

Federal Funds for Research and Development :

Fiscal Years 1973–2003

Federal Obligations for Research to
Universities and Colleges by Agency and
Detailed Field of Science and Engineering

Detailed Statistical Tables

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July 2004

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GENERAL NOTES

Data in these tables were derived from the National Science Foundation's (NSF's) annual surveys of Federal Funds for Research and Development and cover fiscal years 1973–2003. They reflect research funding levels as reported by six of the Federal agencies in the survey series. All agencies that were identified as conducting R&D programs were surveyed, but only six agencies are required to report research funding to universities and colleges. These agencies are shown in the list of tables.

In the survey cycle for fiscal years 1973–75, data were first collected on Federal research support to universities and colleges by field of science. Beginning with the survey cycle for fiscal years 1974–76, data were reported for Federal basic research support to universities and colleges by field of science and for Federal applied research support to universities and colleges by field of science.

Research totals in these tables are given in obligations for research performed at universities and colleges. The research obligation data are further categorized according to character of work (basic research and applied research) and field of science or engineering.

The amounts reported for each year are expressed in obligations incurred or expected to be incurred in that year regardless of when the funds may have been authorized, appropriated, or received by an agency and regardless of whether the funds are identified in an agency's budget specifically for research.

Data for 1973 through 2001 are actual, representing completed transactions. Data for 2002 and 2003 are estimated because they do not represent final actions. The latest Survey of Federal Funds for Research and Development data used in these tables were collected during the second quarter of fiscal year 2002. The amounts reported for 2002 reflect congressional appropriation actions as of that period, as well as apportionment and reprogramming decisions as of that time. Data for 2003 represent administration budget proposals that had not been acted on. Authorization, appropriation, deferral, and apportionment actions that were completed after these data were collected will be reflected in later surveys of this series.

While completing the survey each year, agency respondents make revisions to their estimates for the latest 2 years of the previous report, in this case fiscal years 2001 and 2002. Such revision is part of the budgetary cycle. From time to time, survey submissions also reflect reappraisals and revisions in classification of various aspects of agencies' R&D programs. When such revisions occur, NSF requires the agencies to provide revised prior-year data to maintain consistency and comparability with the most recent concepts.

Accuracy of the data depends in part on the Federal respondents. Because many agency R&D programs are not identified as budget-line items, agency officials must identify R&D and R&D plant activities within broader programs. Over the years personnel of the participating agencies have developed increasing skill and consistency in meeting the survey requirements, and their interaction with NSF staff has considerably increased the reliability of the data.

DEFINITIONS

1. An agency is an organization of the Federal Government whose principal executive officer reports to the President. The Library of Congress is also included in the survey, even though its chief officer reports to Congress.
2. Obligations represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when future payment of money is required. Obligations cover all transactions that occurred in fiscal years 1973 through 2001 and those estimated for fiscal years 2002 and 2003.

The amounts shown for each year reflect obligations for that year regardless of when the funds were originally authorized or received and regardless of whether they were appropriated, received, or identified in the agency's budget specifically for research.

3. Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objectives of the sponsoring agency.

Basic research is defined as systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.

Applied research is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.

4. Fields of science and engineering in the annual Survey of Federal Funds for Research and Development consist of eight broad field categories, each consisting of a number of detailed fields. The broad fields are life sciences; psychology; physical sciences; environmental sciences; mathematics and computer sciences; engineering; social sciences; and other sciences, not elsewhere classified. The term “not elsewhere classified” (n.e.c.) is used for multidisciplinary projects within a broad field and for single-discipline projects for which a separate field has not been assigned.

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Table 1A. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	1,591,406	1,856,975	1,971,919	2,154,078	2,453,345	2,771,683	3,116,995	3,463,608
Life sciences, total	871,768	1,102,832	1,151,802	1,247,204	1,399,945	1,605,247	1,796,036	1,984,684
Biol & agricultural, total	491,509	640,260	673,061	727,323	811,910	944,394	1,096,055	1,197,367
Biol (excl environmental)	NA	NA	NA	NA	NA	811,129	946,771	1,036,988
Environmental biology	NA	NA	NA	NA	NA	28,791	39,437	39,462
Agricultural	NA	NA	NA	NA	NA	104,474	109,847	120,917
Medical sciences, total	348,592	432,629	446,929	479,200	538,443	601,340	622,537	709,688
Clinical medical	218,694	249,518	253,697	276,546	305,861	NA	NA	NA
Other medical	129,898	183,111	193,232	202,654	232,582	NA	NA	NA
Life sciences, n.e.c.	31,667	29,943	31,812	40,681	49,592	59,513	77,444	77,629
Psychology, total	46,687	56,955	54,774	58,441	59,243	67,722	89,820	89,364
Biological aspects	18,224	23,611	21,239	23,113	23,007	24,330	27,660	31,749
Social aspects	20,289	22,231	21,286	21,907	20,816	25,411	30,033	33,602
Psychological sciences, n.e.c.	8,174	11,113	12,249	13,421	15,420	17,981	32,127	24,013
Physical sciences, total	234,204	242,934	267,515	278,106	326,085	366,604	402,798	460,974
Astronomy	30,148	30,432	28,410	28,516	34,593	37,417	40,645	45,770
Chemistry	70,612	75,691	89,737	94,224	115,782	123,514	140,147	159,494
Physics	121,985	130,995	143,906	149,624	167,018	198,687	214,738	246,072
Physical sciences, n.e.c.	11,459	5,816	5,462	5,742	8,692	6,986	7,268	9,638
Environmental sciences, total	119,699	130,607	146,057	168,642	205,163	226,541	275,498	297,035
Atmospheric sciences	36,709	32,244	38,537	42,682	50,656	60,605	71,124	86,664
Geological sciences	18,994	34,439	39,940	51,604	55,574	59,767	78,421	83,279
Oceanography	43,863	56,212	60,850	63,513	82,491	92,253	108,785	104,741
Environmental sciences, n.e.c.	20,133	7,712	6,730	10,843	16,442	13,916	17,168	22,351
Math & computer sciences, total	49,357	52,848	57,520	57,609	72,869	79,489	87,531	94,608
Mathematics	NA	NA	NA	30,076	38,274	39,963	41,166	49,025
Computer sciences	NA	NA	NA	26,171	33,932	36,036	42,827	41,312
Math & computer sciences, n.e.c.	NA	NA	NA	1,362	663	3,490	3,538	4,271
Engineering, total	124,228	141,205	167,299	172,317	220,578	240,875	269,590	323,723
Aeronautical	10,526	14,495	15,382	16,719	19,940	23,527	26,624	37,758
Astronautical	3,802	3,195	2,897	3,485	2,903	3,027	2,277	7,317
Chemical	8,850	9,176	15,614	16,063	17,109	24,514	19,231	20,250
Civil	7,104	6,164	4,937	5,385	7,302	8,262	16,965	21,624
Electrical	26,400	27,325	27,970	35,819	51,561	53,160	53,555	77,266
Mechanical	17,994	14,747	14,389	16,714	21,654	22,917	26,405	32,955
Metallurgy & materials	26,190	32,320	37,866	39,864	46,941	49,167	52,320	57,327
Engineering, n.e.c.	23,362	33,783	48,244	38,268	53,168	56,301	72,213	69,226
Social sciences, total	92,616	90,510	91,297	118,866	136,618	146,072	138,211	137,758
Anthropology	4,819	6,627	6,348	5,275	4,931	7,004	7,845	6,387
Economics	25,178	30,087	33,526	32,868	37,771	42,548	45,590	50,611
Political science	1,690	2,392	2,448	2,120	2,787	3,610	5,150	4,292
Sociology	23,182	18,757	12,825	17,014	18,948	21,107	24,163	27,019
Social sciences, n.e.c.	37,747	32,647	36,150	61,589	72,181	71,803	55,463	49,449
History	919	995	1,370	NA	NA	NA	NA	NA
Linguistics	2,740	2,827	2,250	NA	NA	NA	NA	NA
Other social sciences	34,088	28,825	32,530	NA	NA	NA	NA	NA
Other sciences, n.e.c.	52,847	39,084	35,655	52,893	32,844	39,133	57,511	75,462

See explanatory information, if any, and SOURCE at end of table.

Table 1A. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	3,706,877	3,795,700	4,252,253	4,777,369	5,463,524	5,617,363	6,384,158	6,765,643
Life sciences, total	2,117,191	2,204,998	2,459,974	2,800,211	3,239,373	3,251,816	3,824,072	4,029,470
Biol & agricultural, total	1,294,160	1,337,402	1,492,803	1,686,416	1,942,840	1,961,835	2,321,137	2,419,035
Biol (excl environmental)	1,116,265	1,149,436	1,288,444	1,480,070	1,710,125	1,752,121	2,107,345	2,188,319
Environmental biology	38,323	40,920	43,408	95,919	98,816	94,169	96,905	98,935
Agricultural	139,572	147,046	160,951	110,427	133,899	115,545	116,887	131,781
Medical sciences, total	754,112	793,851	876,819	1,012,486	1,163,674	1,171,064	1,361,849	1,514,972
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	68,919	73,745	90,352	101,309	132,859	118,917	141,086	95,463
Psychology, total	92,715	83,501	99,002	112,798	138,454	148,372	186,631	196,385
Biological aspects	29,645	25,920	28,938	36,895	44,982	47,364	55,571	65,229
Social aspects	32,105	26,944	31,772	32,826	39,856	41,850	54,219	42,686
Psychological sciences, n.e.c.	30,965	30,637	38,292	43,077	53,616	59,158	76,841	88,470
Physical sciences, total	525,167	559,144	596,468	697,754	753,232	751,875	822,507	856,885
Astronomy	47,886	52,595	51,944	68,740	65,908	68,225	71,710	75,085
Chemistry	193,477	189,588	205,714	242,337	269,449	265,663	281,119	294,724
Physics	274,504	305,977	328,780	375,157	402,699	404,723	403,838	424,718
Physical sciences, n.e.c.	9,300	10,984	10,030	11,520	15,176	13,264	65,840	62,358
Environmental sciences, total	280,329	274,684	316,895	319,455	361,141	365,748	400,350	408,097
Atmospheric sciences	82,690	79,713	81,037	96,371	102,816	111,460	114,762	113,357
Geological sciences	71,424	69,022	69,691	77,879	98,621	107,394	111,982	108,893
Oceanography	109,459	112,368	150,590	131,344	150,039	140,572	160,477	158,586
Environmental sciences, n.e.c.	16,756	13,581	15,577	13,861	9,665	6,322	13,129	27,261
Math & computer sciences, total	121,389	139,651	172,379	181,576	251,816	273,903	288,530	305,442
Mathematics	59,485	64,278	72,293	78,406	96,978	105,166	111,538	117,798
Computer sciences	50,169	67,125	80,795	74,195	102,371	111,457	111,039	117,282
Math & computer sciences, n.e.c.	11,735	8,248	19,291	28,975	52,467	57,280	65,953	70,362
Engineering, total	365,346	361,508	408,677	474,193	501,280	608,969	599,755	673,093
Aeronautical	39,277	38,495	41,529	45,025	42,002	60,104	66,900	60,028
Astronautical	8,752	9,582	15,396	10,115	11,330	13,165	14,084	17,825
Chemical	21,896	19,419	23,551	51,231	45,631	51,109	54,597	56,704
Civil	24,910	27,138	30,238	39,085	40,612	36,512	41,100	40,700
Electrical	86,087	88,611	91,665	120,192	118,364	138,513	143,214	139,082
Mechanical	36,331	40,486	49,962	55,302	66,187	82,809	76,282	73,935
Metallurgy & materials	69,505	75,342	85,966	87,675	107,150	133,272	107,790	175,086
Engineering, n.e.c.	78,588	62,435	70,370	65,568	70,004	93,485	95,788	109,733
Social sciences, total	136,377	113,505	125,447	111,122	122,319	111,155	129,172	137,855
Anthropology	5,793	5,846	5,735	6,755	6,987	7,590	8,415	8,150
Economics	48,931	52,647	58,400	32,789	36,548	34,062	39,278	41,512
Political science	4,008	2,688	3,129	4,343	5,178	3,963	3,678	4,498
Sociology	24,937	22,088	25,261	29,203	30,169	27,832	33,651	33,851
Social sciences, n.e.c.	52,708	30,236	32,922	38,032	43,437	37,708	44,150	49,844
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	68,363	58,709	73,411	80,260	95,909	105,525	133,141	158,416

See explanatory information, if any, and SOURCE at end of table.

Table 1A. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	7,472,527	7,786,999	8,533,195	8,645,718	9,544,259	9,917,836	9,957,076	10,343,365
Life sciences, total	4,395,848	4,531,711	4,967,297	5,011,126	5,500,452	5,743,699	5,642,443	6,018,581
Biol & agricultural, total	2,627,973	2,668,819	2,907,436	2,903,743	3,055,135	3,144,372	2,999,296	3,240,568
Biol (excl environmental)	2,334,373	2,406,847	2,610,574	2,577,484	2,745,460	2,815,578	2,676,217	2,953,493
Environmental biology	141,548	127,929	149,317	162,085	160,458	166,859	166,724	148,059
Agricultural	152,052	134,043	147,545	164,174	149,217	161,935	156,355	139,016
Medical sciences, total	1,645,894	1,728,615	1,929,661	2,023,805	2,336,436	2,507,825	2,468,957	2,583,311
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	121,981	134,277	130,200	83,578	108,881	91,502	174,190	194,702
Psychology, total	218,068	237,474	256,144	129,030	287,486	314,793	281,553	257,470
Biological aspects	78,186	78,718	86,055	11,192	13,384	10,010	11,587	22,734
Social aspects	51,790	70,671	79,442	22,026	16,761	17,549	17,549	10,118
Psychological sciences, n.e.c.	88,092	88,085	90,647	95,812	257,341	287,234	248,326	224,618
Physical sciences, total	929,635	1,001,514	1,070,744	1,150,622	1,172,630	1,168,476	1,193,942	1,126,675
Astronomy	78,398	82,167	104,389	197,058	120,137	132,617	166,937	192,513
Chemistry	297,704	317,381	339,576	351,834	347,925	376,675	362,997	364,033
Physics	485,699	546,293	590,911	573,549	607,988	600,831	589,830	511,618
Physical sciences, n.e.c.	67,834	55,673	35,868	28,181	96,580	58,353	74,178	58,511
Environmental sciences, total	460,488	488,755	558,617	584,682	590,370	637,208	614,996	656,856
Atmospheric sciences	122,416	129,912	147,110	166,002	159,562	174,077	208,879	158,133
Geological sciences	135,426	138,327	176,658	170,884	188,506	205,493	171,196	136,644
Oceanography	176,935	181,984	135,524	149,286	146,706	147,912	111,021	209,824
Environmental sciences, n.e.c.	25,711	38,532	99,325	98,510	95,596	109,726	123,900	152,255
Math & computer sciences, total	344,809	414,929	398,710	477,677	490,134	540,132	535,117	650,571
Mathematics	115,208	129,191	121,910	150,445	135,887	141,038	133,154	135,970
Computer sciences	158,790	281,950	251,720	319,883	337,829	380,379	376,162	488,260
Math & computer sciences, n.e.c.	70,811	3,788	25,080	7,349	16,418	18,715	25,801	26,341
Engineering, total	749,156	712,715	828,843	836,083	887,988	954,599	1,090,788	1,079,626
Aeronautical	71,724	84,045	58,261	56,924	52,135	63,207	52,598	47,546
Astronautical	19,790	20,215	21,888	25,073	20,447	20,708	19,726	17,901
Chemical	41,902	58,523	75,554	69,770	65,369	60,402	70,621	60,640
Civil	46,290	42,885	48,139	39,808	37,734	37,351	51,737	44,924
Electrical	151,536	138,159	142,787	148,535	195,695	190,046	173,686	163,830
Mechanical	87,536	77,484	98,472	99,091	117,327	125,724	134,381	90,576
Metallurgy & materials	194,090	165,529	213,765	183,407	200,562	272,781	317,940	303,756
Engineering, n.e.c.	136,288	125,875	169,977	213,475	198,719	184,380	270,099	350,453
Social sciences, total	155,254	175,261	213,691	174,609	216,015	200,495	204,488	184,623
Anthropology	8,031	8,098	8,660	7,987	6,965	6,614	11,512	9,821
Economics	45,585	49,214	50,900	61,086	58,844	54,759	59,826	55,606
Political science	5,397	5,507	5,980	4,527	4,494	4,979	7,303	5,177
Sociology	43,423	57,559	92,667	43,173	34,091	27,631	16,305	12,038
Social sciences, n.e.c.	52,818	54,883	55,484	57,836	111,621	106,512	109,542	101,981
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	219,269	224,640	239,149	281,889	399,184	358,434	393,749	368,963

See explanatory information, if any, and SOURCE at end of table.

