

TABLE 9. U.S. development expenditures, by source of funds and performing sector: 1953–2012

Year	Funding source:	All sources	Federal								Industry				U&C	Other nonprofit			Other government ^a
	Performer:	All performers	Total	Federal	Industry ^b	FFRDCs ^c	U&C ^d	U&C	Other nonprofit ^e	Nonprofit FFRDCs ^e	Total	Industry ^f	U&C ^d	Other nonprofit ^g	U&C ^d	Total	Other nonprofit ^g	U&C ^d	U&C ^d
	Current \$millions																		
1953		3,412	1,762	567	1,123	NA	9	48	17	NA	1,637	1,630	1	6	3	7	6	1	3
1954		3,734	2,027	537	1,405	NA	9	59	18	NA	1,693	1,685	1	7	3	8	7	1	3
1955		4,189	2,427	543	1,785	NA	12	69	19	NA	1,748	1,738	2	8	3	8	7	1	4
1956		5,855	3,561	631	2,817	NA	14	81	20	NA	2,277	2,267	2	8	4	9	7	2	4
1957		6,681	4,477	728	3,616	NA	12	101	21	NA	2,185	2,174	3	8	4	10	8	2	5
1958		7,214	4,941	842	3,942	NA	13	120	25	NA	2,252	2,241	3	8	4	11	9	2	6
1959		8,463	5,872	940	4,750	NA	16	134	32	NA	2,569	2,557	3	9	5	12	10	2	6
1960		9,360	6,390	1,003	5,169	NA	19	151	49	NA	2,948	2,935	3	10	5	12	10	2	6
1961		9,930	6,701	1,090	5,347	NA	22	170	73	NA	3,201	3,189	2	10	5	16	14	2	7
1962		10,115	6,822	1,227	5,280	NA	23	190	103	NA	3,259	3,246	2	11	6	20	18	2	8
1963		11,540	7,956	1,465	6,116	NA	22	219	134	NA	3,548	3,535	2	11	6	22	20	2	8
1964		12,506	8,610	1,680	6,156	359	30	227	159	NA	3,861	3,848	2	11	7	21	18	3	8
1965		13,215	8,742	1,789	6,218	298	48	207	183	NA	4,433	4,419	2	12	8	24	20	4	9
1966		14,490	9,466	1,886	6,849	271	61	200	199	NA	4,977	4,961	2	14	10	28	23	5	9
1967		15,332	9,521	1,943	6,795	302	66	208	208	NA	5,762	5,744	3	15	10	31	24	7	9
1968		16,154	9,756	1,904	7,044	293	72	226	217	NA	6,346	6,326	4	16	9	35	26	9	8
1969		17,051	9,848	2,016	6,944	332	80	246	231	NA	7,150	7,127	5	18	8	38	28	10	7
1970		16,925	9,382	2,258	6,232	340	84	249	220	NA	7,489	7,466	5	18	7	40	30	10	6
1971		17,399	9,561	2,473	6,167	391	69	267	194	NA	7,780	7,757	4	19	9	42	33	9	8
1972		18,743	10,141	2,639	6,533	402	63	291	213	NA	8,533	8,510	4	19	14	44	35	9	12
1973		20,197	10,311	2,657	6,621	399	71	296	268	NA	9,798	9,773	5	20	20	51	38	13	18
1974		21,504	10,506	2,765	6,553	479	75	321	314	NA	10,896	10,868	7	22	25	57	42	15	20
1975		22,706	10,993	2,890	6,783	535	83	373	330	NA	11,600	11,569	8	23	27	63	47	16	22
1976		25,085	12,035	2,972	7,522	654	100	447	341	NA	12,927	12,890	12	25	31	68	52	16	24
1977		27,667	13,153	3,188	8,275	675	153	503	359	NA	14,370	14,328	15	27	40	76	58	19	28
1978		31,056	14,383	3,676	8,756	753	254	542	403	NA	16,504	16,460	15	30	49	88	64	24	32
1979		35,445	16,064	3,944	9,888	810	336	603	483	NA	19,193	19,145	16	32	56	99	71	28	34
1980		40,765	17,604	4,072	10,957	882	362	719	612	NA	22,945	22,891	19	35	68	110	79	31	38
1981		46,305	20,242	4,530	12,791	950	386	778	360	447	25,817	25,756	24	37	80	123	88	35	44
1982		51,879	22,323	5,178	14,215	989	397	745	362	436	29,286	29,219	27	40	88	137	98	39	46
1983		57,771	24,859	6,106	15,522	1,054	399	832	447	500	32,617	32,542	31	44	97	151	109	43	47
1984		66,461	28,320	7,078	17,640	1,056	435	986	594	530	37,815	37,731	37	47	108	167	120	47	51
1985		74,522	32,304	8,011	20,258	1,102	486	1,244	644	560	41,857	41,762	43	51	120	183	134	49	57
1986		75,855	33,993	8,275	21,517	1,145	513	1,504	587	453	41,460	41,354	50	55	136	201	149	53	65

