

Appendix table 4-6

## U.S. inflation-adjusted R&amp;D expenditures, by source of funds and performing sector: 1953–2002

(Millions of constant 1996 dollars)

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Year	Funding sector:	Total	Federal Government							Industry				U&C	Nonprofits		Non-Federal <sup>a</sup>		
	Performing sector:		Total	Federal	Industry <sup>b</sup>	Industry FFRDCs <sup>b</sup>	U&C <sup>c</sup>	U&C FFRDCs <sup>d</sup>	Non-profits <sup>b</sup>	Nonprofit FFRDCs <sup>b,e</sup>	Total	Industry <sup>f</sup>	U&C <sup>c</sup>	Non-profits	U&C <sup>c</sup>	Total	Non-profits	U&C <sup>c</sup>	
1953		26,805	14,455	5,273	7,429	—	774	681	299	—	11,670	11,429	106	135	190	286	145	140	205
1954		28,912	15,957	4,951	9,002	—	846	826	332	—	12,215	11,934	121	159	203	309	159	149	229
1955		32,286	18,747	4,918	10,399	1,153	966	945	324	43	12,750	12,437	137	177	212	324	162	162	253
1956		41,746	24,523	5,528	14,645	1,809	1,081	1,061	345	54	16,359	16,024	154	181	225	362	186	176	276
1957		46,693	29,298	6,139	18,590	1,727	1,143	1,261	372	66	16,420	16,072	173	175	241	431	241	189	303
1958		50,659	32,447	6,962	20,499	1,712	1,294	1,458	439	83	17,130	16,774	180	176	256	492	287	206	333
1959		57,217	37,462	7,683	23,844	2,045	1,625	1,595	569	101	18,576	18,204	181	192	279	532	306	226	368
1960		61,966	40,352	8,115	25,255	2,325	2,039	1,735	667	216	20,352	19,955	180	216	302	554	306	248	406
1961		64,616	41,978	8,856	25,334	2,186	2,480	1,961	753	408	21,199	20,802	178	218	332	660	383	276	448
1962		68,734	44,557	9,620	26,420	1,847	3,019	2,199	880	572	22,531	22,115	178	237	369	785	479	306	493
1963		76,276	50,739	11,124	29,809	1,907	3,646	2,520	1,017	717	23,720	23,304	176	239	417	857	517	339	543
1964		81,653	54,496	12,705	31,093	1,791	4,263	2,695	1,071	878	25,225	24,816	174	236	486	857	480	377	589
1965		85,127	55,444	13,272	30,980	1,531	4,907	2,647	1,203	904	27,538	27,103	175	261	572	944	521	423	629
1966		90,367	58,040	13,523	32,612	1,582	5,458	2,664	1,343	859	29,971	29,501	184	286	673	1,028	564	464	654
1967		92,600	57,758	13,663	31,519	1,654	5,912	2,761	1,357	893	32,311	31,813	204	294	791	1,073	575	498	666
1968		93,881	56,991	13,297	30,970	1,671	6,030	2,745	1,384	894	34,249	33,722	219	308	838	1,101	574	527	702
1969		94,238	55,211	13,738	28,949	1,698	5,884	2,650	1,404	888	36,283	35,727	219	337	845	1,145	584	562	754
1970		90,435	51,594	14,294	25,141	1,659	5,800	2,500	1,409	791	35,955	35,403	225	327	890	1,180	592	588	816
1971		88,402	49,930	14,445	23,509	1,702	5,765	2,407	1,397	704	35,465	34,908	236	321	949	1,199	603	596	858