Table 1A. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	10,780,033	11,310,714	12,776,067	15,588,828	18,136,093	19,765,895	21,706,082
Life sciences, total	6,566,059	7,005,369	8,091,196	9,357,175	12,212,548	13,599,085	15,179,058
Biol & agricultural, total	3,820,244	4,069,294	4,685,742	6,615,615	10,393,323	NA	NA
Biol (excl environmental)	3,500,584	3,739,058	4,288,328	6,162,879	9,890,754	NA	NA
Environmental biology	146,578	158,273	194,666	233,778	217,361	NA	NA
Agricultural	173,082	171,963	202,748	218,958	285,208	NA	NA
Medical sciences, total	2,537,336	2,714,380	3,141,633	2,194,375	1,602,535	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	208,479	221,695	263,821	547,185	216,690	NA	NA
Psychology, total	283,399	297,318	325,569	898,333	353,927	403,077	460,847
Biological aspects	25,103	23,104	14,246	6,623	11,061	NA	NA
Social aspects	14,129	11,891	11,855	14,873	6,219	NA	NA
Psychological sciences, n.e.c.	244,167	262,323	299,468	876,837	336,647	NA	NA
Physical sciences, total	1,163,863	1,204,162	1,322,760	1,561,163	1,525,488	1,580,209	1,683,551
Astronomy	168,004	173,413	196,996	228,334	268,214	NA	NA
Chemistry	340,896	331,412	380,705	622,461	486,916	NA	NA
Physics	522,066	577,136	628,655	575,746	576,401	NA	NA
Physical sciences, n.e.c.	132,897	122,201	116,404	134,622	193,957	NA	NA
Environmental sciences, total	672,091	652,121	696,105	910,361	913,987	957,963	995,816
Atmospheric sciences	205,787	165,621	202,584	186,733	189,353	NA	NA
Geological sciences	124,194	171,276	143,948	136,327	151,264	NA	NA
Oceanography	215,405	197,197	240,596	233,993	258,810	NA	NA
Environmental sciences, n.e.c.	126,705	118,027	108,977	353,308	314,560	NA	NA
Math & computer sciences, total	571,595	624,106	662,983	792,873	943,482	973,008	1,040,430
Mathematics	118,167	132,516	131,264	211,490	169,702	NA	NA
Computer sciences	429,357	470,433	506,284	568,127	724,950	NA	NA
Math & computer sciences, n.e.c.	24,071	21,157	25,435	13,256	48,830	NA	NA
Engineering, total	988,013	992,421	1,046,107	1,283,447	1,374,247	1,377,398	1,409,044
Aeronautical	49,321	62,107	72,452	69,915	65,397	NA	NA
Astronautical	17,567	8,819	40,957	43,765	24,402	NA	NA
Chemical	62,679	73,351	74,586	80,232	71,488	NA	NA
Civil	45,100	46,297	44,815	50,770	51,118	NA	NA
Electrical	146,348	177,287	192,238	181,805	238,582	NA	NA
Mechanical	76,197	76,403	77,957	72,344	101,542	NA	NA
Metallurgy & materials	261,206	246,636	241,172	280,503	336,551	NA	NA
Engineering, n.e.c.	329,595	301,521	301,930	504,113	485,167	NA	NA
Social sciences, total	197,440	189,508	231,398	321,422	279,101	288,473	299,924
Anthropology	10,794	10,733	11,031	11,637	11,812	NA	NA
Economics	58,675	48,465	52,305	66,005	73,846	NA	NA
Political science	5,389	5,077	5,325	5,541	6,620	NA	NA
Sociology	14,521	13,846	14,472	19,735	17,105	NA	NA
Social sciences, n.e.c.	108,061	111,387	148,265	218,504	169,718	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	337,573	345,709	399,949	464,054	533,313	586,682	637,412

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: This table shows obligations from the Departments of Agriculture, Defense, Energy, and Health & Human Services; the National Aeronautics & Space Administration; and the National Science Foundation; they represent approximately 97 percent of total Federal research obligations to universities and colleges in fiscal years 2001, 2002, and 2003.

Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 1B. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	94,176	94,419	107,669	119,162	138,935	181,419	198,100	214,442
Life sciences, total	65,154	64,868	73,474	83,123	98,017	132,826	145,103	157,357
Biol & agricultural, total	61,213	60,949	69,040	78,129	92,440	126,589	138,140	149,957
Biol (excl environmental)	NA	NA	NA	NA	NA	24,295	28,846	28,706
Environmental biology	NA	NA	NA	NA	NA	0	534	548
Agricultural	NA	NA	NA	NA	NA	102,294	108,760	120,703
Medical sciences, total	3,941	3,919	4,434	4,994	5,577	6,237	6,963	7,400
Clinical medical	3,941	3,919	4,434	4,994	5,577	NA	NA	NA
Other medical	0	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0	0
Psychology, total	1	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	1	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	4,859	4,728	5,298	5,900	7,157	9,044	8,473	9,670
Astronomy	0	0	0	0	0	0	0	0
Chemistry	4,807	4,692	5,128	5,865	7,078	8,875	8,396	9,607
Physics	52	36	170	35	79	169	77	63
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	801	1,197	1,190	699	787	968	1,182	1,306
Atmospheric sciences	641	915	1,087	699	787	968	1,092	1,195
Geological sciences	160	282	103	0	0	0	90	111
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	73	128	99	162	154	310	387	282
Mathematics	NA	NA	NA	162	154	310	387	282
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	3,200	3,298	4,860	3,954	4,596	5,551	6,830	7,378
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	80	52
Civil	11	172	40	5	12	25	154	0
Electrical	23	17	88	17	40	82	22	0
Mechanical	0	0	0	0	0	0	111	227
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	3,166	3,109	4,732	3,932	4,544	5,444	6,463	7,099
Social sciences, total	19,976	20,100	22,748	25,319	28,224	32,720	36,125	38,449
Anthropology	0	0	0	0	0	0	0	0
Economics	18,907	18,958	21,454	23,977	26,736	31,033	33,955	36,464
Political science	1	0	0	0	0	0	0	0
Sociology	1,060	1,137	1,264	1,326	1,475	1,660	2,041	1,967
Social sciences, n.e.c.	8	5	30	16	13	27	129	18
History	8	3	6	NA	NA	NA	NA	NA
Linguistics	0	0	0	NA	NA	NA	NA	NA
Other social sciences	0	2	24	NA	NA	NA	NA	NA
Other sciences, n.e.c.	112	100	0	5	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 1B. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	240,383	252,898	272,832	259,517	292,155	272,847	279,180	304,251
Life sciences, total	176,497	180,954	194,722	202,571	232,567	215,737	221,750	241,674
Biol & agricultural, total	168,735	171,866	184,955	187,532	218,879	202,941	209,134	228,942
Biol (excl environmental)	28,625	24,320	24,004	40,497	43,797	49,940	53,812	54,515
Environmental biology	1,036	1,775	1,683	38,592	42,294	38,837	39,372	44,047
Agricultural	139,074	145,771	159,268	108,443	132,788	114,164	115,950	130,380
Medical sciences, total	7,762	9,088	9,767	15,039	13,688	12,796	12,616	12,732
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	12,186	13,576	14,696	13,533	15,548	12,211	11,249	11,840
Astronomy	0	0	0	0	0	0	0	0
Chemistry	11,933	13,386	14,482	13,497	15,548	12,162	11,249	11,840
Physics	253	190	214	36	0	49	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	1,719	1,862	2,230	1,668	2,055	2,244	2,408	2,756
Atmospheric sciences	1,519	1,610	1,607	1,213	1,711	1,713	1,251	1,511
Geological sciences	200	252	623	455	344	531	1,157	1,245
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,492	1,107	1,051	1,032	1,328	864	704	797
Mathematics	1,492	1,107	1,051	1,032	973	833	704	615
Computer sciences	0	0	0	0	355	31	0	182
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	8,394	9,062	9,789	10,790	9,888	11,832	11,835	10,755
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	241	237	268	2	0	0	0	0
Civil	184	154	175	136	608	269	100	76
Electrical	21	25	28	12	0	28	0	0
Mechanical	87	84	95	74	316	14	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	7,861	8,562	9,223	10,566	8,964	11,521	11,735	10,679
Social sciences, total	40,095	46,337	50,344	29,923	30,769	29,959	31,234	36,429
Anthropology	61	0	0	0	0	0	0	0
Economics	37,947	43,963	47,855	22,800	23,718	22,998	24,331	28,714
Political science	12	4	0	0	0	0	0	0
Sociology	2,021	2,331	2,450	7,123	7,051	6,953	6,903	7,715
Social sciences, n.e.c.	54	39	39	0	0	8	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 1B. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	326,227	345,621	383,896	436,110	429,130	435,553	431,187	373,456
Life sciences, total	263,230	274,754	296,684	329,054	325,380	324,328	324,378	278,837
Biol & agricultural, total	250,522	260,906	286,932	319,658	315,105	313,710	315,126	269,930
Biol (excl environmental)	51,305	74,986	78,982	91,810	100,869	86,069	87,851	72,153
Environmental biology	48,031	52,675	62,739	64,789	65,759	68,082	72,194	60,189
Agricultural	151,186	133,245	145,211	163,059	148,477	159,559	155,081	137,588
Medical sciences, total	12,708	13,848	9,752	9,396	10,275	10,618	9,241	8,896
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	11	11
Psychology, total	0	0	0	0	27	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	27	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	11,809	14,427	19,264	23,410	25,407	29,237	24,832	21,644
Astronomy	0	0	0	0	33	0	0	0
Chemistry	11,809	14,427	18,575	23,410	25,374	29,237	24,832	21,644
Physics	0	0	689	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	2,154	1,515	3,035	5,955	5,364	3,821	4,437	3,951
Atmospheric sciences	1,511	1,136	2,279	5,514	4,300	3,188	3,498	3,653
Geological sciences	643	379	756	441	1,064	633	930	289
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	9	9
Math & computer sciences, total	497	417	1,776	3,026	2,688	2,921	2,571	2,389
Mathematics	497	353	867	678	632	466	567	297
Computer sciences	0	64	909	2,348	2,056	2,455	2,004	2,092
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	13,850	16,181	21,968	23,253	18,079	20,648	22,715	17,185
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	103	1,785	0	0	25	0	0
Civil	0	0	804	0	0	0	0	0
Electrical	0	0	329	0	0	0	0	0
Mechanical	0	0	261	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	13,850	16,078	18,789	23,253	18,079	20,623	22,715	17,185
Social sciences, total	34,687	38,327	41,169	51,412	52,185	54,598	52,254	49,450
Anthropology	0	0	0	0	11	0	0	0
Economics	27,536	31,420	34,397	42,711	44,802	45,403	44,640	41,905
Political science	0	0	0	0	0	0	0	0
Sociology	7,151	6,907	6,772	8,701	7,372	9,195	7,614	7,545
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 1B. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	436,657	408,122	481,547	547,146	642,677	629,408	567,227
Life sciences, total	334,965	329,627	393,010	442,459	516,908	513,138	455,020
Biol & agricultural, total	326,674	321,007	384,946	433,101	506,908	NA	NA
Biol (excl environmental)	89,396	72,113	94,866	103,749	116,288	NA	NA
Environmental biology	66,220	77,876	87,885	112,451	107,138	NA	NA
Agricultural	171,058	171,018	202,195	216,901	283,482	NA	NA
Medical sciences, total	8,291	8,620	8,064	9,358	10,000	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	26,360	17,670	22,471	20,687	28,148	31,581	34,549
Astronomy	0	0	0	0	0	NA	NA
Chemistry	26,236	17,500	22,316	20,546	27,964	NA	NA
Physics	124	170	155	141	184	NA	NA
Physical sciences, n.e.c.	0	0	0	0	0	NA	NA
Environmental sciences, total	4,665	2,294	1,889	1,946	3,000	2,442	2,299
Atmospheric sciences	4,223	1,964	1,731	1,941	2,995	NA	NA
Geological sciences	442	330	158	5	5	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	0	NA	NA
Math & computer sciences, total	203	610	316	278	416	436	383
Mathematics	203	610	316	278	416	NA	NA
Computer sciences	0	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	18,150	14,416	16,335	18,547	27,451	25,980	27,284
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	254	297	353	305	267	NA	NA
Civil	60	85	86	63	83	NA	NA
Electrical	25	29	28	36	48	NA	NA
Mechanical	24	34	76	45	61	NA	NA
Metallurgy & materials	0	0	0	0	0	NA	NA
Engineering, n.e.c.	17,787	13,971	15,792	18,098	26,992	NA	NA
Social sciences, total	52,314	43,505	47,526	63,041	66,649	55,726	47,587
Anthropology	0	0	0	0	21	NA	NA
Economics	43,155	34,952	38,098	48,188	54,568	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	9,159	8,553	9,428	14,853	12,060	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	188	105	105	105

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 1C. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	160,552	166,985	164,991	191,503	220,913	242,792	271,186	312,690
Life sciences, total	21,054	18,900	19,011	17,118	19,439	19,948	21,027	27,984
Biol & agricultural, total	5,421	5,530	5,238	4,986	6,773	8,810	10,688	13,913
Biol (excl environmental)	NA	NA	NA	NA	NA	6,797	9,340	12,183
Environmental biology	NA	NA	NA	NA	NA	1,833	1,298	1,630
Agricultural	NA	NA	NA	NA	NA	180	50	100
Medical sciences, total	15,633	13,370	13,773	12,132	12,666	10,692	10,308	14,021
Clinical medical	14,278	10,393	11,483	9,448	10,899	NA	NA	NA
Other medical	1,355	2,977	2,290	2,684	1,767	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	446	31	50
Psychology, total	7,150	8,002	8,080	7,598	8,803	10,771	11,303	12,456
Biological aspects	905	967	1,192	1,639	691	523	499	114
Social aspects	5,741	6,371	5,698	4,636	6,357	7,384	9,753	12,160
Psychological sciences, n.e.c.	504	664	1,190	1,323	1,755	2,864	1,051	182
Physical sciences, total	29,729	28,702	29,321	31,136	36,995	43,463	50,468	55,108
Astronomy	1,631	251	249	308	2,153	2,853	3,322	3,513
Chemistry	5,700	6,549	6,936	7,922	11,246	12,526	13,711	17,375
Physics	19,024	20,490	20,754	21,255	20,350	26,339	33,325	33,856
Physical sciences, n.e.c.	3,374	1,412	1,382	1,651	3,246	1,745	110	364
Environmental sciences, total	30,561	29,762	30,874	31,994	37,554	51,035	54,571	52,799
Atmospheric sciences	3,371	3,211	3,500	3,411	4,835	7,678	8,372	10,720
Geological sciences	4,010	3,886	3,990	3,971	5,727	6,325	5,490	5,781
Oceanography	20,953	22,411	23,367	24,181	22,905	33,543	35,986	29,216
Environmental sciences, n.e.c.	2,227	254	17	431	4,087	3,489	4,723	7,082
Math & computer sciences, total	23,106	27,198	25,384	21,926	29,483	33,179	40,551	38,693
Mathematics	NA	NA	NA	9,636	11,983	12,175	13,127	16,121
Computer sciences	NA	NA	NA	12,227	16,837	17,514	24,229	18,863
Math & computer sciences, n.e.c.	NA	NA	NA	63	663	3,490	3,195	3,709
Engineering, total	47,195	53,637	50,539	58,502	87,855	82,806	91,554	124,037
Aeronautical	4,506	7,631	7,512	9,551	11,726	13,348	15,246	23,525
Astronautical	2,808	2,310	2,304	2,860	2,211	2,496	1,157	6,082
Chemical	2,606	2,462	2,913	2,083	3,821	3,335	3,317	3,821
Civil	309	372	670	1,178	649	835	872	1,338
Electrical	14,485	15,911	15,181	19,398	29,781	31,093	33,344	51,443
Mechanical	9,210	6,825	6,414	8,093	13,150	13,614	13,767	15,034
Metallurgy & materials	10,864	16,117	13,941	13,231	17,217	17,453	19,793	22,168
Engineering, n.e.c.	2,407	2,009	1,604	2,108	9,300	632	4,058	626
Social sciences, total	577	611	1,055	1,116	679	1,035	975	818
Anthropology	0	0	0	0	0	0	0	0
Economics	259	156	312	141	33	174	0	0
Political science	0	0	144	352	494	587	781	239
Sociology	318	346	89	203	152	274	173	27
Social sciences, n.e.c.	0	109	510	420	0	0	21	552
History	0	0	0	NA	NA	NA	NA	NA
Linguistics	0	0	0	NA	NA	NA	NA	NA
Other social sciences	0	109	510	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,180	173	727	22,113	105	555	737	795

See explanatory information, if any, and SOURCE at end of table.