TABLE 9. U.S. development expenditures, by source of funds and performing sector: 1953–2012

Year	Funding	All	Federal									Industry				U&C	Other nonprofit			Other
	source:	sources	Federal		Industry		U&C	Other	Nonprofit	Industry		U&C	Other	U&C	Other		government ^a			
	Performer:	All performers	Total	Industry ^b	FFRDCs ^c	U&C ^d	FFRDCs	nonprofit ^e	FFRDCs ^e	Total	Industry ^f	U&C ^d	nonprofit ^g	U&C ^d	Total	nonprofit ^g	U&C ^d	U&C ^d		
1987		79,929	36,691	8,176	24,122	1,230	599	1,670	474	421	42,784	42,667	57	60	155	226	165	61	73	
1988		84,567	37,285	8,864	23,719	1,414	698	1,762	407	420	46,765	46,634	66	65	180	254	183	71	83	
1989		87,723	35,320	9,355	21,049	1,423	773	1,782	507	430	51,822	51,676	76	70	205	285	203	81	91	
1990		94,067	33,859	9,700	18,966	1,438	910	1,735	619	490	59,568	59,410	83	75	226	315	226	89	99	
1991		95,105	31,220	8,778	17,256	1,383	1,012	1,537	722	533	63,197	63,030	86	82	239	345	251	94	103	
1992		99,811	31,514	9,098	17,181	1,372	1,055	1,452	758	599	67,567	67,388	91	88	246	378	279	100	105	
1993		99,705	30,054	9,071	16,083	1,038	1,127	1,374	787	574	68,866	68,674	97	95	259	416	309	107	109	
1994		102,938	30,208	8,823	16,209	1,196	1,213	1,378	815	573	71,886	71,681	102	103	276	455	343	112	114	
1995		113,079	32,436	9,262	17,824	1,208	1,180	1,616	744	603	79,738	79,518	108	111	288	495	381	113	123	
1996		121,377	31,373	9,033	17,066	1,358	1,128	1,520	698	571	89,032	88,797	115	120	305	538	423	115	128	
1997		128,677	32,270	9,077	18,121	1,292	1,055	1,454	687	585	95,332	95,063	114	155	305	649	536	112	121	
1998		144,723	32,714	9,214	18,452	1,280	974	1,527	760	507	110,868	110,589	114	164	302	723	611	113	116	
1999		154,376	30,609	9,265	16,571	1,208	710	1,640	727	487	122,533	122,236	119	178	321	793	673	121	120	
2000		169,472	27,513	9,377	13,510	1,185	565	1,577	580	720	140,551	140,235	121	195	348	934	804	130	125	
2001		167,812	28,547	11,062	12,542	647	673	1,717	874	1,033	137,727	137,410	121	197	376	1,030	890	140	132	
2002		176,689	29,904	11,800	13,061	639	669	1,726	937	1,074	145,038	144,727	120	191	419	1,184	1,028	156	144	
2003		175,591	30,185	12,646	11,939	747	940	1,954	743	1,216	143,438	143,121	121	195	461	1,349	1,182	167	160	
2004		177,347	34,411	12,746	14,419	851	1,268	2,447	1,300	1,379	140,938	140,615	123	199	474	1,358	1,186	172	166	
2005		195,864	36,697	13,994	15,512	1,052	1,199	2,360	1,211	1,369	157,034	156,696	126	212	493	1,477	1,301	175	163	
2006		212,836	38,875	16,089	16,720	1,156	970	2,136	603	1,202	171,748	171,392	130	226	512	1,540	1,360	179	162	
2007		228,084	39,732	18,016	14,860	1,738	939	2,488	568	1,123	185,947	185,569	138	240	533	1,703	1,511	192	169	
2008		259,713	54,679	17,566	29,488	1,948	885	2,239	562	1,991	202,363	201,961	153	249	581	1,905	1,689	216	185	
2009		255,987	55,901	17,245	30,436	2,008	1,636	1,868	550	2,158	196,613	196,118	254	241	950	2,218	1,846	373	305	
2010		250,791	56,384	18,844	28,088	2,118	2,633	1,838	638	2,226	190,202	189,612	348	242	1,338	2,449	1,921	528	419	
2011		271,577	58,938	23,015	26,228	2,027	2,856	1,715	797	2,301	208,271	207,659	357	255	1,450	2,503	1,958	545	416	
2012 (preliminary)		290,935	64,264	24,404	30,409	1,975	2,951	1,628	555	2,342	222,210	221,580	362	267	1,510	2,542	1,992	550	409	
2005 constant \$millions																				
1953		21,093	10,894	3,503	6,943	NA	53	294	102	NA	10,122	10,078	6	37	16	43	37	6	18	
1954		22,875	12,415	3,290	8,607	NA	52	358	107	NA	10,372	10,323	6	43	19	49	43	6	21	
1955		25,235	14,618	3,268	10,753	NA	69	416	111	NA	10,527	10,470	9	48	19	48	42	6	23	
1956		34,099	20,741	3,672	16,407	NA	79	469	114	NA	13,262	13,204	12	47	21	50	41	9	26	
1957		37,655	25,233	4,100	20,380	NA	68	569	116	NA	12,312	12,253	14	45	24	56	45	11	30	
1958		39,764	27,234	4,639	21,730	NA	69	661	135	NA	12,414	12,353	17	44	24	61	50	11	31	
1959		46,109	31,990	5,121	25,879	NA	84	730	174	NA	13,997	13,931	16	49	25	65	54	11	33	
1960		50,294	34,333	5,387	27,775	NA	102	809	261	NA	15,838	15,771	13	54	25	64	54	11	34	
1961		52,753	35,598	5,788	28,407	NA	114	901	388	NA	17,006	16,942	11	53	27	85	74	11	37	
1962		53,013	35,756	6,431	27,674	NA	118	996	537	NA	17,081	17,013	10	58	30	105	94	10	40	