1972		90,316	50,401	14,694	23,473	1,717	5,940	2,467	1,482	629	36,816	36,251	248	317	979	1,234	622	611	886
1973		92,271	49,519	14,394	22,619	1,775	5,978	2,503	1,685	565	39,579	39,000	266	313	1,021	1,254	628	626	897
1974		91,203	47,314	14,015	20,677	1,877	5,898	2,529	1,744	573	40,648	40,052	284	312	1,072	1,295	642	653	874
1975		89,315	46,502	13,893	19,680	2,020	5,996	2,666	1,686	562	39,531	38,926	295	310	1,078	1,335	655	679	869
1976		93,312	48,056	13,925	20,499	2,189	6,191	2,992	1,681	579	41,849	41,220	310	320	1,135	1,399	691	708	872
1977		96,330	49,092	13,797	21,153	2,203	6,425	3,259	1,644	611	43,629	42,959	343	327	1,263	1,472	724	747	875
1978		101,057	50,662	14,435	20,956	2,286	6,901	3,673	1,721	689	46,561	45,853	376	332	1,408	1,507	754	754	919
1979		106,042	52,159	14,299	21,730	2,282	7,365	3,852	1,885	746	49,946	49,202	411	333	1,502	1,513	775	738	922
1980		110,869	52,599	13,728	22,356	2,286	7,599	4,043	1,753	833	54,223	53,429	462	332	1,612	1,527	792	735	909
1981		115,910	54,097	13,796	24,045	2,260	7,487	3,983	1,663	862	57,637	56,803	503	330	1,696	1,550	807	742	932
1982		121,975	56,141	14,342	25,752	2,278	7,364	3,839	1,774	792	61,422	60,536	548	339	1,821	1,653	848	805	937
1983		130,676	60,265	15,722	27,722	2,357	7,564	4,123	1,905	871	65,714	64,733	627	354	1,969	1,772	909	863	955
1984		143,171	65,101	16,679	30,315	2,478	8,045	4,540	2,170	875	73,050	71,954	724	372	2,119	1,892	977	915	1,009
1985		155,641	71,465	17,767	34,378	2,538	8,669	4,907	2,307	899	78,656	77,409	855	392	2,365	2,023	1,056	968	1,131
1986		159,720	72,579	17,932	34,524	2,545	9,331	5,275	2,257	714	80,987	79,580	989	417	2,680	2,188	1,152	1,036	1,287
1987		162,734	75,404	17,515	37,068	2,612	10,013	5,526	2,023	646	80,660	79,148	1,071	441	2,916	2,383	1,247	1,136	1,372
1988		166,935	74,988	17,881	35,184	2,668	10,712	5,711	2,197	635	84,749	83,122	1,163	464	3,150	2,595	1,344	1,250	1,452
1989		170,434	72,650	18,291	31,655	2,674	11,186	5,711	2,476	657	90,028	88,268	1,274	486	3,425	2,802	1,444	1,358	1,530
1990		175,677	71,201	18,115	29,825	2,672	11,485	5,657	2,711	735	96,183	94,327	1,347	509	3,683	2,993	1,549	1,444	1,617
1991		179,446	67,811	17,008	26,874	2,561	11,893	5,711	2,988	776	102,945	101,026	1,385	534	3,856	3,181	1,666	1,515	1,653
1992		179,933	66,219	17,261	24,356	2,456	12,549	5,726	3,055	814	104,779	102,774	1,437	567	3,885	3,390	1,814	1,576	1,660
1993		176,270	64,414	17,576	22,163	2,152	13,080	5,624	3,023	796	102,657	100,575	1,479	603	3,943	3,601	1,975	1,627	1,655