Table 1C. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	362,966	412,685	472,203	538,608	587,152	707,401	681,038	728,731
Life sciences, total	30,035	41,882	41,869	54,987	64,400	59,974	60,333	64,866
Biol & agricultural, total	17,093	14,278	19,303	23,782	27,838	23,967	24,355	28,059
Biol (excl environmental)	15,497	11,649	16,339	17,760	24,901	21,178	20,959	25,460
Environmental biology	1,504	2,543	2,964	6,022	2,937	2,789	3,396	2,599
Agricultural	92	86	0	0	0	0	0	0
Medical sciences, total	12,901	24,351	19,056	27,547	32,731	32,380	32,040	32,055
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41	3,253	3,510	3,658	3,831	3,627	3,938	4,752
Psychology, total	13,552	14,295	17,557	19,705	21,754	23,820	27,994	26,702
Biological aspects	53	0	0	4,069	3,738	3,976	4,658	5,441
Social aspects	13,172	13,900	15,910	14,515	16,687	17,047	23,056	8,008
Psychological sciences, n.e.c.	327	395	1,647	1,121	1,329	2,797	280	13,253
Physical sciences, total	66,827	78,066	70,739	89,404	90,374	97,773	98,348	94,666
Astronomy	4,558	4,022	3,455	3,974	4,722	6,145	6,811	4,519
Chemistry	23,411	28,063	31,428	34,652	40,415	43,206	44,977	41,279
Physics	37,997	44,811	34,854	49,055	43,584	47,609	45,425	47,778
Physical sciences, n.e.c.	861	1,170	1,002	1,723	1,653	813	1,135	1,090
Environmental sciences, total	54,454	62,851	71,378	78,043	73,307	89,476	88,943	91,474
Atmospheric sciences	11,325	12,529	13,997	17,214	16,949	24,186	21,494	24,713
Geological sciences	3,630	4,367	7,403	7,483	18,960	33,036	28,614	27,258
Oceanography	34,904	39,238	41,377	44,737	36,795	31,524	38,149	38,918
Environmental sciences, n.e.c.	4,595	6,717	8,601	8,609	603	730	686	585
Math & computer sciences, total	56,138	68,423	89,910	95,795	132,366	149,479	140,715	148,226
Mathematics	20,991	24,362	27,493	30,181	32,239	35,066	32,526	33,152
Computer sciences	26,211	36,698	44,536	37,383	49,233	58,804	44,583	46,079
Math & computer sciences, n.e.c.	8,936	7,363	17,881	28,231	50,894	55,609	63,606	68,995
Engineering, total	141,309	146,331	169,039	189,913	192,621	275,105	253,940	297,458
Aeronautical	24,427	22,777	23,876	26,669	23,026	37,876	43,417	31,274
Astronautical	6,702	7,508	12,723	7,157	8,580	9,034	10,104	11,105
Chemical	3,188	1,934	819	1,978	1,818	2,613	3,108	2,551
Civil	2,915	2,749	3,851	4,445	5,313	8,645	8,150	10,399
Electrical	55,428	55,433	57,328	77,695	77,349	90,933	91,759	79,472
Mechanical	17,476	18,699	26,186	27,704	30,355	46,594	32,856	27,533
Metallurgy & materials	29,200	34,036	40,748	41,708	44,702	64,317	55,918	117,151
Engineering, n.e.c.	1,973	3,195	3,508	2,557	1,478	15,093	8,628	17,973
Social sciences, total	258	29	19	59	62	60	62	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	13	12	0	23	36	37	0
Political science	236	0	0	55	24	0	0	0
Sociology	22	6	7	4	15	24	25	0
Social sciences, n.e.c.	0	10	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	393	808	11,692	10,702	12,268	11,714	10,703	5,339

See explanatory information, if any, and SOURCE at end of table.

Table 1C. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	840,013	795,087	793,816	912,317	1,090,116	1,078,636	1,046,968	1,070,841
Life sciences, total	90,963	55,176	58,872	101,567	104,601	117,100	85,872	98,789
Biol & agricultural, total	61,643	28,831	37,318	58,275	55,614	55,129	43,294	47,882
Biol (excl environmental)	26,033	21,817	28,388	31,864	32,855	29,765	28,251	34,266
Environmental biology	35,610	7,014	8,930	26,411	22,589	25,364	15,043	13,616
Agricultural	0	0	0	0	170	0	0	0
Medical sciences, total	25,208	20,766	19,900	43,127	42,137	61,687	16,618	44,893
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,112	5,579	1,654	165	6,850	284	25,960	6,014
Psychology, total	26,834	28,315	21,654	25,344	22,934	19,867	22,914	19,300
Biological aspects	7,239	6,176	5,222	6,277	8,637	6,220	8,391	14,440
Social aspects	7,565	13,563	12,759	17,403	12,229	11,941	11,782	2,499
Psychological sciences, n.e.c.	12,030	8,576	3,673	1,664	2,068	1,706	2,741	2,361
Physical sciences, total	96,330	101,269	97,494	116,394	137,780	134,728	140,444	118,629
Astronomy	4,302	2,261	0	506	6,238	7,050	4,949	1,806
Chemistry	41,971	41,864	41,451	50,912	53,523	57,036	63,619	62,261
Physics	48,504	56,296	53,083	63,000	77,492	69,360	70,891	43,947
Physical sciences, n.e.c.	1,553	848	2,960	1,976	527	1,282	985	10,615
Environmental sciences, total	114,235	96,913	111,153	110,136	115,835	146,186	98,114	109,300
Atmospheric sciences	22,576	14,660	15,449	18,020	13,920	20,292	20,576	21,216
Geological sciences	42,567	35,828	38,372	31,324	39,286	57,398	25,597	16,923
Oceanography	48,938	44,814	56,342	56,369	57,321	55,348	42,608	49,499
Environmental sciences, n.e.c.	154	1,611	990	4,423	5,308	13,148	9,333	21,662
Math & computer sciences, total	170,381	195,320	181,551	222,097	232,481	269,663	279,131	282,990
Mathematics	32,165	36,551	25,829	39,961	39,716	48,030	35,190	35,019
Computer sciences	69,378	157,037	133,482	177,667	187,927	217,535	237,760	236,388
Math & computer sciences, n.e.c.	68,838	1,732	22,240	4,469	4,838	4,098	6,181	11,583
Engineering, total	316,627	311,309	318,349	326,983	419,045	387,432	412,174	440,569
Aeronautical	31,955	40,051	20,562	24,087	18,953	26,552	21,018	22,094
Astronautical	10,934	10,655	10,708	12,818	9,545	8,298	8,189	6,271
Chemical	2,074	1,380	1,842	3,058	7,001	4,572	6,039	8,106
Civil	11,823	11,790	16,924	9,310	9,044	7,598	9,148	5,767
Electrical	78,204	86,235	78,437	90,581	134,590	124,780	119,402	115,604
Mechanical	37,114	32,530	39,626	47,365	65,962	73,096	64,868	61,815
Metallurgy & materials	131,369	118,750	144,444	122,443	137,971	119,663	135,840	146,128
Engineering, n.e.c.	13,154	9,918	5,806	17,321	35,979	22,873	47,670	74,784
Social sciences, total	64	58	913	3,688	17,488	1,084	86	33
Anthropology	0	0	0	418	303	0	0	0
Economics	38	35	54	40	71	41	52	20
Political science	0	0	0	0	0	0	0	0
Sociology	26	23	36	25	48	27	34	13
Social sciences, n.e.c.	0	0	823	3,205	17,066	1,016	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	24,579	6,727	3,830	6,108	39,952	2,576	8,233	1,231

See explanatory information, if any, and SOURCE at end of table.

Table 1C. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	945,452	962,659	988,963	1,112,752	1,696,631	1,559,049	1,344,590
Life sciences, total	95,940	130,862	154,941	216,900	525,254	423,542	211,837
Biol & agricultural, total	44,272	71,142	70,395	71,679	95,831	NA	NA
Biol (excl environmental)	37,799	65,677	62,338	59,682	87,041	NA	NA
Environmental biology	5,084	4,927	8,057	11,248	8,120	NA	NA
Agricultural	1,389	538	0	749	670	NA	NA
Medical sciences, total	50,428	58,724	69,408	103,860	396,168	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,240	996	15,138	41,361	33,255	NA	NA
Psychology, total	20,606	16,016	3,387	16,194	11,116	14,084	10,460
Biological aspects	14,977	12,741	2,292	5,668	10,371	NA	NA
Social aspects	4,591	2,320	0	8,526	647	NA	NA
Psychological sciences, n.e.c.	1,038	955	1,095	2,000	98	NA	NA
Physical sciences, total	104,230	108,535	103,477	107,810	138,141	142,756	145,022
Astronomy	153	6,270	2,117	0	0	NA	NA
Chemistry	39,477	38,629	36,606	45,715	52,319	NA	NA
Physics	54,923	54,169	58,948	52,411	73,863	NA	NA
Physical sciences, n.e.c.	9,677	9,467	5,806	9,684	11,959	NA	NA
Environmental sciences, total	97,642	86,341	87,671	89,900	105,158	103,258	91,737
Atmospheric sciences	19,686	19,684	13,863	13,142	14,263	NA	NA
Geological sciences	6,280	4,953	2,431	2,756	7,258	NA	NA
Oceanography	50,740	46,231	69,332	67,383	78,495	NA	NA
Environmental sciences, n.e.c.	20,936	15,473	2,045	6,619	5,142	NA	NA
Math & computer sciences, total	240,246	243,865	225,926	248,607	315,655	316,851	335,576
Mathematics	20,263	29,183	18,673	29,507	21,498	NA	NA
Computer sciences	200,499	198,192	187,065	209,766	250,022	NA	NA
Math & computer sciences, n.e.c.	19,484	16,490	20,188	9,334	44,135	NA	NA
Engineering, total	382,396	374,602	397,292	425,521	596,899	543,474	532,457
Aeronautical	15,017	26,116	32,783	36,460	33,591	NA	NA
Astronautical	6,181	1,901	1,415	12,094	3,285	NA	NA
Chemical	6,162	10,419	12,908	9,463	6,946	NA	NA
Civil	5,602	4,025	1,668	6,926	2,627	NA	NA
Electrical	94,556	125,486	134,471	123,786	168,239	NA	NA
Mechanical	49,693	48,390	51,488	48,588	75,249	NA	NA
Metallurgy & materials	118,798	107,612	97,678	103,992	146,626	NA	NA
Engineering, n.e.c.	86,387	50,653	64,881	84,212	160,336	NA	NA
Social sciences, total	38	0	0	667	52	754	1,077
Anthropology	0	0	0	0	7	NA	NA
Economics	25	0	0	75	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	13	0	0	415	2	NA	NA
Social sciences, n.e.c.	0	0	0	177	43	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	4,354	2,438	16,269	7,153	4,356	14,330	16,424

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 1D. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	78,709	85,660	112,121	116,323	133,930	174,760	203,754	224,134
Life sciences, total	23,683	25,696	33,901	23,213	25,519	35,063	31,103	29,108
Biol & agricultural, total	21,008	22,935	32,376	20,985	21,952	29,479	25,167	24,965
Biol (excl environmental)	NA	NA	NA	NA	NA	27,479	24,134	24,931
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	2,000	1,033	34
Medical sciences, total	2,675	2,761	1,525	691	1,182	165	66	0
Clinical medical	2,675	2,761	1,525	470	674	NA	NA	NA
Other medical	0	0	0	221	508	NA	NA	NA
Life sciences, n.e.c.	0	0	0	1,537	2,385	5,419	5,870	4,143
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	46,891	52,123	58,574	61,874	70,978	84,955	96,449	120,337
Astronomy	0	0	0	0	0	0	0	0
Chemistry	8,416	5,662	8,567	13,439	14,350	12,666	14,146	14,968
Physics	38,475	45,195	49,372	48,435	56,628	72,289	80,288	101,872
Physical sciences, n.e.c.	0	1,266	635	0	0	0	2,015	3,497
Environmental sciences, total	2,311	2,686	4,228	16,705	18,410	16,740	22,572	25,008
Atmospheric sciences	531	675	1,173	3,537	1,799	1,306	916	628
Geological sciences	0	0	548	6,006	6,595	6,587	7,824	8,131
Oceanography	1,780	2,011	2,507	4,191	6,026	6,282	7,430	8,654
Environmental sciences, n.e.c.	0	0	0	2,971	3,990	2,565	6,402	7,595
Math & computer sciences, total	2,373	1,103	1,555	447	2,610	3,000	3,804	4,397
Mathematics	NA	NA	NA	290	1,696	1,950	2,304	2,921
Computer sciences	NA	NA	NA	157	914	1,050	1,500	1,170
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	306
Engineering, total	3,451	4,052	13,863	13,443	15,832	33,177	43,410	41,429
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	222	0
Chemical	100	22	1,889	2,896	4,219	11,889	3,456	2,770
Civil	0	0	0	0	0	500	0	43
Electrical	0	30	184	0	98	100	829	1,744
Mechanical	0	0	300	419	695	1,000	592	2,086
Metallurgy & materials	3,351	3,419	6,781	9,734	9,489	13,300	13,090	9,642
Engineering, n.e.c.	0	581	4,709	394	1,331	6,388	25,221	25,144
Social sciences, total	0	0	0	641	331	325	1,412	891
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	641	331	120	0	0
Political science	0	0	0	0	0	0	454	0
Sociology	0	0	0	0	0	205	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	958	891
History	0	0	0	NA	NA	NA	NA	NA
Linguistics	0	0	0	NA	NA	NA	NA	NA
Other social sciences	0	0	0	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	250	1,500	5,004	2,964

See explanatory information, if any, and SOURCE at end of table.

Table 1D. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	248,069	235,813	273,375	311,355	335,882	334,269	371,691	384,196
Life sciences, total	33,974	39,252	36,747	38,662	39,507	35,062	41,980	47,208
Biol & agricultural, total	25,466	28,647	27,035	28,403	29,892	25,805	31,959	34,950
Biol (excl environmental)	25,466	28,404	26,323	24,909	28,924	24,642	31,637	34,335
Environmental biology	0	0	0	3,494	968	833	322	220
Agricultural	0	243	712	0	0	330	0	395
Medical sciences, total	5,018	6,320	6,461	5,930	7,514	8,004	8,021	9,975
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,490	4,285	3,251	4,329	2,101	1,253	2,000	2,283
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	140,357	159,616	173,423	193,700	207,151	202,198	214,489	229,799
Astronomy	0	3,414	0	0	0	0	0	0
Chemistry	27,181	18,866	18,615	26,272	26,018	27,594	28,486	33,771
Physics	110,563	132,893	152,609	166,970	180,721	174,373	186,003	195,301
Physical sciences, n.e.c.	2,613	4,443	2,199	458	412	231	0	727
Environmental sciences, total	20,664	2,958	16,489	17,520	19,269	17,834	20,807	18,823
Atmospheric sciences	3,423	246	2,245	3,013	4,094	3,816	3,158	3,672
Geological sciences	9,108	2,548	9,611	10,813	8,989	10,627	12,496	10,389
Oceanography	6,661	0	3,775	3,190	5,066	2,963	3,661	3,843
Environmental sciences, n.e.c.	1,472	164	858	504	1,120	428	1,492	919
Math & computer sciences, total	4,593	4,556	5,984	5,924	17,359	19,433	21,762	21,005
Mathematics	3,350	3,163	3,972	3,393	11,384	12,812	17,051	15,958
Computer sciences	1,073	1,276	1,670	2,531	5,975	6,547	4,632	5,047
Math & computer sciences, n.e.c.	170	117	342	0	0	74	79	0
Engineering, total	46,981	27,883	37,143	54,335	52,479	58,000	66,726	63,281
Aeronautical	0	0	0	0	0	31	0	0
Astronautical	792	234	0	0	0	0	47	0
Chemical	1,504	173	3,153	24,626	15,182	17,892	17,454	18,312
Civil	529	1,548	0	1,425	693	768	3,077	1,628
Electrical	2,578	1,559	655	1,905	600	1,662	2,602	1,395
Mechanical	2,837	2,314	2,696	4,674	8,464	8,167	11,372	10,375
Metallurgy & materials	13,080	11,910	13,305	15,149	15,746	20,028	20,907	21,872
Engineering, n.e.c.	25,661	10,145	17,334	6,556	11,794	9,452	11,267	9,699
Social sciences, total	1,000	434	509	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	1,000	434	509	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	500	1,114	3,080	1,214	117	1,742	5,927	4,080

See explanatory information, if any, and SOURCE at end of table.

Table 1D. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	437,020	478,937	595,528	605,233	547,392	528,693	558,061	566,423
Life sciences, total	52,597	51,391	121,238	106,589	72,429	83,884	84,108	74,411
Biol & agricultural, total	39,748	37,984	46,821	52,369	57,227	55,325	56,573	56,236
Biol (excl environmental)	39,249	37,604	46,305	51,920	55,864	55,150	56,548	56,186
Environmental biology	449	330	288	100	1,313	125	25	50
Agricultural	50	50	228	349	50	50	0	0
Medical sciences, total	11,459	11,590	72,598	52,268	13,679	27,519	25,124	17,179
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,390	1,817	1,819	1,952	1,523	1,040	2,411	996
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	265,702	274,194	304,696	291,447	310,304	308,940	316,844	312,379
Astronomy	0	0	0	0	0	0	0	0
Chemistry	43,706	44,676	39,903	44,333	50,763	44,673	43,044	47,749
Physics	221,546	228,154	262,128	245,996	258,848	259,426	271,144	263,969
Physical sciences, n.e.c.	450	1,364	2,665	1,118	693	4,841	2,656	661
Environmental sciences, total	27,736	45,871	46,737	46,173	60,136	51,383	58,149	98,404
Atmospheric sciences	4,275	17,821	22,511	22,709	28,498	28,529	28,034	20,629
Geological sciences	18,925	24,219	20,162	17,915	26,650	16,820	24,053	25,305
Oceanography	3,889	3,318	2,610	3,606	3,447	3,725	4,472	3,350
Environmental sciences, n.e.c.	647	513	1,454	1,943	1,541	2,309	1,590	49,120
Math & computer sciences, total	18,557	20,397	20,155	19,105	12,170	13,880	13,272	13,525
Mathematics	13,727	17,155	16,280	15,122	7,575	9,070	0	0
Computer sciences	4,830	3,242	3,875	3,983	4,595	2,310	4,364	4,106
Math & computer sciences, n.e.c.	0	0	0	0	0	2,500	8,908	9,419
Engineering, total	67,212	81,306	98,127	134,395	86,691	69,198	81,438	67,491
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	709	22,897	26,116	24,576	22,055	20,531	19,844	14,237
Civil	2,982	2,398	3,070	2,518	3,047	1,597	4,437	3,433
Electrical	2,397	1,942	2,388	1,883	2,373	1,361	3,028	2,169
Mechanical	9,279	9,384	10,857	9,798	10,252	8,517	8,463	11,232
Metallurgy & materials	22,546	20,989	21,708	20,416	21,451	19,577	18,263	20,719
Engineering, n.e.c.	29,299	23,696	33,988	75,204	27,513	17,615	27,403	15,701
Social sciences, total	0	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	5,216	5,778	4,575	7,524	5,662	1,408	4,250	213

See explanatory information, if any, and SOURCE at end of table.