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	source:	sources																	government ^a
	Performer:	All performers	Total	Federal	Industry ^b	FFRDCs ^c	U&C ^d	U&C	Other	Nonprofit	Total	Industry ^f	U&C ^d	Other	U&C ^d	Total	Other nonprofit ^g	U&C ^d	U&C ^d
1963		59,846	41,258	7,598	31,718	NA	114	1,133	695	NA	18,400	18,333	10	57	32	114	104	10	41
1964		63,876	43,976	8,581	31,442	1,834	151	1,157	812	NA	19,720	19,654	10	56	33	105	92	13	41
1965		66,286	43,847	8,971	31,189	1,495	241	1,036	915	NA	22,236	22,166	10	60	39	120	100	20	43
1966		70,674	46,169	9,199	33,407	1,322	298	976	968	NA	24,276	24,198	10	68	47	137	112	24	46
1967		72,554	45,057	9,195	32,156	1,429	310	984	982	NA	27,265	27,183	12	71	47	144	114	31	40
1968		73,326	44,284	8,643	31,975	1,330	325	1,026	985	NA	28,807	28,716	18	73	42	159	118	41	35
1969		73,756	42,598	8,719	30,038	1,436	344	1,064	997	NA	30,929	30,829	22	78	34	164	121	43	31
1970		69,543	38,552	9,277	25,607	1,397	343	1,023	904	NA	30,772	30,677	21	74	29	164	123	41	27
1971		68,086	37,413	9,676	24,133	1,530	270	1,045	759	NA	30,445	30,355	16	74	34	162	129	33	31
1972		70,312	38,041	9,901	24,508	1,508	234	1,092	799	NA	32,008	31,924	13	71	51	165	131	34	46
1973		71,781	36,645	9,444	23,532	1,418	251	1,050	951	NA	34,823	34,734	18	71	71	179	135	44	62
1974		70,066	34,232	9,010	21,351	1,561	243	1,046	1,021	NA	35,502	35,410	21	70	80	186	138	49	65
1975		67,594	32,726	8,603	20,193	1,593	246	1,109	982	NA	34,534	34,441	24	70	82	187	140	48	66
1976		70,624	33,884	8,367	21,177	1,841	280	1,258	960	NA	36,394	36,290	32	71	88	192	147	45	67
1977		73,228	34,813	8,438	21,902	1,787	405	1,332	950	NA	38,033	37,922	38	72	106	202	153	49	74
1978		76,805	35,571	9,092	21,654	1,862	628	1,340	995	NA	40,816	40,707	36	73	121	217	159	58	79
1979		80,930	36,678	9,004	22,577	1,849	768	1,378	1,102	NA	43,821	43,712	35	73	127	226	163	63	78
1980		85,299	36,836	8,521	22,927	1,846	757	1,504	1,281	NA	48,012	47,899	41	72	141	230	166	64	80
1981		88,590	38,727	8,667	24,471	1,818	738	1,488	688	856	49,392	49,276	45	72	152	235	168	67	84
1982		93,544	40,250	9,337	25,631	1,783	717	1,343	653	787	52,806	52,685	48	73	159	247	176	70	82
1983		100,207	43,119	10,590	26,924	1,828	692	1,442	776	867	56,575	56,445	54	76	169	262	188	74	82
1984		111,107	47,344	11,833	29,490	1,765	727	1,648	994	887	63,218	63,077	62	79	180	279	201	78	86
1985		120,920	52,418	12,998	32,871	1,788	789	2,018	1,045	909	67,917	67,764	70	83	195	297	217	80	93
1986		120,422	53,965	13,136	34,159	1,818	815	2,387	931	719	65,818	65,650	80	88	216	319	236	84	104
1987		123,308	56,604	12,613	37,214	1,898	924	2,576	731	650	66,004	65,824	88	92	240	348	255	93	113
1988		126,134	55,612	13,221	35,378	2,109	1,041	2,628	608	627	69,751	69,556	99	96	268	380	273	106	123
1989		126,081	50,764	13,446	30,253	2,045	1,112	2,561	729	619	74,482	74,272	109	100	294	409	292	117	131
1990		130,176	46,856	13,424	26,246	1,990	1,259	2,401	857	678	82,434	82,215	115	104	313	435	313	123	138
1991		127,105	41,725	11,731	23,062	1,848	1,352	2,054	965	712	84,462	84,238	115	109	320	461	335	126	137
1992		130,305	41,143	11,877	22,430	1,791	1,377	1,895	990	782	88,210	87,976	119	115	321	494	364	130	137
1993		127,353	38,388	11,587	20,543	1,326	1,440	1,755	1,005	734	87,962	87,717	124	122	331	532	395	137	139
1994		128,768	37,788	11,037	20,276	1,496	1,518	1,724	1,019	716	89,924	89,668	128	129	345	569	430	140	142
1995		138,567	39,747	11,350	21,842	1,480	1,445	1,980	911	739	97,711	97,442	133	136	353	606	467	139	150
1996		145,956	37,727	10,862	20,522	1,633	1,357	1,827	839	686	107,061	106,778	138	144	367	647	509	138	154
1997		152,050	38,132	10,725	21,413	1,527	1,247	1,718	811	691	112,648	112,330	135	183	360	767	634	133	143