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## U.S. inflation-adjusted R&amp;D expenditures, by source of funds and performing sector: 1953–2002

(Millions of constant 1996 dollars)

Year	Funding sector:	Federal Government									Industry			U&C	Nonprofits			Non-Federal <sup>a</sup>	
	Performing sector:	Total	Total	Federal	Industry <sup>b</sup>	Industry FFRDCs <sup>b</sup>	U&C <sup>c</sup>	U&C FFRDCs <sup>d</sup>	Non-profits <sup>b</sup>	Nonprofit FFRDCs <sup>b,e</sup>	Total	Industry <sup>f</sup>	U&C <sup>c</sup>	Non-profits	U&C <sup>c</sup>	Total	Non-profits	U&C <sup>c</sup>	U&C <sup>c</sup>
1994 .....		176,245	63,313	17,035	21,103	2,312	13,527	5,514	3,032	790	103,326	101,168	1,516	642	4,101	3,816	2,157	1,660	1,689
1995 .....		187,174	64,184	17,231	21,588	2,323	13,845	5,471	2,902	823	113,017	110,756	1,577	684	4,188	4,000	2,353	1,647	1,784
1996 .....		197,288	63,341	16,585	21,356	2,255	14,073	5,395	2,906	772	123,416	121,015	1,671	730	4,434	4,238	2,574	1,665	1,860
1997 .....		208,064	63,313	16,497	21,381	2,077	14,239	5,358	2,956	805	133,622	131,055	1,773	793	4,744	4,501	2,750	1,751	1,885
1998 .....		219,288	64,283	16,824	21,401	1,998	14,677	5,387	3,179	817	143,258	140,519	1,886	853	5,008	4,829	2,969	1,860	1,909
1999 .....		232,697	64,037	17,058	19,624	1,910	15,503	5,401	3,594	949	155,976	153,059	1,985	932	5,380	5,303	3,287	2,016	2,002
2000 .....		247,663	62,093	16,763	16,075	1,811	16,541	5,371	4,162	1,371	171,863	168,793	2,039	1,032	5,805	5,804	3,627	2,177	2,097
2001 preliminary .....		250,024	66,387	19,237	15,445	1,796	17,668	5,444	4,852	1,945	169,060	165,978	2,068	1,015	6,232	6,174	3,883	2,292	2,170
2002 preliminary .....		249,678	70,681	21,505	15,445	2,020	19,044	5,478	5,350	1,839	163,420	160,324	2,116	979	6,740	6,603	4,176	2,427	2,234

FFRDC federally funded research and development center

U&amp;C universities and colleges

<sup>a</sup>Because of limitations in the survey information, data on non-Federal Government funding to other performers are not available and are consequently included in other sectors' support for their own R&D performance. For example, non-Federal Government support to nonprofits is included in nonprofit support for their own R&D.

<sup>b</sup>Expenditures of industry FFRDCs for 1953–54 were not separated from total Federal support to the industrial sector. Thus, the figure for Federal support to industry includes support to FFRDCs for those years. The same is true for expenditures of nonprofit FFRDCs, which are included in Federal support for nonprofit institutions in 1953–63.

<sup>c</sup>Adjustments have been made to university R&D for 1998 and later years to eliminate double counting of funds passed through from one academic institution to another. Data for 1998 and later years are not directly comparable to data for 1997 and earlier years. For FY 1998, \$479 million in passthrough funds were reported. For FY 2002, \$865 million in passthrough funds are estimated.

<sup>d</sup>Includes all R&D expenditures of FFRDCs administered by academic institutions.

<sup>e</sup>Beginning in 2001, data for nonprofit FFRDCs are reported by FFRDCs. In prior years, data were collected from the Federal agencies supporting the FFRDCs.

<sup>f</sup>Industry sources of industry R&D expenditures include all non-Federal sources of industry R&D expenditures.

NOTES: Expenditure levels for academic and Federal Government performers are also in reference to calendar years. These levels are approximations based on FY data. For Federal Government expenditures starting in 1977, the calendar-year approximation is 75 percent of the amount reported in the same FY plus 25 percent of the amount reported in the subsequent FY. Academic expenditures in all years and for Federal Government expenditures before 1977 are 50 and 50 percent, respectively, because those FYs (for most academic institutions and the Federal Government before 1977) began on July 1 instead of October 1. Technical notes explaining methodological issues of measurement will be provided in National Science Foundation, *The Methodology Underlying the Measurement of R&D Expenditures: 2002* (Arlington, VA, forthcoming). Data are based on annual reports by performers except for the nonprofit sector. Data are preliminary for 2001 and 2002. For trend comparisons, use only the historical data reported here. This table incorporates the latest revisions to prior-year data. Do not use data published earlier.

SOURCES: Data were derived from National Science Foundation, Division of Science Resources Statistics, *National Patterns of R&D Resources*, annual series.