Table 1D. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	552,213	563,536	561,885	618,540	694,960	698,076	706,508
Life sciences, total	72,570	78,829	74,381	95,793	119,148	133,607	89,626
Biol & agricultural, total	42,145	45,506	51,251	57,311	66,557	NA	NA
Biol (excl environmental)	42,145	45,506	51,251	57,311	66,557	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	29,968	33,168	22,991	37,274	52,591	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	457	155	139	1,208	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	323,158	332,245	330,919	363,907	389,246	377,580	415,594
Astronomy	0	0	0	0	0	NA	NA
Chemistry	45,523	44,287	51,205	53,090	65,651	NA	NA
Physics	276,898	287,278	279,249	310,407	289,095	NA	NA
Physical sciences, n.e.c.	737	680	465	410	34,500	NA	NA
Environmental sciences, total	69,850	64,424	67,964	81,238	86,666	83,892	81,614
Atmospheric sciences	19,373	20,550	21,165	27,323	25,453	NA	NA
Geological sciences	20,857	26,332	28,064	26,267	27,624	NA	NA
Oceanography	4,137	1,928	2,905	4,289	3,231	NA	NA
Environmental sciences, n.e.c.	25,483	15,614	15,830	23,359	30,358	NA	NA
Math & computer sciences, total	9,681	9,893	17,500	8,959	26,547	15,473	32,000
Mathematics	7,297	7,280	14,304	6,112	14,637	NA	NA
Computer sciences	2,384	2,613	3,196	2,847	11,910	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	70,684	77,736	68,135	68,643	73,353	87,524	87,674
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	16,259	20,968	18,610	24,576	14,473	NA	NA
Civil	3,152	5,536	4,752	4,309	4,614	NA	NA
Electrical	2,035	3,605	3,056	2,795	3,063	NA	NA
Mechanical	9,967	10,470	9,261	8,654	11,288	NA	NA
Metallurgy & materials	24,884	18,904	16,030	14,162	15,142	NA	NA
Engineering, n.e.c.	14,387	18,253	16,426	14,147	24,773	NA	NA
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	6,270	409	2,986	0	0	0	0

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: Data shown for fiscal years 1973-74 and 1975-76 represent obligations of the Atomic Energy Commission and the Energy Research & Development Administration, respectively. In fiscal year 1982 the Bonneville Power Administration became part of the Department of Energy.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 1E. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	807,263	1,056,026	1,076,646	1,200,494	1,349,838	1,522,252	1,706,438	1,886,203
Life sciences, total	690,958	912,299	936,201	1,033,276	1,161,602	1,312,949	1,476,735	1,634,702
Biol & agricultural, total	345,516	473,602	481,238	536,096	600,347	680,258	809,888	878,679
Biol (excl environmental)	NA	NA	NA	NA	NA	680,258	809,888	878,594
Environmental biology	NA	NA	NA	NA	NA	0	0	85
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	323,966	409,849	424,712	459,240	515,618	581,716	602,394	685,824
Clinical medical	196,514	231,306	235,105	260,487	287,461	NA	NA	NA
Other medical	127,452	178,543	189,607	198,753	228,157	NA	NA	NA
Life sciences, n.e.c.	21,476	28,848	30,251	37,940	45,637	50,975	64,453	70,199
Psychology, total	28,483	42,149	37,185	42,429	40,054	47,712	66,836	64,248
Biological aspects	9,238	18,507	13,827	16,297	15,200	18,492	19,641	24,009
Social aspects	11,909	13,670	13,073	14,748	11,830	14,820	16,617	17,013
Psychological sciences, n.e.c.	7,336	9,972	10,285	11,384	13,024	14,400	30,578	23,226
Physical sciences, total	17,463	24,120	24,257	26,168	29,221	33,327	42,627	52,271
Astronomy	0	0	0	0	0	0	0	0
Chemistry	16,886	23,341	23,449	25,274	28,227	32,200	41,190	49,314
Physics	577	779	808	894	994	1,127	1,437	2,957
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,978	2,865	3,280	3,074	4,027	3,681	3,327	3,713
Mathematics	NA	NA	NA	3,074	3,854	3,681	2,984	3,671
Computer sciences	NA	NA	NA	0	173	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	343	42
Engineering, total	12,558	15,686	15,769	17,481	22,764	24,271	26,081	28,076
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	402	171	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	12,156	15,515	15,769	17,481	22,764	24,271	26,081	28,076
Social sciences, total	43,159	41,155	36,538	55,496	69,437	75,515	62,352	61,240
Anthropology	1,356	3,056	2,934	2,274	1,627	2,228	2,294	980
Economics	750	4,984	4,474	2,669	2,492	2,668	2,723	3,184
Political science	123	687	628	0	198	179	535	646
Sociology	19,506	15,524	8,885	13,365	14,238	15,666	18,469	21,026
Social sciences, n.e.c.	21,424	16,904	19,617	37,188	50,882	54,774	38,331	35,404
History	22	136	427	NA	NA	NA	NA	NA
Linguistics	1,487	1,432	852	NA	NA	NA	NA	NA
Other social sciences	19,915	15,336	18,338	NA	NA	NA	NA	NA
Other sciences, n.e.c.	12,664	17,752	23,416	22,570	22,733	24,797	28,480	41,953

See explanatory information, if any, and SOURCE at end of table.

Table 1E. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	2,000,154	2,025,102	2,281,060	2,610,783	3,033,108	3,086,318	3,692,979	3,895,344
Life sciences, total	1,740,055	1,799,046	2,032,185	2,323,784	2,699,166	2,744,401	3,282,684	3,458,114
Biol & agricultural, total	951,330	984,159	1,114,714	1,274,396	1,475,594	1,523,007	1,848,891	1,917,674
Biol (excl environmental)	951,266	983,966	1,114,379	1,273,318	1,475,253	1,522,390	1,848,442	1,916,990
Environmental biology	64	193	335	231	162	203	306	435
Agricultural	0	0	0	847	179	414	143	249
Medical sciences, total	726,201	751,934	839,455	961,656	1,106,654	1,114,580	1,305,988	1,456,198
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	62,524	62,953	78,016	87,732	116,918	106,814	127,805	84,242
Psychology, total	67,885	61,270	72,191	82,796	103,083	112,903	148,334	156,299
Biological aspects	22,471	20,807	23,617	26,556	33,130	36,564	45,248	52,313
Social aspects	15,652	11,171	13,273	15,315	19,265	21,561	28,391	30,982
Psychological sciences, n.e.c.	29,762	29,292	35,301	40,925	50,688	54,778	74,695	73,004
Physical sciences, total	51,351	47,170	53,979	64,571	77,695	76,634	87,353	93,651
Astronomy	0	0	0	0	0	0	0	0
Chemistry	49,491	45,397	51,885	63,188	75,225	75,005	84,987	91,425
Physics	1,860	1,773	2,094	1,383	2,470	1,566	2,299	2,158
Physical sciences, n.e.c.	0	0	0	0	0	63	67	68
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	3,975	4,079	4,074	5,271	3,989	4,615	4,578	5,897
Mathematics	3,975	4,079	4,074	5,251	3,733	4,615	4,520	5,759
Computer sciences	0	0	0	20	256	0	58	138
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	32,959	28,328	27,046	29,564	27,067	30,455	38,365	39,388
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	32,959	28,328	27,046	29,564	27,067	30,455	38,365	39,388
Social sciences, total	65,076	43,334	48,492	50,388	58,069	50,372	65,446	67,616
Anthropology	556	706	317	448	422	868	1,561	1,334
Economics	2,935	2,084	3,547	1,627	3,048	2,326	5,019	3,056
Political science	811	633	1,020	1,716	1,750	1,862	824	1,201
Sociology	19,558	17,196	20,481	18,621	19,249	17,439	23,714	23,194
Social sciences, n.e.c.	41,216	22,715	23,127	27,976	33,600	27,877	34,328	38,831
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	38,853	41,875	43,093	54,409	64,039	66,938	66,219	74,379

See explanatory information, if any, and SOURCE at end of table.

Table 1E. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	4,228,426	4,424,619	4,850,036	4,639,872	5,376,717	5,639,375	5,599,759	6,032,620
Life sciences, total	3,751,584	3,905,581	4,213,108	4,179,597	4,690,013	4,903,687	4,800,710	5,238,923
Biol & agricultural, total	2,048,681	2,108,185	2,272,980	2,194,167	2,344,324	2,423,702	2,272,858	2,561,877
Biol (excl environmental)	2,047,772	2,107,375	2,270,562	2,194,039	2,344,161	2,423,589	2,272,821	2,561,835
Environmental biology	484	646	804	128	163	113	37	42
Agricultural	425	164	1,614	0	0	0	0	0
Medical sciences, total	1,590,833	1,676,197	1,821,766	1,913,032	2,262,498	2,400,614	2,408,281	2,505,142
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	112,070	121,199	118,362	72,398	83,191	79,371	119,571	171,904
Psychology, total	176,285	195,631	230,381	88,663	247,376	274,240	240,880	220,664
Biological aspects	63,122	68,567	80,385	0	0	0	21	8,294
Social aspects	39,763	50,377	65,701	79	0	0	25	3,832
Psychological sciences, n.e.c.	73,400	76,687	84,295	88,584	247,376	274,240	240,834	208,538
Physical sciences, total	79,941	83,703	88,073	99,180	98,811	98,189	91,423	92,420
Astronomy	0	0	0	0	0	0	0	0
Chemistry	76,480	79,850	83,672	94,012	92,030	91,939	80,712	82,349
Physics	3,266	3,704	4,401	5,168	6,781	6,250	10,711	10,071
Physical sciences, n.e.c.	195	149	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	13,851	17,773
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	13,851	17,773
Math & computer sciences, total	4,715	6,005	6,842	5,928	7,941	10,258	36,935	51,923
Mathematics	4,666	5,642	6,477	5,766	6,929	7,786	20,112	24,297
Computer sciences	49	363	365	0	845	2,298	16,823	27,626
Math & computer sciences, n.e.c.	0	0	0	162	167	174	0	0
Engineering, total	34,963	35,303	39,798	45,037	43,913	44,304	80,013	85,311
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	34,963	35,303	39,798	45,037	43,913	44,304	80,013	85,311
Social sciences, total	84,284	92,843	135,970	74,189	97,952	91,330	82,781	71,037
Anthropology	722	794	1,238	0	0	0	0	0
Economics	7,409	5,516	5,406	5,276	1,170	1,123	3,119	2,126
Political science	1,922	2,010	1,733	48	40	0	108	143
Sociology	33,118	46,424	81,743	28,441	20,878	12,915	1,915	1,435
Social sciences, n.e.c.	41,113	38,099	45,850	40,424	75,864	77,292	77,639	67,333
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	96,654	105,553	135,864	147,278	190,711	217,367	253,166	254,569

See explanatory information, if any, and SOURCE at end of table.

Table 1E. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	6,430,508	6,854,037	7,922,622	10,324,194	11,792,025	13,403,658	15,485,615
Life sciences, total	5,717,283	6,094,445	7,046,986	8,139,831	10,599,527	12,050,569	13,924,074
Biol & agricultural, total	3,090,070	3,291,571	3,788,485	5,620,640	9,299,797	NA	NA
Biol (excl environmental)	3,090,070	3,291,571	3,788,485	5,620,640	9,299,797	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	2,443,360	2,608,277	3,035,755	2,038,268	1,135,905	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	183,853	194,597	222,746	480,923	163,825	NA	NA
Psychology, total	253,532	271,329	310,483	872,744	334,563	380,486	441,682
Biological aspects	10,126	10,336	11,888	0	0	NA	NA
Social aspects	5,093	4,517	5,093	30	86	NA	NA
Psychological sciences, n.e.c.	238,313	256,476	293,502	872,714	334,477	NA	NA
Physical sciences, total	95,191	101,409	116,772	364,164	199,086	226,418	262,839
Astronomy	0	0	0	0	0	NA	NA
Chemistry	91,929	97,933	112,769	354,362	178,404	NA	NA
Physics	3,262	3,476	4,003	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	9,802	20,682	NA	NA
Environmental sciences, total	17,109	18,133	20,879	220,970	181,403	206,277	239,420
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	335	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	17,109	18,133	20,879	220,970	181,068	NA	NA
Math & computer sciences, total	21,611	22,627	24,826	75,782	28,001	31,508	36,292
Mathematics	9,701	10,301	11,803	75,275	26,976	NA	NA
Computer sciences	11,910	12,326	13,023	507	200	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	825	NA	NA
Engineering, total	47,548	50,368	57,998	229,588	102,837	116,954	135,767
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	31,081	37,116	NA	NA
Engineering, n.e.c.	47,548	50,368	57,998	198,507	65,721	NA	NA
Social sciences, total	69,981	72,852	87,028	162,956	109,070	121,867	135,995
Anthropology	32	0	0	30	0	NA	NA
Economics	1,209	456	963	2,129	2,034	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	726	921	1,003	49	397	NA	NA
Social sciences, n.e.c.	68,014	71,475	85,062	160,748	106,639	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	208,253	222,874	257,650	258,159	237,538	269,579	309,546

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 1F. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	64,620	80,591	76,896	78,168	87,743	94,534	115,154	123,758
Life sciences, total	33,409	39,351	33,160	36,228	43,410	43,372	53,417	55,003
Biol & agricultural, total	12,228	23,917	17,917	26,691	29,504	30,528	35,771	36,832
Biol (excl environmental)	NA	NA	NA	NA	NA	30,528	35,771	36,747
Environmental biology	NA	NA	NA	NA	NA	0	0	85
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	21,181	15,434	15,065	4,810	5,515	4,023	3,801	5,650
Clinical medical	21,181	8,445	5,833	2,910	3,638	NA	NA	NA
Other medical	0	6,989	9,232	1,900	1,877	NA	NA	NA
Life sciences, n.e.c.	0	0	178	4,727	8,391	8,821	13,845	12,521
Psychology, total	19,257	28,952	26,204	26,812	26,755	32,942	36,500	41,336
Biological aspects	9,147	18,507	13,827	16,297	15,200	18,492	19,641	24,009
Social aspects	10,110	10,445	12,377	10,515	11,555	14,450	16,617	17,013
Psychological sciences, n.e.c.	0	0	0	0	0	0	242	314
Physical sciences, total	581	366	621	69	47	229	432	1,009
Astronomy	0	0	0	0	0	0	0	0
Chemistry	581	366	621	69	47	229	432	1,009
Physics	0	0	0	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	452	783	1,139	703	1,227	659	343	42
Mathematics	NA	NA	NA	703	1,227	659	0	0
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	343	42
Engineering, total	0	0	0	0	0	159	43	85
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	0	0	0	0	0	159	43	85
Social sciences, total	10,921	11,139	13,268	13,918	15,315	17,173	21,542	22,035
Anthropology	1,223	1,108	1,877	2,274	1,627	2,228	2,294	980
Economics	0	0	84	176	184	216	357	86
Political science	0	0	86	0	178	130	356	514
Sociology	8,366	8,510	4,260	9,791	11,662	13,148	16,372	17,830
Social sciences, n.e.c.	1,332	1,521	6,961	1,677	1,664	1,451	2,163	2,625
History	22	136	427	NA	NA	NA	NA	NA
Linguistics	1,310	1,385	852	NA	NA	NA	NA	NA
Other social sciences	0	0	5,682	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	2,504	438	989	0	2,877	4,248

See explanatory information, if any, and SOURCE at end of table.

Table 1F. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	116,316	113,829	127,603	155,305	183,540	198,859	264,762	312,690
Life sciences, total	55,363	57,637	70,704	89,365	106,545	116,758	160,292	193,486
Biol & agricultural, total	33,501	34,951	39,023	54,404	62,168	72,972	102,982	118,848
Biol (excl environmental)	33,437	34,951	39,023	53,557	61,989	72,558	102,703	118,223
Environmental biology	64	0	0	0	0	0	136	376
Agricultural	0	0	0	847	179	414	143	249
Medical sciences, total	18,647	19,309	25,342	30,416	41,050	39,403	52,324	64,980
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,215	3,377	6,339	4,545	3,327	4,383	4,986	9,658
Psychology, total	38,913	32,620	37,586	42,285	52,329	57,672	74,636	84,913
Biological aspects	22,471	20,807	23,617	26,556	33,130	36,564	45,248	52,313
Social aspects	15,652	11,171	13,273	15,098	19,050	20,939	28,391	30,982
Psychological sciences, n.e.c.	790	642	696	631	149	169	997	1,618
Physical sciences, total	465	510	463	419	558	598	1,629	2,121
Astronomy	0	0	0	0	0	0	0	0
Chemistry	465	510	463	419	558	598	1,629	2,121
Physics	0	0	0	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	0	410	160	306	256	294	545	502
Mathematics	0	410	160	286	0	294	545	502
Computer sciences	0	0	0	20	256	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	84	0	0	0	0	0	0	0
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	84	0	0	0	0	0	0	0
Social sciences, total	17,070	18,121	16,436	18,140	20,929	20,535	25,204	29,306
Anthropology	556	706	317	448	422	868	1,561	1,334
Economics	140	314	54	127	631	1,057	1,507	1,376
Political science	756	633	1,020	1,716	1,614	1,819	824	1,201
Sociology	13,070	14,145	13,270	13,650	14,874	13,861	17,353	20,582
Social sciences, n.e.c.	2,548	2,323	1,775	2,199	3,388	2,930	3,959	4,813
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	4,421	4,531	2,254	4,790	2,923	3,002	2,456	2,362

See explanatory information, if any, and SOURCE at end of table.