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	Performer:	All performers	Total	Federal	Industry ^b	FFRDCs ^c	U&C ^d	U&C	Other nonprofit ^e	Nonprofit FFRDCs ^e	Total	Industry ^f	U&C ^d	Other nonprofit ^g	U&C ^d	Total	Other nonprofit ^g	U&C ^d	U&C ^d
1998		169,101	38,225	10,766	21,560	1,496	1,138	1,785	888	592	129,542	129,217	133	192	353	845	714	132	135
1999		177,766	35,246	10,669	19,082	1,391	818	1,888	837	561	141,099	140,757	137	205	370	913	775	139	138
2000		191,013	31,010	10,568	15,227	1,336	637	1,778	653	812	158,416	158,060	137	220	392	1,053	907	146	141
2001		184,963	31,465	12,192	13,824	713	741	1,892	963	1,139	151,804	151,454	133	217	414	1,135	981	154	145
2002		191,644	32,435	12,798	14,167	693	725	1,872	1,016	1,165	157,314	156,977	130	207	455	1,284	1,115	169	156
2003		186,531	32,065	13,434	12,683	793	998	2,076	790	1,292	152,374	152,038	129	207	489	1,433	1,255	177	170
2004		183,236	35,554	13,169	14,898	879	1,310	2,529	1,344	1,425	145,618	145,284	128	206	489	1,403	1,226	178	172
2005		195,864	36,697	13,994	15,512	1,052	1,199	2,360	1,211	1,369	157,034	156,696	126	212	493	1,477	1,301	175	163
2006		206,175	37,658	15,586	16,197	1,120	940	2,069	584	1,164	166,373	166,028	126	219	496	1,491	1,318	174	157
2007		214,715	37,403	16,960	13,989	1,636	884	2,342	534	1,057	175,048	174,692	130	226	501	1,603	1,422	181	159
2008		239,185	50,357	16,178	27,157	1,794	815	2,062	518	1,833	186,368	185,998	141	229	535	1,754	1,555	199	170
2009		233,714	51,038	15,745	27,788	1,833	1,494	1,706	502	1,971	179,506	179,054	232	220	867	2,025	1,685	340	278
2010		225,954	50,800	16,977	25,306	1,908	2,372	1,656	575	2,006	171,365	170,834	313	218	1,206	2,207	1,731	475	377
2011		239,573	51,993	20,303	23,137	1,788	2,520	1,513	703	2,030	183,727	183,187	315	225	1,279	2,208	1,727	481	367
2012 (preliminary)		252,138	55,694	21,149	26,354	1,712	2,558	1,411	481	2,030	192,577	192,032	314	232	1,309	2,203	1,726	477	354

