. In FY 2000 the National Institutes of Health in the Department of Health and Human Services classified all of its previous development activities as basic research or applied research, resulting in an increase in health basic research. In FY 1998 many Department of Energy programs were reclassified from energy to general science and basic research, and the Department of Veterans Affairs began reporting medical care support funds as part of its total research budgetary resources; change reflected in budget authority for veteran benefits and services.

SOURCES: 1955–94 data from agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices. 1995–2009 data from agencies' submission to Office of Management and Budget, Circular No. A-11, Max Schedule C; budget justification documents; and supplemental data from agencies' budget offices.