Table 1F. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	408,430	474,119	555,429	NA	NA	NA	NA	NA
Life sciences, total	260,523	294,216	340,437	NA	NA	NA	NA	NA
Biol & agricultural, total	161,086	175,079	211,189	NA	NA	NA	NA	NA
Biol (excl environmental)	160,238	174,402	209,036	NA	NA	NA	NA	NA
Environmental biology	423	513	539	NA	NA	NA	NA	NA
Agricultural	425	164	1,614	NA	NA	NA	NA	NA
Medical sciences, total	86,984	103,315	110,092	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	12,453	15,822	19,156	NA	NA	NA	NA	NA
Psychology, total	104,502	121,045	147,866	NA	NA	NA	NA	NA
Biological aspects	63,122	68,567	80,385	NA	NA	NA	NA	NA
Social aspects	39,763	50,377	65,701	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	1,617	2,101	1,780	NA	NA	NA	NA	NA
Physical sciences, total	1,634	1,880	2,162	NA	NA	NA	NA	NA
Astronomy	0	0	0	NA	NA	NA	NA	NA
Chemistry	1,634	1,880	2,162	NA	NA	NA	NA	NA
Physics	0	0	0	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, total	0	0	0	NA	NA	NA	NA	NA
Atmospheric sciences	0	0	0	NA	NA	NA	NA	NA
Geological sciences	0	0	0	NA	NA	NA	NA	NA
Oceanography	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Math & computer sciences, total	415	1,183	1,321	NA	NA	NA	NA	NA
Mathematics	415	820	956	NA	NA	NA	NA	NA
Computer sciences	0	363	365	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Engineering, total	0	806	569	NA	NA	NA	NA	NA
Aeronautical	0	0	0	NA	NA	NA	NA	NA
Astronautical	0	0	0	NA	NA	NA	NA	NA
Chemical	0	0	0	NA	NA	NA	NA	NA
Civil	0	0	0	NA	NA	NA	NA	NA
Electrical	0	0	0	NA	NA	NA	NA	NA
Mechanical	0	0	0	NA	NA	NA	NA	NA
Metallurgy & materials	0	0	0	NA	NA	NA	NA	NA
Engineering, n.e.c.	0	806	569	NA	NA	NA	NA	NA
Social sciences, total	38,624	40,451	46,194	NA	NA	NA	NA	NA
Anthropology	722	794	1,238	NA	NA	NA	NA	NA
Economics	1,797	2,752	2,298	NA	NA	NA	NA	NA
Political science	1,749	2,010	1,733	NA	NA	NA	NA	NA
Sociology	26,754	27,872	32,676	NA	NA	NA	NA	NA
Social sciences, n.e.c.	7,602	7,023	8,249	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	2,732	14,538	16,880	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table 1F. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	NA	NA	NA	NA	NA	NA	NA
Life sciences, total	NA	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	NA	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	NA	NA	NA	NA	NA	NA	NA
Environmental biology	NA	NA	NA	NA	NA	NA	NA
Agricultural	NA	NA	NA	NA	NA	NA	NA
Medical sciences, total	NA	NA	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Psychology, total	NA	NA	NA	NA	NA	NA	NA
Biological aspects	NA	NA	NA	NA	NA	NA	NA
Social aspects	NA	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Physical sciences, total	NA	NA	NA	NA	NA	NA	NA
Astronomy	NA	NA	NA	NA	NA	NA	NA
Chemistry	NA	NA	NA	NA	NA	NA	NA
Physics	NA	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, total	NA	NA	NA	NA	NA	NA	NA
Atmospheric sciences	NA	NA	NA	NA	NA	NA	NA
Geological sciences	NA	NA	NA	NA	NA	NA	NA
Oceanography	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	NA	NA	NA	NA	NA	NA	NA
Mathematics	NA	NA	NA	NA	NA	NA	NA
Computer sciences	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Engineering, total	NA	NA	NA	NA	NA	NA	NA
Aeronautical	NA	NA	NA	NA	NA	NA	NA
Astronautical	NA	NA	NA	NA	NA	NA	NA
Chemical	NA	NA	NA	NA	NA	NA	NA
Civil	NA	NA	NA	NA	NA	NA	NA
Electrical	NA	NA	NA	NA	NA	NA	NA
Mechanical	NA	NA	NA	NA	NA	NA	NA
Metallurgy & materials	NA	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Social sciences, total	NA	NA	NA	NA	NA	NA	NA
Anthropology	NA	NA	NA	NA	NA	NA	NA
Economics	NA	NA	NA	NA	NA	NA	NA
Political science	NA	NA	NA	NA	NA	NA	NA
Sociology	NA	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

**Table 1G. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	684,264	923,694	958,640	1,059,730	1,180,785	1,342,575	1,541,965	1,711,172
Life sciences, total	630,492	850,415	883,233	976,224	1,088,205	1,237,156	1,404,658	1,562,136
Biol & agricultural, total	326,174	436,975	456,610	504,052	563,869	640,516	766,611	835,780
Biol (excl environmental)	NA	NA	NA	NA	NA	640,516	766,611	835,780
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	282,842	384,592	396,550	438,959	487,233	554,486	587,439	668,678
Clinical medical	158,273	220,493	222,463	247,376	271,038	NA	NA	NA
Other medical	124,569	164,099	174,087	191,583	216,195	NA	NA	NA
Life sciences, n.e.c.	21,476	28,848	30,073	33,213	37,103	42,154	50,608	57,678
Psychology, total	7,336	9,972	10,285	11,384	12,639	14,400	30,336	22,912
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	7,336	9,972	10,285	11,384	12,639	14,400	30,336	22,912
Physical sciences, total	16,882	22,649	23,636	26,099	29,174	33,098	42,195	51,262
Astronomy	0	0	0	0	0	0	0	0
Chemistry	16,305	21,870	22,828	25,205	28,180	31,971	40,758	48,305
Physics	577	779	808	894	994	1,127	1,437	2,957
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,526	2,082	2,141	2,371	2,627	3,022	2,984	3,671
Mathematics	NA	NA	NA	2,371	2,627	3,022	2,984	3,671
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	11,238	15,401	15,769	17,481	19,322	22,015	26,038	27,991
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	11,238	15,401	15,769	17,481	19,322	22,015	26,038	27,991
Social sciences, total	4,126	5,718	5,795	6,439	7,074	8,087	10,151	10,171
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	4,126	5,718	5,795	6,439	7,074	8,087	10,151	10,171
History	0	0	0	NA	NA	NA	NA	NA
Linguistics	0	0	0	NA	NA	NA	NA	NA
Other social sciences	4,126	5,718	5,795	NA	NA	NA	NA	NA
Other sciences, n.e.c.	12,664	17,457	17,781	19,732	21,744	24,797	25,603	33,029

See explanatory information, if any, and SOURCE at end of table.

**Table 1G. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	1,812,950	1,880,706	2,118,747	2,417,746	2,806,886	2,855,117	3,385,877	3,543,384
Life sciences, total	1,660,325	1,729,960	1,950,127	2,217,462	2,577,440	2,611,729	3,100,265	3,244,145
Biol & agricultural, total	912,790	946,627	1,074,378	1,217,792	1,411,961	1,448,035	1,743,499	1,796,572
Biol (excl environmental)	912,790	946,434	1,074,043	1,217,561	1,411,799	1,447,832	1,743,329	1,796,513
Environmental biology	0	193	335	231	162	203	170	59
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	689,348	723,757	804,072	916,483	1,051,888	1,061,263	1,233,947	1,372,989
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	58,187	59,576	71,677	83,187	113,591	102,431	122,819	74,584
Psychology, total	27,674	28,650	34,605	40,294	50,539	54,609	73,698	71,386
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	27,674	28,650	34,605	40,294	50,539	54,609	73,698	71,386
Physical sciences, total	50,886	46,660	53,516	64,152	77,137	76,036	85,724	91,530
Astronomy	0	0	0	0	0	0	0	0
Chemistry	49,026	44,887	51,422	62,769	74,667	74,407	83,358	89,304
Physics	1,860	1,773	2,094	1,383	2,470	1,566	2,299	2,158
Physical sciences, n.e.c.	0	0	0	0	0	63	67	68
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	3,975	3,669	3,914	4,965	3,733	4,321	4,033	5,395
Mathematics	3,975	3,669	3,914	4,965	3,733	4,321	3,975	5,257
Computer sciences	0	0	0	0	0	0	58	138
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	29,144	28,328	27,046	29,564	27,067	30,455	38,365	39,388
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	29,144	28,328	27,046	29,564	27,067	30,455	38,365	39,388
Social sciences, total	11,030	11,252	13,394	19,281	19,083	16,783	20,029	19,523
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	11,030	11,252	13,394	19,281	19,083	16,783	20,029	19,523
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	29,916	32,187	36,145	42,028	51,887	61,184	63,763	72,017

See explanatory information, if any, and SOURCE at end of table.

**Table 1G. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	3,758,220	3,874,457	4,173,441	4,517,143	5,252,613	5,517,409	5,480,904	5,924,352
Life sciences, total	3,458,771	3,569,528	3,818,996	4,109,023	4,605,278	4,818,925	4,708,640	5,150,040
Biol & agricultural, total	1,885,341	1,930,492	2,048,841	2,189,567	2,337,278	2,413,574	2,263,002	2,551,619
Biol (excl environmental)	1,885,280	1,930,359	2,048,576	2,189,439	2,337,115	2,413,461	2,262,965	2,551,577
Environmental biology	61	133	265	128	163	113	37	42
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	1,473,813	1,533,659	1,672,689	1,851,758	2,193,182	2,337,092	2,335,879	2,433,724
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	99,617	105,377	97,466	67,698	74,818	68,259	109,759	164,697
Psychology, total	71,783	74,586	82,515	88,584	247,376	274,240	240,471	220,386
Biological aspects	0	0	0	0	0	0	0	8,294
Social aspects	0	0	0	0	0	0	0	3,554
Psychological sciences, n.e.c.	71,783	74,586	82,515	88,584	247,376	274,240	240,471	208,538
Physical sciences, total	78,307	81,823	85,911	99,180	98,811	98,189	91,423	92,420
Astronomy	0	0	0	0	0	0	0	0
Chemistry	74,846	77,970	81,510	94,012	92,030	91,939	80,712	82,349
Physics	3,266	3,704	4,401	5,168	6,781	6,250	10,711	10,071
Physical sciences, n.e.c.	195	149	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	13,851	17,773
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	13,851	17,773
Math & computer sciences, total	4,300	4,822	5,521	5,299	6,473	7,601	34,115	50,357
Mathematics	4,251	4,822	5,521	5,299	6,473	7,433	19,984	24,290
Computer sciences	49	0	0	0	0	168	14,131	26,067
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	34,963	34,497	39,229	45,037	43,913	44,304	80,013	85,311
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	34,963	34,497	39,229	45,037	43,913	44,304	80,013	85,311
Social sciences, total	16,174	18,186	22,285	23,926	63,310	62,345	62,070	54,504
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	16,174	18,186	22,285	23,926	63,310	62,345	62,070	54,504
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	93,922	91,015	118,984	146,094	187,452	211,805	250,321	253,561

See explanatory information, if any, and SOURCE at end of table.

Table 1G. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	6,308,572	6,715,863	7,733,215	10,086,658	11,528,087	13,118,522	15,228,762
Life sciences, total	5,615,648	5,977,792	6,883,337	7,939,496	10,378,394	11,810,996	13,710,908
Biol & agricultural, total	3,078,865	3,277,416	3,773,895	5,603,149	9,279,345	NA	NA
Biol (excl environmental)	3,078,865	3,277,416	3,773,895	5,603,149	9,279,345	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	2,359,548	2,511,712	2,892,199	1,865,429	950,091	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	177,235	188,664	217,243	470,918	148,958	NA	NA
Psychology, total	253,156	269,305	310,101	872,714	334,477	380,396	441,587
Biological aspects	10,126	10,336	11,888	0	0	NA	NA
Social aspects	5,063	4,407	5,068	0	0	NA	NA
Psychological sciences, n.e.c.	237,967	254,562	293,145	872,714	334,477	NA	NA
Physical sciences, total	95,191	101,409	116,772	364,164	199,086	226,418	262,839
Astronomy	0	0	0	0	0	NA	NA
Chemistry	91,929	97,933	112,769	354,362	178,404	NA	NA
Physics	3,262	3,476	4,003	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	9,802	20,682	NA	NA
Environmental sciences, total	17,109	18,133	20,879	215,760	181,068	205,925	239,051
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	0	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	17,109	18,133	20,879	215,760	181,068	NA	NA
Math & computer sciences, total	19,417	20,819	23,973	75,013	26,714	30,381	35,267
Mathematics	9,320	9,993	11,507	75,013	26,714	NA	NA
Computer sciences	10,097	10,826	12,466	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	47,548	50,368	57,998	229,588	102,837	116,954	135,767
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	31,081	37,116	NA	NA
Engineering, n.e.c.	47,548	50,368	57,998	198,507	65,721	NA	NA
Social sciences, total	53,427	57,084	65,731	138,698	80,363	91,395	106,097
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	53,427	57,084	65,731	138,698	80,363	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	207,076	220,953	254,424	251,225	225,148	256,057	297,246

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

**Table 1H. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: National Aeronautics
& Space Administration, fiscal years 1973-2003**

[Dollars in thousands]

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Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	80,425	84,959	90,717	97,836	105,059	116,298	125,296	146,104
Life sciences, total	6,075	5,805	6,515	5,720	7,866	8,300	8,342	9,645
Biol & agricultural, total	2,422	2,162	2,469	2,492	3,089	5,770	2,755	4,130
Biol (excl environmental)	NA	NA	NA	NA	NA	5,770	2,407	3,700
Environmental biology	NA	NA	NA	NA	NA	0	344	350
Agricultural	NA	NA	NA	NA	NA	0	4	80
Medical sciences, total	2,377	2,548	2,485	2,143	3,207	2,530	2,806	2,443
Clinical medical	1,286	959	1,150	1,147	1,250	NA	NA	NA
Other medical	1,091	1,589	1,335	996	1,957	NA	NA	NA
Life sciences, n.e.c.	1,276	1,095	1,561	1,085	1,570	0	2,781	3,072
Psychology, total	773	654	1,019	847	829	870	677	807
Biological aspects	111	37	59	0	80	71	86	97
Social aspects	328	140	186	133	108	82	125	105
Psychological sciences, n.e.c.	334	477	774	714	641	717	466	605
Physical sciences, total	38,512	41,493	38,611	39,633	40,029	46,147	48,791	54,082
Astronomy	20,765	21,404	19,592	18,363	17,987	18,840	21,202	26,564
Chemistry	3,841	3,443	3,792	4,140	4,399	3,749	3,908	4,147
Physics	10,969	13,508	11,782	13,039	12,230	18,336	18,538	18,139
Physical sciences, n.e.c.	2,937	3,138	3,445	4,091	5,413	5,222	5,143	5,232
Environmental sciences, total	19,854	22,300	24,278	31,505	32,938	34,353	39,553	45,175
Atmospheric sciences	8,841	9,159	10,949	14,034	16,428	17,653	20,360	25,336
Geological sciences	4,879	5,537	6,280	9,729	7,817	8,729	12,634	11,775
Oceanography	497	146	348	332	338	232	825	909
Environmental sciences, n.e.c.	5,637	7,458	6,701	7,410	8,355	7,739	5,734	7,155
Math & computer sciences, total	290	727	1,660	1,178	1,469	1,398	1,471	2,757
Mathematics	NA	NA	NA	0	701	712	1,039	1,344
Computer sciences	NA	NA	NA	0	768	686	432	1,214
Math & computer sciences, n.e.c.	NA	NA	NA	1,178	0	0	0	199
Engineering, total	12,762	13,672	16,086	16,356	18,804	22,766	23,617	31,512
Aeronautical	5,811	6,234	7,848	7,168	7,564	9,494	10,511	13,187
Aeronautical	994	829	593	625	692	531	898	1,235
Chemical	248	281	367	575	370	262	75	206
Civil	29	214	222	157	124	40	55	55
Electrical	1,370	1,877	1,682	2,700	3,301	3,462	3,100	4,103
Mechanical	981	726	806	1,249	1,128	1,505	1,875	3,062
Metallurgy & materials	1,752	1,563	2,448	2,013	3,293	4,045	3,426	5,561
Engineering, n.e.c.	1,577	1,948	2,120	1,869	2,332	3,427	3,677	4,103
Social sciences, total	135	110	366	222	158	54	149	217
Anthropology	0	0	0	0	0	0	0	0
Economics	65	74	3	87	82	0	0	22
Political science	50	30	235	95	30	29	15	0
Sociology	20	0	0	0	0	0	0	25
Social sciences, n.e.c.	0	6	128	40	46	25	134	170
History	0	6	72	NA	NA	NA	NA	NA
Linguistics	0	0	0	NA	NA	NA	NA	NA
Other social sciences	0	0	56	NA	NA	NA	NA	NA
Other sciences, n.e.c.	2,024	198	2,182	2,375	2,966	2,410	2,696	1,909

See explanatory information, if any, and SOURCE at end of table.

