

TABLE 4. R&D expenditures at universities and colleges, by source of funds and science and engineering field: FY 1997–2004

(Dollars in thousands)

Source and field	1997	1998	1999	2000	2001	2002	2003	2004
All R&D expenditures	24,370,716	25,856,006	27,530,968	30,068,664	32,793,818	36,367,358	40,056,637	42,945,081
Source of funds								
Federal government	14,314,924	15,151,228	16,101,914	17,535,692	19,222,037	21,862,995	24,743,653	27,379,233
State and local government	1,909,299	1,943,946	2,021,280	2,199,603	2,320,195	2,505,086	2,649,552	2,846,722
Industry	1,736,793	1,888,299	2,032,727	2,155,741	2,219,791	2,186,906	2,162,963	2,107,322
Institutional funds	4,697,958	5,002,634	5,380,923	5,923,665	6,606,735	7,125,556	7,658,875	7,771,253
All other sources	1,711,742	1,869,899	1,994,124	2,253,963	2,425,060	2,686,815	2,841,594	2,840,551
Field								
Science	20,531,359	21,786,486	23,269,670	25,513,865	27,774,815	30,845,883	34,063,861	36,633,054
Computer sciences	709,527	746,651	861,064	876,398	956,017	1,125,344	1,304,617	1,404,509
Environmental sciences	1,532,900	1,624,511	1,691,787	1,765,345	1,831,387	2,019,481	2,190,230	2,354,063
Atmospheric sciences	245,509	269,180	287,860	287,842	301,416	340,945	395,804	415,645
Earth sciences	449,775	513,620	545,513	562,974	555,110	640,472	724,335	829,609
Oceanography	536,706	545,680	604,173	633,021	675,300	720,371	765,574	776,498
Environmental sciences, nec	300,910	296,031	254,241	281,508	299,561	317,693	304,517	332,311
Life sciences	13,591,422	14,596,872	15,630,121	17,468,638	19,214,458	21,421,027	23,745,699	25,650,300
Agricultural sciences	1,966,202	1,995,736	2,035,689	2,177,086	2,325,084	2,452,650	2,552,331	2,694,818
Biological sciences	4,183,527	4,584,501	5,039,407	5,619,030	5,945,428	6,580,230	7,379,172	7,840,436
Medical sciences	6,907,897	7,471,786	8,003,094	8,986,474	10,190,874	11,501,237	12,787,242	14,040,677
Life sciences, nec	533,796	544,849	551,931	686,048	753,072	886,910	1,026,954	1,074,369
Mathematical sciences	289,621	310,536	313,493	341,454	359,826	388,155	428,494	449,968
Physical sciences	2,371,338	2,483,327	2,605,426	2,711,754	2,804,084	3,018,150	3,277,029	3,545,031
Astronomy	287,601	302,652	384,518	385,564	378,196	402,327	392,048	420,254
Chemistry	820,842	876,340	919,176	961,279	1,007,299	1,130,787	1,227,116	1,316,897
Physics	1,058,635	1,078,600	1,149,230	1,207,356	1,240,452	1,286,481	1,417,777	1,522,134
Physical sciences, nec	204,260	225,735	152,502	157,555	178,137	198,555	240,088	285,746
Psychology	396,317	444,463	464,447	516,536	582,789	671,963	768,615	782,481
Social sciences	1,125,441	1,131,450	1,251,925	1,298,957	1,441,089	1,584,963	1,659,148	1,669,746
Economics	260,757	261,098	266,421	255,206	271,581	283,768	313,106	316,615
Political sciences	175,498	175,559	200,329	229,950	253,402	272,063	289,288	301,938
Sociology	257,394	252,878	271,443	301,100	328,229	377,579	370,101	355,429
Social sciences, nec	431,792	441,915	513,732	512,701	587,877	651,553	686,653	695,764
Sciences, nec	514,793	448,676	451,407	534,783	585,165	616,800	690,029	776,956
Engineering	3,839,357	4,069,520	4,261,298	4,554,799	5,019,003	5,521,475	5,992,776	6,312,027
Aeronautical/astronautical engineering	247,129	249,888	260,590	256,759	339,180	342,928	402,023	439,923
Bioengineering/biomedical engineering	76,791	101,957	136,564	173,710	212,574	281,854	313,504	369,848
Chemical engineering	316,672	327,080	349,020	375,709	414,477	430,741	453,277	493,353
Civil engineering	471,818	494,843	529,269	600,892	664,262	717,172	776,059	789,257
Electrical engineering	942,123	1,042,528	1,016,886	1,118,093	1,163,652	1,305,814	1,400,544	1,437,535
Mechanical engineering	517,735	567,878	625,353	632,552	686,953	780,010	820,995	867,475
Metallurgical/materials engineering	388,828	391,397	384,010	399,350	452,795	467,970	548,232	564,968
Engineering, nec	878,261	893,949	959,606	997,734	1,085,110	1,194,986	1,278,142	1,349,668

nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to total.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2004.