NA = not available; included in data for federal support to industry and federal support to other nonprofit institutions.

FFRDC = federally funded R&D center; U&C = universities and colleges.

^a Due to survey limitations, data on R&D funded by other (nonfederal) government are separately available only for U&C; nonetheless, other government funded R&D is included in the own performance of these other sectors (e.g., other government funding to other nonprofits is included in other nonprofit funding for their own R&D).

^b Character-of-work estimates for industry were revised in 1998 and for later years; hence, the data for 1997 and earlier years are not directly comparable.

^c Character-of-work estimates for industry-administered FFRDCs in 1953–63 are not separate from the federal funding to industry; the data on federal funding to industry in those years include the funding to these FFRDCs.

^d The data for U&C R&D before 2003 covers only science and engineering (S&E) fields; in 2003 and later years, the R&D in non-S&E fields is also included. Adjustments have been made to U&C R&D for 1998 and later years to eliminate the double counting of funds passed through from one academic institution to another. The character-of-work estimation procedure for academic R&D was revised in 1998 and again in 2010; hence, these data are not directly comparable with data reported for earlier years.

^e Character-of-work estimates for nonprofit-administered FFRDCs in 1953–80 are not separate from federal funding for other nonprofit institutions; thus, the data for federal funding to other nonprofit institutions includes the funding to these FFRDCs in those years.

^f Industry sources of funding for industry R&D include all nonfederal sources of funding.

^g The 1998–2012 data for other nonprofit R&D are not based on a dedicated nonprofit survey and may later be revised.

NOTES: The R&D data for 2012 are preliminary and may later be revised. Some back-year data may have been revised, accordingly, for trend comparisons, use only the historical data reported here; do not use data published earlier. Detail may not add to total due to rounding. Constant-dollar estimates are derived from unrounded data. Data are based on annual reports by performers, except for the nonprofit sector. The R&D expenditures of FFRDCs are chiefly from federal funding, but any nonfederal funds are included in the totals. Expenditures for industry and, before 2001, for industry-administered FFRDCs are collected by calendar year. Expenditures for other performers are calendar-year approximations based on fiscal year data. In most cases, the approximation equals 75% of the amount reported in the same fiscal year plus 25% of the amount reported in the subsequent fiscal year. However, the fiscal year for academic performers generally begins 1 July, not 1 October; also, prior to 1977, the federal fiscal year began on 1 July, not 1 October. Therefore, calendar-year approximations for academic performers and federal performers before 1977 equal 50% of the amount reported in the same fiscal year plus 50% of amount reported in the subsequent fiscal year. Los Alamos National Laboratory became industry administered in June 2006—previously, it was U&C administered. Lawrence Livermore National Laboratory became industry administered in October 2007—previously, it was U&C administered.

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics (NSF/NCSES), National Patterns of R&D Resources (annual series), Business R&D and Innovation Survey (annual series), Higher Education R&D Survey (annual series), Survey of Federal Funds for R&D (annual series), FFRC R&D Survey (annual series), R&D Funding and Performance by Nonprofit Organizations (FYs 1996–97). All NSF/NCSES reports available at <http://www.nsf.gov/statistics/>.