Table 1H. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	157,152	155,852	169,681	176,887	213,421	224,834	263,024	309,685
Life sciences, total	9,994	12,867	15,078	16,556	19,977	18,178	19,957	21,958
Biol & agricultural, total	5,060	7,604	7,423	8,883	10,997	10,814	13,081	14,042
Biol (excl environmental)	4,167	6,220	6,398	7,755	9,371	9,562	11,659	12,962
Environmental biology	494	457	200	177	694	615	628	323
Agricultural	399	927	825	951	932	637	794	757
Medical sciences, total	2,230	2,158	2,080	2,314	3,087	3,304	3,184	4,012
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,704	3,105	5,575	5,359	5,893	4,060	3,692	3,904
Psychology, total	1,053	1,203	1,916	1,589	2,151	1,940	2,341	2,420
Biological aspects	128	226	250	262	227	243	289	300
Social aspects	99	210	333	297	353	236	270	297
Psychological sciences, n.e.c.	826	767	1,333	1,030	1,571	1,461	1,782	1,823
Physical sciences, total	57,697	53,060	54,877	61,660	71,432	77,869	90,495	101,813
Astronomy	27,454	25,798	27,970	32,167	34,049	35,029	37,330	42,930
Chemistry	5,939	5,658	4,613	4,076	4,128	4,246	4,340	4,830
Physics	19,274	16,395	15,781	16,819	22,442	27,940	34,474	41,106
Physical sciences, n.e.c.	5,030	5,209	6,513	8,598	10,813	10,654	14,351	12,947
Environmental sciences, total	47,470	44,193	47,007	43,710	59,196	54,320	71,151	76,379
Atmospheric sciences	27,054	24,536	25,138	22,402	30,823	30,808	35,487	30,597
Geological sciences	12,179	10,652	12,885	13,820	19,080	15,046	17,550	17,895
Oceanography	1,337	2,759	2,948	3,066	3,653	3,318	7,204	5,995
Environmental sciences, n.e.c.	6,900	6,246	6,036	4,422	5,640	5,148	10,910	21,892
Math & computer sciences, total	3,003	3,983	5,348	6,097	8,716	10,782	12,519	19,332
Mathematics	862	937	834	416	833	761	953	1,115
Computer sciences	1,283	2,278	3,446	4,937	6,310	8,424	9,302	16,850
Math & computer sciences, n.e.c.	858	768	1,068	744	1,573	1,597	2,264	1,367
Engineering, total	34,600	38,514	43,819	45,167	49,644	58,814	62,347	80,772
Aeronautical	14,850	15,419	17,550	18,270	18,348	22,044	23,299	28,416
Astronautical	1,122	1,670	2,557	2,958	2,750	4,131	3,933	6,720
Chemical	265	393	1,026	254	674	995	1,487	1,796
Civil	112	320	542	0	374	309	113	239
Electrical	4,256	4,426	4,225	5,191	5,475	6,239	6,617	6,490
Mechanical	4,034	5,183	5,063	4,448	6,473	5,282	6,771	7,509
Metallurgy & materials	5,723	6,320	7,731	6,713	7,656	10,446	9,829	13,109
Engineering, n.e.c.	4,238	4,783	5,125	7,333	7,894	9,368	10,298	16,493
Social sciences, total	199	63	296	286	84	86	107	186
Anthropology	0	50	0	6	0	0	0	0
Economics	0	0	0	0	3	3	0	0
Political science	0	0	0	0	0	0	0	25
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	199	13	296	280	81	83	107	161
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	3,136	1,969	1,340	1,822	2,221	2,845	4,107	6,825

See explanatory information, if any, and SOURCE at end of table.

**Table 1H. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: National Aeronautics
& Space Administration, fiscal years 1973-2003**

[Dollars in thousands]

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Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	387,128	421,815	474,414	511,782	538,975	555,371	587,589	560,164
Life sciences, total	24,905	27,983	34,765	36,965	37,698	37,013	53,455	55,306
Biol & agricultural, total	15,128	16,918	22,032	22,174	20,850	21,039	26,777	32,328
Biol (excl environmental)	13,098	13,797	19,627	19,050	18,971	17,388	23,699	28,981
Environmental biology	1,639	2,537	1,913	2,358	1,359	1,325	1,804	1,919
Agricultural	391	584	492	766	520	2,326	1,274	1,428
Medical sciences, total	5,686	6,214	5,645	5,982	7,847	7,387	9,693	7,201
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,091	4,851	7,088	8,809	9,001	8,587	16,985	15,777
Psychology, total	3,177	3,843	2,543	4,123	4,330	5,111	4,149	3,221
Biological aspects	84	85	71	40	62	73	85	0
Social aspects	846	950	603	540	493	397	2,367	118
Psychological sciences, n.e.c.	2,247	2,808	1,869	3,543	3,775	4,641	1,697	3,103
Physical sciences, total	125,428	137,571	165,442	190,240	211,583	216,646	220,565	239,469
Astronomy	49,741	46,134	64,812	81,279	77,679	86,915	113,837	151,158
Chemistry	5,215	5,977	5,688	5,238	6,427	5,427	5,830	3,123
Physics	56,295	72,223	76,603	84,373	103,395	99,316	66,332	57,110
Physical sciences, n.e.c.	14,177	13,237	18,339	19,350	24,082	24,988	34,566	28,078
Environmental sciences, total	81,518	92,602	114,946	129,256	125,788	127,355	147,852	130,385
Atmospheric sciences	37,902	40,224	44,362	59,514	49,990	52,835	56,045	50,546
Geological sciences	17,486	17,060	19,701	19,514	22,517	20,207	18,997	17,186
Oceanography	5,489	8,718	9,023	16,039	12,517	13,227	12,916	10,766
Environmental sciences, n.e.c.	20,641	26,600	41,860	34,189	40,764	41,086	59,894	51,887
Math & computer sciences, total	26,208	26,825	25,007	21,117	25,948	22,133	29,413	27,657
Mathematics	998	989	623	873	684	689	917	641
Computer sciences	23,237	23,780	21,844	18,193	19,151	16,711	22,231	21,677
Math & computer sciences, n.e.c.	1,973	2,056	2,540	2,051	6,113	4,733	6,265	5,339
Engineering, total	111,421	116,736	113,810	108,138	108,577	112,484	103,839	82,973
Aeronautical	39,402	43,365	36,976	29,846	30,487	36,504	31,580	25,452
Astronautical	8,856	9,560	11,180	12,255	10,902	12,410	11,537	11,630
Chemical	1,661	2,071	2,104	1,620	2,407	2,758	2,970	1,804
Civil	91	151	340	162	180	1,252	1,235	185
Electrical	8,989	8,670	9,240	7,000	8,117	8,713	7,489	9,220
Mechanical	9,811	9,053	11,383	10,305	11,428	11,442	10,045	11,697
Metallurgy & materials	15,101	18,938	20,317	19,448	20,809	16,681	19,265	12,855
Engineering, n.e.c.	27,510	24,928	22,270	27,502	24,247	22,724	19,718	10,130
Social sciences, total	65	84	126	39	331	162	413	135
Anthropology	0	0	0	0	0	0	0	0
Economics	27	0	36	0	0	0	0	0
Political science	25	0	0	0	0	0	0	0
Sociology	0	74	90	0	212	87	0	19
Social sciences, n.e.c.	13	10	0	39	119	75	413	116
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	14,406	16,171	17,775	21,904	24,720	34,467	27,903	21,018

See explanatory information, if any, and SOURCE at end of table.

Table 1H. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	596,090	647,500	744,694	721,038	811,947	811,947	811,947
Life sciences, total	56,216	50,446	56,813	57,247	53,456	53,456	53,456
Biol & agricultural, total	27,998	18,908	25,600	27,939	25,975	NA	NA
Biol (excl environmental)	26,473	16,866	23,751	22,007	20,439	NA	NA
Environmental biology	890	1,635	1,296	4,624	4,480	NA	NA
Agricultural	635	407	553	1,308	1,056	NA	NA
Medical sciences, total	5,289	5,591	5,415	5,615	7,871	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	22,929	25,947	25,798	23,693	19,610	NA	NA
Psychology, total	4,970	5,755	7,461	4,370	4,366	4,366	4,366
Biological aspects	0	27	66	955	690	NA	NA
Social aspects	154	836	2,524	1,292	1,604	NA	NA
Psychological sciences, n.e.c.	4,816	4,892	4,871	2,123	2,072	NA	NA
Physical sciences, total	221,863	261,719	311,759	257,903	304,680	304,680	304,680
Astronomy	128,833	128,219	154,015	180,084	215,962	NA	NA
Chemistry	12,038	10,367	15,426	7,504	9,737	NA	NA
Physics	61,085	104,588	117,193	46,899	49,552	NA	NA
Physical sciences, n.e.c.	19,907	18,545	25,125	23,416	29,429	NA	NA
Environmental sciences, total	173,686	184,945	182,833	184,137	173,143	173,143	173,143
Atmospheric sciences	95,889	56,821	91,177	71,730	65,886	NA	NA
Geological sciences	15,098	60,802	24,300	14,385	11,637	NA	NA
Oceanography	11,711	9,094	8,491	9,740	12,688	NA	NA
Environmental sciences, n.e.c.	50,988	58,228	58,865	88,282	82,932	NA	NA
Math & computer sciences, total	22,746	21,602	30,686	22,963	34,291	34,291	34,291
Mathematics	841	816	1,193	693	924	NA	NA
Computer sciences	17,318	16,119	24,246	18,348	29,497	NA	NA
Math & computer sciences, n.e.c.	4,587	4,667	5,247	3,922	3,870	NA	NA
Engineering, total	91,427	92,225	124,716	120,552	120,908	120,908	120,908
Aeronautical	34,304	35,991	39,669	33,455	31,806	NA	NA
Astronautical	11,386	6,918	39,542	31,671	21,117	NA	NA
Chemical	1,755	1,812	1,717	2,287	2,345	NA	NA
Civil	209	0	118	0	160	NA	NA
Electrical	8,246	8,200	8,756	6,786	11,064	NA	NA
Mechanical	9,583	9,415	10,130	8,474	9,005	NA	NA
Metallurgy & materials	12,140	14,327	15,821	11,686	15,946	NA	NA
Engineering, n.e.c.	13,804	15,562	8,963	26,193	29,465	NA	NA
Social sciences, total	191	299	325	977	330	330	330
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	220	NA	NA
Sociology	52	162	187	0	0	NA	NA
Social sciences, n.e.c.	139	137	138	977	110	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	24,991	30,509	30,101	72,889	120,773	120,773	120,773

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 11. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	370,281	368,926	419,775	428,760	504,670	534,162	612,221	680,035
Life sciences, total	64,844	75,264	82,700	84,754	87,502	96,161	113,726	125,888
Biol & agricultural, total	55,929	75,082	82,700	84,635	87,309	93,488	109,417	125,723
Biol (excl environmental)	NA	NA	NA	NA	NA	66,530	72,156	88,874
Environmental biology	NA	NA	NA	NA	NA	26,958	37,261	36,849
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	0	182	0	0	193	0	0	0
Clinical medical	0	180	0	0	0	NA	NA	NA
Other medical	0	2	0	0	193	NA	NA	NA
Life sciences, n.e.c.	8,915	0	0	119	0	2,673	4,309	165
Psychology, total	10,280	6,150	8,490	7,567	9,557	8,369	11,004	11,853
Biological aspects	7,970	4,100	6,161	5,177	7,036	5,244	7,434	7,529
Social aspects	2,310	2,050	2,329	2,390	2,521	3,125	3,538	4,324
Psychological sciences, n.e.c.	0	0	0	0	0	0	32	0
Physical sciences, total	96,750	91,768	111,454	113,395	141,705	149,668	155,990	169,506
Astronomy	7,752	8,777	8,569	9,845	14,453	15,724	16,121	15,693
Chemistry	30,962	32,004	41,865	37,584	50,482	53,498	58,796	64,083
Physics	52,888	50,987	61,020	65,966	76,737	80,427	81,073	89,185
Physical sciences, n.e.c.	5,148	0	0	0	33	19	0	545
Environmental sciences, total	66,172	74,662	85,487	87,739	115,474	123,445	157,620	172,747
Atmospheric sciences	23,325	18,284	21,828	21,001	26,807	33,000	40,384	48,785
Geological sciences	9,945	24,734	29,019	31,898	35,435	38,126	52,383	57,481
Oceanography	20,633	31,644	34,628	34,809	53,222	52,196	64,544	65,962
Environmental sciences, n.e.c.	12,269	0	12	31	10	123	309	519
Math & computer sciences, total	21,537	20,827	25,542	30,822	35,126	37,921	37,991	44,766
Mathematics	NA	NA	NA	16,914	19,886	21,135	21,325	24,686
Computer sciences	NA	NA	NA	13,787	15,240	16,786	16,666	20,065
Math & computer sciences, n.e.c.	NA	NA	NA	121	0	0	0	15
Engineering, total	45,062	50,860	66,182	62,581	70,727	72,304	78,098	91,291
Aeronautical	209	630	22	0	650	685	867	1,046
Astronautical	0	56	0	0	0	0	0	0
Chemical	5,494	6,240	10,445	10,509	8,699	9,028	12,303	13,401
Civil	6,755	5,406	4,005	4,045	6,517	6,862	15,884	20,188
Electrical	10,522	9,490	10,835	13,704	18,341	18,423	16,260	19,976
Mechanical	7,803	7,196	6,869	6,953	6,681	6,798	10,060	12,546
Metallurgy & materials	10,223	11,221	14,696	14,886	16,942	14,369	16,011	19,956
Engineering, n.e.c.	4,056	10,621	19,310	12,484	12,897	16,139	6,713	4,178
Social sciences, total	28,769	28,534	30,590	36,072	37,789	36,423	37,198	36,143
Anthropology	3,463	3,571	3,414	3,001	3,304	4,776	5,551	5,407
Economics	5,197	5,915	7,283	5,353	8,097	8,553	8,912	10,941
Political science	1,516	1,675	1,441	1,673	2,065	2,815	3,365	3,407
Sociology	2,278	1,750	2,587	2,120	3,083	3,302	3,480	3,974
Social sciences, n.e.c.	16,315	15,623	15,865	23,925	21,240	16,977	15,890	12,414
History	889	850	865	NA	NA	NA	NA	NA
Linguistics	1,253	1,395	1,398	NA	NA	NA	NA	NA
Other social sciences	14,173	13,378	13,602	NA	NA	NA	NA	NA
Other sciences, n.e.c.	36,867	20,861	9,330	5,830	6,790	9,871	20,594	27,841

See explanatory information, if any, and SOURCE at end of table.

Table 11. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	697,884	713,350	783,102	880,219	1,001,806	991,694	1,096,246	1,143,436
Life sciences, total	126,636	130,997	139,373	163,651	183,756	178,464	197,368	195,650
Biol & agricultural, total	126,476	130,848	139,373	163,420	179,640	175,301	193,717	195,368
Biol (excl environmental)	91,244	94,877	101,001	115,831	127,879	124,409	140,836	144,057
Environmental biology	35,225	35,952	38,226	47,403	51,761	50,892	52,881	51,311
Agricultural	7	19	146	186	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	160	149	0	231	4,116	3,163	3,651	282
Psychology, total	10,225	6,733	7,338	8,708	11,466	9,709	7,962	10,964
Biological aspects	6,993	4,887	5,071	6,008	7,887	6,581	5,376	7,175
Social aspects	3,182	1,663	2,256	2,699	3,551	3,006	2,502	3,399
Psychological sciences, n.e.c.	50	183	11	1	28	122	84	390
Physical sciences, total	196,749	207,656	228,754	274,886	291,032	285,190	320,573	325,116
Astronomy	15,874	19,361	20,519	32,599	27,137	27,051	27,569	27,636
Chemistry	75,522	78,218	84,691	100,652	108,115	103,450	107,080	111,579
Physics	104,557	109,915	123,228	140,894	153,482	153,186	135,637	138,375
Physical sciences, n.e.c.	796	162	316	741	2,298	1,503	50,287	47,526
Environmental sciences, total	156,022	162,820	179,791	178,514	207,314	201,874	217,041	218,665
Atmospheric sciences	39,369	40,792	38,050	52,529	49,239	50,937	53,372	52,864
Geological sciences	46,307	51,203	39,169	45,308	51,248	48,154	52,165	52,106
Oceanography	66,557	70,371	102,490	80,351	104,525	102,767	111,463	109,830
Environmental sciences, n.e.c.	3,789	454	82	326	2,302	16	41	3,865
Math & computer sciences, total	52,188	57,503	66,012	67,457	88,058	88,730	108,252	110,185
Mathematics	28,815	30,630	34,869	38,133	47,816	51,079	55,784	61,199
Computer sciences	21,602	26,873	31,143	29,324	40,242	37,651	52,464	48,986
Math & computer sciences, n.e.c.	1,771	0	0	0	0	0	4	0
Engineering, total	100,834	111,390	121,841	144,424	169,581	174,763	166,542	181,439
Aeronautical	0	299	103	86	628	153	184	338
Astronautical	136	170	116	0	0	0	0	0
Chemical	16,698	16,682	18,285	24,371	27,957	29,609	32,548	34,045
Civil	21,170	22,367	25,670	33,079	33,624	26,521	29,660	28,358
Electrical	23,535	27,168	29,429	35,389	34,940	39,651	42,236	51,725
Mechanical	11,897	14,206	15,922	18,402	20,579	22,752	25,283	28,518
Metallurgy & materials	21,502	23,076	24,182	24,105	39,046	38,481	21,136	22,954
Engineering, n.e.c.	5,896	7,422	8,134	8,992	12,807	17,596	15,495	15,501
Social sciences, total	29,749	23,308	25,787	30,466	33,335	30,678	32,323	33,624
Anthropology	5,176	5,090	5,418	6,301	6,565	6,722	6,854	6,816
Economics	8,049	6,587	6,986	8,362	9,756	8,699	9,891	9,742
Political science	2,949	2,051	2,109	2,572	3,404	2,101	2,854	3,272
Sociology	3,336	2,555	2,323	3,455	3,854	3,416	3,009	2,942
Social sciences, n.e.c.	10,239	7,025	8,951	9,776	9,756	9,740	9,715	10,852
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	25,481	12,943	14,206	12,113	17,264	22,286	46,185	67,793

See explanatory information, if any, and SOURCE at end of table.

Table 11. Federal obligations to universities and colleges for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	1,253,713	1,320,920	1,435,505	1,540,404	1,561,929	1,680,208	1,733,512	1,739,861
Life sciences, total	212,569	216,826	242,630	257,354	270,331	277,687	293,920	272,315
Biol & agricultural, total	212,251	215,995	241,353	257,100	262,015	275,467	284,668	272,315
Biol (excl environmental)	156,916	151,268	166,710	188,801	192,740	203,617	207,047	200,072
Environmental biology	55,335	64,727	74,643	68,299	69,275	71,850	77,621	72,243
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	318	831	1,277	254	8,316	2,220	9,252	0
Psychology, total	11,772	9,685	1,566	10,900	12,819	15,575	13,610	14,285
Biological aspects	7,741	3,890	377	4,875	4,685	3,717	3,090	0
Social aspects	3,616	5,781	379	4,004	4,012	5,211	7,466	3,669
Psychological sciences, n.e.c.	415	14	810	2,021	4,122	6,647	3,054	10,616
Physical sciences, total	350,425	390,350	395,775	429,951	388,745	380,736	399,834	342,134
Astronomy	24,355	33,772	39,577	115,273	36,187	38,652	48,151	39,549
Chemistry	118,523	130,587	150,287	133,929	119,808	148,363	144,960	146,907
Physics	156,088	185,916	194,007	175,012	161,472	166,479	170,752	136,521
Physical sciences, n.e.c.	51,459	40,075	11,904	5,737	71,278	27,242	35,971	19,157
Environmental sciences, total	234,845	251,854	282,746	293,162	283,247	308,463	292,593	297,043
Atmospheric sciences	56,152	56,071	62,509	60,245	62,854	69,233	100,726	62,089
Geological sciences	55,805	60,841	97,667	101,690	98,989	110,435	101,619	76,941
Oceanography	118,619	125,134	67,549	73,272	73,421	75,612	51,025	146,209
Environmental sciences, n.e.c.	4,269	9,808	55,021	57,955	47,983	53,183	39,223	11,804
Math & computer sciences, total	124,451	165,965	163,379	206,404	208,906	221,277	173,795	272,087
Mathematics	63,155	68,501	71,834	88,045	80,351	74,997	76,368	75,716
Computer sciences	61,296	97,464	91,245	117,692	123,255	139,070	92,980	196,371
Math & computer sciences, n.e.c.	0	0	300	667	5,300	7,210	4,447	0
Engineering, total	205,083	151,880	236,791	198,277	211,683	320,533	390,609	386,097
Aeronautical	367	629	723	2,991	2,695	151	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	37,458	32,072	43,707	40,516	33,906	32,516	41,768	36,493
Civil	31,394	28,546	27,001	27,818	25,463	26,904	36,917	35,539
Electrical	61,946	41,312	52,393	49,071	50,615	55,192	43,767	36,837
Mechanical	31,332	26,517	36,345	31,623	29,685	32,669	51,005	5,832
Metallurgy & materials	25,074	6,852	27,296	21,100	20,331	116,860	144,572	124,054
Engineering, n.e.c.	17,512	15,952	49,326	25,158	48,988	56,241	72,580	147,342
Social sciences, total	36,154	43,949	35,513	45,281	48,059	53,321	68,954	63,968
Anthropology	7,309	7,304	7,422	7,569	6,651	6,614	11,512	9,821
Economics	10,575	12,243	11,007	13,059	12,801	8,192	12,015	11,555
Political science	3,450	3,497	4,247	4,479	4,454	4,979	7,195	5,034
Sociology	3,128	4,131	4,026	6,006	5,581	5,407	6,742	3,026
Social sciences, n.e.c.	11,692	16,774	8,811	14,168	18,572	28,129	31,490	34,532
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	78,414	90,411	77,105	99,075	138,139	102,616	100,197	91,932

See explanatory information, if any, and SOURCE at end of table.

**Table 11. Federal obligations to universities and colleges for total research,
by detailed field of science & engineering: National Science
Foundation, fiscal years 1973-2003**

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	1,819,113	1,874,860	2,076,356	2,265,158	2,497,853	2,663,757	2,790,195
Life sciences, total	289,085	321,160	365,065	404,945	398,255	424,773	445,045
Biol & agricultural, total	289,085	321,160	365,065	404,945	398,255	NA	NA
Biol (excl environmental)	214,701	247,325	267,637	299,490	300,632	NA	NA
Environmental biology	74,384	73,835	97,428	105,455	97,623	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	4,291	4,218	4,238	5,025	3,882	4,141	4,339
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	4,291	4,218	4,238	5,025	3,882	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	393,061	382,584	437,362	446,692	466,187	497,194	520,867
Astronomy	39,018	38,924	40,864	48,250	52,252	NA	NA
Chemistry	125,693	122,696	142,383	141,244	152,841	NA	NA
Physics	125,774	127,455	169,107	165,888	163,707	NA	NA
Physical sciences, n.e.c.	102,576	93,509	85,008	91,310	97,387	NA	NA
Environmental sciences, total	309,139	295,984	334,869	332,170	364,617	388,951	407,603
Atmospheric sciences	66,616	66,602	74,648	72,597	80,756	NA	NA
Geological sciences	81,517	78,859	88,995	92,914	104,405	NA	NA
Oceanography	148,817	139,944	159,868	152,581	164,396	NA	NA
Environmental sciences, n.e.c.	12,189	10,579	11,358	14,078	15,060	NA	NA
Math & computer sciences, total	277,108	325,509	363,729	436,284	538,572	574,449	601,888
Mathematics	79,862	84,326	84,975	99,625	105,251	NA	NA
Computer sciences	197,246	241,183	278,754	336,659	433,321	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	377,808	383,074	381,631	420,596	452,799	482,558	504,954
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	38,249	39,855	40,998	43,601	47,457	NA	NA
Civil	36,077	36,651	38,191	39,472	43,634	NA	NA
Electrical	41,486	39,967	45,927	48,402	56,168	NA	NA
Mechanical	6,930	8,094	7,002	6,583	5,939	NA	NA
Metallurgy & materials	105,384	105,793	111,643	119,582	121,721	NA	NA
Engineering, n.e.c.	149,682	152,714	137,870	162,956	177,880	NA	NA
Social sciences, total	74,916	72,852	96,519	93,781	103,000	109,796	114,935
Anthropology	10,762	10,733	11,031	11,607	11,784	NA	NA
Economics	14,286	13,057	13,244	15,613	17,244	NA	NA
Political science	5,389	5,077	5,325	5,541	6,400	NA	NA
Sociology	4,571	4,210	3,854	4,418	4,646	NA	NA
Social sciences, n.e.c.	39,908	39,775	63,065	56,602	62,926	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	93,705	89,479	92,943	125,665	170,541	181,895	190,564

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data (such as mechanical engineering). These changes are reflected in the historical data tables.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2A. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	1,125,103	1,229,791	1,320,736	1,535,210	1,738,104	2,051,685	2,291,264
Life sciences, total	NA	610,316	655,727	719,176	809,828	926,949	1,140,143	1,219,540
Biol & agricultural, total	NA	413,374	442,802	491,747	549,752	639,197	787,936	801,096
Biol (excl environmental)	NA	NA	NA	NA	NA	566,976	703,253	712,238
Environmental biology	NA	NA	NA	NA	NA	28,481	38,842	37,001
Agricultural	NA	NA	NA	NA	NA	43,740	45,841	51,857
Medical sciences, total	NA	177,864	192,794	203,582	231,597	255,473	310,513	372,110
Clinical medical	NA	7,501	11,262	8,954	12,315	NA	NA	NA
Other medical	NA	170,363	181,532	194,628	219,282	NA	NA	NA
Life sciences, n.e.c.	NA	19,078	20,131	23,847	28,479	32,279	41,694	46,334
Psychology, total	NA	28,206	27,918	27,767	31,786	35,981	42,889	52,416
Biological aspects	NA	11,182	12,148	12,479	13,191	12,868	15,584	18,491
Social aspects	NA	11,842	10,515	9,533	11,881	14,986	17,125	18,527
Psychological sciences, n.e.c.	NA	5,182	5,255	5,755	6,714	8,127	10,180	15,398
Physical sciences, total	NA	206,838	227,244	234,717	270,156	299,484	323,298	375,902
Astronomy	NA	29,507	26,698	26,204	31,965	35,860	38,209	41,131
Chemistry	NA	60,755	73,497	78,607	96,249	102,200	114,335	136,092
Physics	NA	114,305	123,491	126,331	137,362	157,083	166,247	194,284
Physical sciences, n.e.c.	NA	2,271	3,558	3,575	4,580	4,341	4,507	4,395
Environmental sciences, total	NA	104,482	120,194	128,205	166,004	191,790	229,887	255,297
Atmospheric sciences	NA	22,390	29,386	29,669	40,283	52,881	61,705	74,867
Geological sciences	NA	29,092	35,114	40,648	45,290	51,605	69,843	74,447
Oceanography	NA	48,094	52,509	54,318	72,669	79,928	91,845	94,945
Environmental sciences, n.e.c.	NA	4,906	3,185	3,570	7,762	7,376	6,494	11,038
Math & computer sciences, total	NA	36,559	42,197	46,344	56,623	65,303	68,969	79,799
Mathematics	NA	NA	NA	27,226	35,019	36,864	38,574	46,092
Computer sciences	NA	NA	NA	18,840	21,574	27,402	29,481	31,372
Math & computer sciences, n.e.c.	NA	NA	NA	278	30	1,037	914	2,335
Engineering, total	NA	88,321	106,710	113,896	139,291	151,506	163,976	208,416
Aeronautical	NA	9,146	9,492	10,793	12,750	16,931	19,131	22,071
Astronautical	NA	2,300	2,009	2,455	1,782	2,196	705	995
Chemical	NA	6,482	10,963	10,203	9,494	9,284	12,548	16,946
Civil	NA	4,937	3,665	3,665	5,992	6,422	9,625	15,068
Electrical	NA	18,873	19,212	26,380	36,414	37,962	37,069	47,482
Mechanical	NA	10,202	9,434	10,424	13,708	15,488	20,756	25,659
Metallurgy & materials	NA	28,008	33,928	35,276	42,113	43,429	47,635	51,871
Engineering, n.e.c.	NA	8,373	18,007	14,700	17,038	19,794	16,507	28,324
Social sciences, total	NA	41,735	40,404	44,818	52,201	55,743	56,976	63,956
Anthropology	NA	3,997	3,781	3,217	3,535	5,005	5,829	5,759
Economics	NA	16,340	15,669	15,755	19,053	20,071	21,126	22,273
Political science	NA	1,892	1,322	1,658	2,026	2,655	3,290	3,572
Sociology	NA	8,222	4,885	6,527	7,827	8,606	10,262	12,139
Social sciences, n.e.c.	NA	11,284	14,747	17,661	19,760	19,406	16,469	20,213
History	NA	905	937	NA	NA	NA	NA	NA
Linguistics	NA	1,685	1,528	NA	NA	NA	NA	NA
Other social sciences	NA	8,694	12,282	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	8,646	9,397	5,813	9,321	11,348	25,547	35,938

See explanatory information, if any, and SOURCE at end of table.

Table 2A. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	2,478,961	2,693,269	3,077,680	3,490,727	3,994,438	4,088,365	4,627,716	4,829,815
Life sciences, total	1,314,624	1,483,665	1,701,670	1,979,576	2,321,755	2,307,844	2,701,722	2,747,344
Biol & agricultural, total	875,788	996,127	1,139,430	1,307,263	1,528,897	1,511,534	1,773,442	1,722,758
Biol (excl environmental)	776,872	897,748	1,030,888	1,191,199	1,384,545	1,383,032	1,642,170	1,582,334
Environmental biology	36,674	33,756	36,736	60,164	62,443	60,755	63,672	65,853
Agricultural	62,242	64,623	71,806	55,900	81,909	67,747	67,600	74,571
Medical sciences, total	394,480	441,860	501,777	600,020	695,484	710,403	823,729	967,034
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	44,356	45,678	60,463	72,293	97,374	85,907	104,551	57,552
Psychology, total	56,151	47,765	55,616	63,144	78,538	79,821	97,258	115,593
Biological aspects	17,229	14,734	15,679	21,598	26,516	27,393	30,142	35,041
Social aspects	18,771	17,053	21,243	21,586	26,939	26,753	32,382	20,491
Psychological sciences, n.e.c.	20,151	15,978	18,694	19,960	25,083	25,675	34,734	60,061
Physical sciences, total	434,744	455,265	502,182	581,913	631,135	636,037	698,787	733,685
Astronomy	42,409	46,188	49,872	67,058	65,230	67,185	70,713	73,252
Chemistry	164,696	165,267	181,946	212,099	236,948	232,482	246,515	258,104
Physics	222,397	238,564	264,727	293,870	317,241	325,870	321,123	343,889
Physical sciences, n.e.c.	5,242	5,246	5,637	8,886	11,716	10,500	60,436	58,440
Environmental sciences, total	241,573	255,951	284,262	288,948	330,689	335,534	369,634	378,172
Atmospheric sciences	67,363	69,043	68,605	84,597	89,707	96,179	101,676	98,049
Geological sciences	61,827	66,245	59,602	66,876	89,765	97,868	103,722	99,783
Oceanography	100,659	111,492	144,500	125,717	144,978	136,415	153,227	154,839
Environmental sciences, n.e.c.	11,724	9,171	11,555	11,758	6,239	5,072	11,009	25,501
Math & computer sciences, total	102,610	118,842	146,848	152,615	172,525	188,722	213,772	227,162
Mathematics	55,266	60,864	68,319	74,011	86,475	101,642	108,925	113,432
Computer sciences	40,588	53,244	66,807	62,304	73,714	74,534	88,298	94,662
Math & computer sciences, n.e.c.	6,756	4,734	11,722	16,300	12,336	12,546	16,549	19,068
Engineering, total	237,252	259,013	295,456	340,276	363,066	429,193	411,277	448,894
Aeronautical	22,596	25,203	28,243	31,546	29,375	41,200	43,051	40,312
Astronautical	945	3,532	8,012	5,042	4,662	8,470	8,340	9,715
Chemical	19,807	16,802	18,914	29,640	27,610	33,272	32,501	34,469
Civil	17,441	18,966	22,474	29,572	30,692	29,274	29,112	31,459
Electrical	52,922	61,064	63,811	85,207	84,380	91,896	95,365	98,185
Mechanical	28,639	32,106	43,884	45,424	54,384	56,857	58,638	58,252
Metallurgy & materials	62,583	69,648	76,812	79,916	95,820	120,373	96,494	120,740
Engineering, n.e.c.	32,319	31,692	33,306	33,929	36,143	47,851	47,776	55,762
Social sciences, total	58,653	46,624	56,911	49,781	50,961	47,854	54,119	63,694
Anthropology	5,470	5,367	5,428	6,385	6,311	6,756	7,419	7,454
Economics	19,981	21,240	22,896	12,587	14,148	13,248	13,983	16,326
Political science	3,300	1,973	2,124	3,037	3,865	2,672	2,999	3,475
Sociology	11,396	8,707	14,894	14,962	14,704	14,010	17,614	15,645
Social sciences, n.e.c.	18,506	9,337	11,569	12,810	11,933	11,168	12,104	20,794
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	33,354	26,144	34,735	34,474	45,769	63,360	81,147	115,271

See explanatory information, if any, and SOURCE at end of table.

Table 2A. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	5,167,140	5,470,029	5,987,152	6,230,381	6,776,435	6,947,337	6,904,691	7,412,978
Life sciences, total	2,902,645	3,067,639	3,328,374	3,480,531	3,776,201	3,870,883	3,687,738	4,013,194
Biol & agricultural, total	1,799,360	1,884,346	2,049,432	2,125,111	2,205,569	2,237,608	2,089,931	2,224,268
Biol (excl environmental)	1,645,581	1,724,891	1,867,034	1,925,304	2,023,749	2,036,295	1,898,563	2,059,731
Environmental biology	69,515	86,934	103,192	114,646	108,217	116,284	112,570	100,107
Agricultural	84,264	72,521	79,206	85,161	73,603	85,029	78,798	64,430
Medical sciences, total	1,029,978	1,094,500	1,185,927	1,292,311	1,493,922	1,568,687	1,500,720	1,660,325
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	73,307	88,793	93,015	63,109	76,710	64,588	97,087	128,601
Psychology, total	124,963	141,717	149,095	86,376	166,637	173,667	164,574	178,371
Biological aspects	41,914	42,313	43,714	10,865	12,932	9,835	10,896	19,632
Social aspects	24,717	40,600	46,847	13,521	12,961	11,926	12,195	6,189
Psychological sciences, n.e.c.	58,332	58,804	58,534	61,990	140,744	151,906	141,483	152,550
Physical sciences, total	782,712	828,867	900,354	956,564	941,646	933,400	976,310	999,818
Astronomy	76,332	77,917	97,207	188,790	110,478	119,572	140,898	172,353
Chemistry	258,507	275,968	299,872	305,137	300,161	323,785	313,347	302,382
Physics	383,550	424,544	471,158	438,162	445,221	441,975	455,656	476,116
Physical sciences, n.e.c.	64,323	50,438	32,117	24,475	85,786	48,068	66,409	48,967
Environmental sciences, total	424,120	455,947	522,786	554,617	559,028	602,585	573,866	611,900
Atmospheric sciences	110,834	120,021	139,086	154,328	151,516	165,235	199,492	151,594
Geological sciences	116,008	123,255	163,724	160,520	174,416	199,762	160,634	128,557
Oceanography	172,743	179,317	133,784	147,627	144,592	145,523	109,243	202,215
Environmental sciences, n.e.c.	24,535	33,354	86,192	92,142	88,504	92,065	104,497	129,534
Math & computer sciences, total	244,169	293,411	295,141	329,073	352,025	350,318	335,309	431,902
Mathematics	111,794	124,889	117,321	145,463	130,379	131,019	118,965	125,081
Computer sciences	116,729	166,507	158,032	181,149	217,363	211,886	199,650	289,079
Math & computer sciences, n.e.c.	15,646	2,015	19,788	2,461	4,283	7,413	16,694	17,742
Engineering, total	484,523	458,197	555,781	556,577	580,032	685,044	790,820	796,925
Aeronautical	45,651	53,237	41,832	44,305	39,736	53,615	42,578	39,982
Astronautical	11,238	8,656	13,305	15,459	11,857	11,301	13,659	15,939
Chemical	31,323	32,397	42,990	41,272	37,726	37,037	40,359	38,370
Civil	34,794	32,829	35,408	27,710	26,206	26,856	36,107	33,910
Electrical	110,070	95,224	98,401	105,060	146,438	151,042	137,899	142,024
Mechanical	67,743	61,773	82,996	82,421	99,182	105,030	112,470	81,460
Metallurgy & materials	130,309	121,826	146,944	123,087	127,803	208,490	258,324	244,144
Engineering, n.e.c.	53,395	52,255	93,905	117,263	91,084	91,673	149,424	201,096
Social sciences, total	70,133	70,019	72,168	70,159	109,399	96,359	112,070	107,960
Anthropology	7,643	7,773	7,594	6,922	6,416	5,855	10,786	9,232
Economics	18,379	19,297	20,903	22,535	22,570	19,261	22,311	21,432
Political science	3,924	3,679	4,356	3,938	3,878	4,537	6,590	4,631
Sociology	19,728	15,456	17,234	7,580	7,271	7,391	8,343	5,090
Social sciences, n.e.c.	20,459	23,814	22,081	29,184	69,264	59,315	64,040	67,575
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	133,875	154,232	163,453	196,484	291,467	235,081	264,004	272,908

See explanatory information, if any, and SOURCE at end of table.

Table 2A. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	7,662,933	7,907,976	9,062,924	10,022,175	11,741,414	12,669,588	13,956,814
Life sciences, total	4,348,389	4,571,071	5,416,336	5,684,855	7,367,698	8,152,252	9,137,604
Biol & agricultural, total	2,606,233	2,727,337	3,221,545	4,323,776	6,286,751	NA	NA
Biol (excl environmental)	2,425,524	2,545,590	2,997,526	4,062,094	6,017,208	NA	NA
Environmental biology	95,015	97,824	126,467	149,153	137,444	NA	NA
Agricultural	85,694	83,923	97,552	112,529	132,099	NA	NA
Medical sciences, total	1,607,897	1,701,561	2,017,596	1,070,146	993,493	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	134,259	142,173	177,195	290,933	87,454	NA	NA
Psychology, total	194,907	200,953	223,810	486,004	171,223	194,016	220,378
Biological aspects	21,197	18,301	10,357	5,458	10,141	NA	NA
Social aspects	9,421	8,872	8,090	13,932	5,286	NA	NA
Psychological sciences, n.e.c.	164,289	173,780	205,363	466,614	155,796	NA	NA
Physical sciences, total	1,041,915	1,011,650	1,124,000	1,216,740	1,278,684	1,316,133	1,411,558
Astronomy	153,329	148,197	172,549	144,135	159,826	NA	NA
Chemistry	278,566	273,252	309,749	423,183	409,423	NA	NA
Physics	489,058	480,058	538,582	526,605	562,088	NA	NA
Physical sciences, n.e.c.	120,962	110,143	103,120	122,817	147,347	NA	NA
Environmental sciences, total	620,507	603,017	652,883	747,852	738,522	766,797	804,123
Atmospheric sciences	190,317	154,124	187,975	171,293	173,130	NA	NA
Geological sciences	122,722	170,002	143,181	135,627	143,808	NA	NA
Oceanography	203,701	186,390	232,612	226,043	245,010	NA	NA
Environmental sciences, n.e.c.	103,767	92,501	89,115	214,889	176,574	NA	NA
Math & computer sciences, total	400,983	438,490	483,989	558,117	696,966	729,242	773,066
Mathematics	112,530	117,547	121,495	169,608	147,526	NA	NA
Computer sciences	268,660	301,055	337,917	382,543	506,056	NA	NA
Math & computer sciences, n.e.c.	19,793	19,888	24,577	5,966	43,384	NA	NA
Engineering, total	698,888	722,065	725,167	834,017	933,515	918,013	973,268
Aeronautical	35,738	42,289	45,496	38,488	31,094	NA	NA
Astronautical	10,712	4,920	28,370	12,413	5,179	NA	NA
Chemical	38,592	45,072	44,400	44,329	46,752	NA	NA
Civil	30,038	25,043	32,100	36,242	36,971	NA	NA
Electrical	120,885	141,701	138,332	125,148	181,139	NA	NA
Mechanical	69,961	68,584	70,020	63,496	93,530	NA	NA
Metallurgy & materials	203,630	203,573	204,861	233,855	263,163	NA	NA
Engineering, n.e.c.	189,332	190,883	161,588	280,046	275,687	NA	NA
Social sciences, total	117,212	111,963	141,317	172,245	144,646	154,086	165,449
Anthropology	10,214	10,157	10,775	10,967	11,137	NA	NA
Economics	23,884	17,294	18,231	23,494	25,322	NA	NA
Political science	4,829	4,546	4,762	5,010	5,923	NA	NA
Sociology	6,339	5,781	5,470	7,642	7,475	NA	NA
Social sciences, n.e.c.	71,946	74,185	102,079	125,132	94,789	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	240,132	248,767	295,422	322,345	410,160	439,049	471,368

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: This table shows obligations from the Departments of Agriculture, Defense, Energy, and Health & Human Services; the National Aeronautics & Space Administration; and the National Science Foundation; they represent approximately 99 percent of total Federal basic research obligations to universities and colleges in fiscal years 2001, 2002, and 2003.

Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2B. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	38,135	43,290	47,004	56,130	77,712	83,967	90,245
Life sciences, total	NA	26,640	30,286	33,467	40,729	60,366	65,499	69,663
Biol & agricultural, total	NA	25,151	28,601	31,569	38,610	58,152	63,053	67,049
Biol (excl environmental)	NA	NA	NA	NA	NA	14,412	17,003	15,000
Environmental biology	NA	NA	NA	NA	NA	0	209	272
Agricultural	NA	NA	NA	NA	NA	43,740	45,841	51,777
Medical sciences, total	NA	1,489	1,685	1,898	2,119	2,214	2,446	2,614
Clinical medical	NA	1,489	1,685	1,898	2,119	NA	NA	NA
Other medical	NA	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	0	0	0	0	0
Psychology, total	NA	0	0	0	0	0	0	0
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	0	0	0	0	0	0	0
Physical sciences, total	NA	1,873	2,010	2,277	2,801	3,615	3,109	3,715
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	1,855	1,947	2,262	2,766	3,537	3,079	3,679
Physics	NA	18	63	15	35	78	30	36
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	714	771	262	293	401	510	567
Atmospheric sciences	NA	580	708	262	293	401	429	456
Geological sciences	NA	134	63	0	0	0	81	111
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	106	21	49	24	46	86	213
Mathematics	NA	NA	NA	49	24	46	86	213
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	NA	1,379	1,830	1,517	1,779	2,060	2,280	2,464
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	10	38
Civil	NA	169	15	3	7	11	50	0
Electrical	NA	9	27	8	19	38	10	0
Mechanical	NA	0	0	0	0	0	30	172
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	1,201	1,788	1,506	1,753	2,011	2,180	2,254
Social sciences, total	NA	7,423	8,372	9,432	10,504	11,224	12,483	13,623
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	7,031	7,927	8,926	9,943	10,621	11,798	12,896
Political science	NA	0	0	0	0	0	0	0
Sociology	NA	390	443	503	558	595	679	720
Social sciences, n.e.c.	NA	2	2	3	3	8	6	7
History	NA	1	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	1	2	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 2B. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	102,901	107,576	117,122	111,755	142,587	131,124	136,886	151,325
Life sciences, total	79,192	80,224	87,635	95,096	125,623	114,542	119,007	131,162
Biol & agricultural, total	76,372	76,849	83,919	87,905	118,906	108,671	113,086	124,936
Biol (excl environmental)	14,049	12,350	12,272	21,646	25,328	31,118	34,675	36,032
Environmental biology	437	764	712	11,805	12,601	10,655	11,649	15,596
Agricultural	61,886	63,735	70,935	54,454	80,977	66,898	66,762	73,308
Medical sciences, total	2,820	3,375	3,716	7,191	6,717	5,871	5,921	6,226
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	5,490	6,140	6,727	5,540	6,251	4,829	4,838	5,145
Astronomy	0	0	0	0	0	0	0	0
Chemistry	5,383	6,047	6,626	5,520	6,251	4,801	4,838	5,145
Physics	107	93	101	20	0	28	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	764	748	755	714	545	624	1,120	1,409
Atmospheric sciences	670	668	588	443	416	386	492	637
Geological sciences	94	80	167	271	129	238	628	772
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	160	369	116	193	280	121	238	352
Mathematics	160	369	116	193	79	104	238	249
Computer sciences	0	0	0	0	201	17	0	103
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	2,932	3,302	3,595	3,130	2,658	3,698	3,599	2,902
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	96	107	116	1	0	0	0	0
Civil	51	46	50	77	344	153	56	43
Electrical	5	11	12	7	0	16	0	0
Mechanical	24	28	30	42	179	8	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	2,756	3,110	3,387	3,003	2,135	3,521	3,543	2,859
Social sciences, total	14,363	16,793	18,294	7,082	7,230	7,310	8,084	10,355
Anthropology	60	0	0	0	0	0	0	0
Economics	13,546	15,924	17,361	4,731	4,762	4,885	5,662	7,640
Political science	2	0	0	0	0	0	0	0
Sociology	750	868	931	2,351	2,468	2,417	2,422	2,715
Social sciences, n.e.c.	5	1	2	0	0	8	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 2B. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	154,200	163,955	173,075	198,547	196,979	199,352	192,902	155,643
Life sciences, total	134,681	140,752	143,726	164,486	162,098	162,662	158,869	125,646
Biol & agricultural, total	128,330	133,919	138,314	159,627	156,578	156,927	154,170	121,329
Biol (excl environmental)	30,243	45,863	39,237	52,205	60,933	50,017	50,316	38,019
Environmental biology	14,376	16,221	21,712	23,326	22,732	22,762	25,356	19,515
Agricultural	83,711	71,835	77,365	84,096	72,913	84,148	78,498	63,795
Medical sciences, total	6,351	6,833	5,412	4,859	5,520	5,735	4,693	4,311
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	6	6
Psychology, total	0	0	0	0	16	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	16	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	5,063	6,706	7,663	9,293	11,392	12,656	9,577	8,414
Astronomy	0	0	0	0	18	0	0	0
Chemistry	5,063	6,706	7,278	9,293	11,374	12,656	9,577	8,414
Physics	0	0	385	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	860	514	1,365	2,401	1,894	1,337	1,390	1,594
Atmospheric sciences	570	377	1,036	2,212	1,662	1,229	1,310	1,499
Geological sciences	290	137	329	189	232	108	75	90
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	5	5
Math & computer sciences, total	99	88	763	1,099	1,354	1,573	1,341	1,297
Mathematics	99	51	255	238	125	132	165	69
Computer sciences	0	37	508	861	1,229	1,441	1,176	1,228
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	4,200	5,253	7,597	7,061	5,539	5,880	6,706	4,704
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	59	1,013	0	0	9	0	0
Civil	0	0	444	0	0	0	0	0
Electrical	0	0	179	0	0	0	0	0
Mechanical	0	0	141	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	4,200	5,194	5,820	7,061	5,539	5,871	6,706	4,704
Social sciences, total	9,297	10,642	11,961	14,207	14,686	15,244	15,019	13,988
Anthropology	0	0	0	0	0	0	0	0
Economics	6,854	8,391	9,734	11,602	12,069	12,313	12,095	11,610
Political science	0	0	0	0	0	0	0	0
Sociology	2,443	2,251	2,227	2,605	2,617	2,931	2,924	2,378
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 2B. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	194,475	173,716	204,892	243,996	270,151	271,612	276,877
Life sciences, total	161,069	153,557	181,379	214,330	237,452	240,458	242,951
Biol & agricultural, total	156,513	149,123	177,335	208,837	232,497	NA	NA
Biol (excl environmental)	48,631	38,946	49,652	55,417	61,152	NA	NA
Environmental biology	22,823	26,661	30,684	41,699	39,889	NA	NA
Agricultural	85,059	83,516	96,999	111,721	131,456	NA	NA
Medical sciences, total	4,556	4,434	4,044	5,493	4,955	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	11,897	7,272	9,115	9,084	10,421	11,846	14,121
Astronomy	0	0	0	0	0	NA	NA
Chemistry	11,844	7,193	9,039	9,000	10,310	NA	NA
Physics	53	79	76	84	111	NA	NA
Physical sciences, n.e.c.	0	0	0	0	0	NA	NA
Environmental sciences, total	1,753	882	1,087	1,141	1,252	1,048	1,045
Atmospheric sciences	1,657	800	1,059	1,138	1,249	NA	NA
Geological sciences	96	82	28	3	3	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	0	NA	NA
Math & computer sciences, total	26	122	43	35	72	78	67
Mathematics	26	122	43	35	72	NA	NA
Computer sciences	0	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	5,355	3,223	3,769	4,986	6,094	5,896	6,985
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	88	106	112	201	161	NA	NA
Civil	18	34	34	38	50	NA	NA
Electrical	17	20	19	22	29	NA	NA
Mechanical	9	13	26	27	38	NA	NA
Metallurgy & materials	0	0	0	0	0	NA	NA
Engineering, n.e.c.	5,223	3,050	3,578	4,698	5,816	NA	NA
Social sciences, total	14,375	8,660	9,499	14,342	14,860	12,286	11,708
Anthropology	0	0	0	0	0	NA	NA
Economics	11,828	6,477	7,266	10,663	11,316	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	2,547	2,183	2,233	3,679	3,544	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	78	0	0	0

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2C. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	106,279	105,530	112,003	141,754	167,865	178,902	208,336
Life sciences, total	NA	8,018	12,176	10,842	12,728	11,601	12,855	15,543
Biol & agricultural, total	NA	4,184	4,246	3,795	5,030	7,010	8,561	9,197
Biol (excl environmental)	NA	NA	NA	NA	NA	5,487	7,533	7,951
Environmental biology	NA	NA	NA	NA	NA	1,523	1,028	1,246
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	3,834	7,930	7,047	7,698	4,195	4,294	6,346
Clinical medical	NA	1,713	6,785	5,564	6,707	NA	NA	NA
Other medical	NA	2,121	1,145	1,483	991	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	0	0	396	0	0
Psychology, total	NA	7,428	4,598	5,454	6,636	8,517	9,034	9,294
Biological aspects	NA	901	1,032	1,528	605	462	464	114
Social aspects	NA	6,091	3,489	3,832	5,428	6,666	8,570	9,180
Psychological sciences, n.e.c.	NA	436	77	94	603	1,389	0	0
Physical sciences, total	NA	20,107	20,954	21,488	25,656	29,288	31,901	37,880
Astronomy	NA	232	229	283	2,120	2,793	3,322	3,513
Chemistry	NA	5,579	6,203	6,824	9,536	10,830	12,182	15,045
Physics	NA	13,932	14,144	13,832	12,948	15,665	16,397	19,279
Physical sciences, n.e.c.	NA	364	378	549	1,052	0	0	43
Environmental sciences, total	NA	21,286	22,788	23,989	30,053	42,367	42,664	46,050
Atmospheric sciences	NA	2,174	2,456	2,128	3,730	6,098	6,448	5,902
Geological sciences	NA	1,735	2,189	1,896	3,114	5,314	4,998	5,071
Oceanography	NA	17,377	18,143	19,555	19,212	27,518	26,864	28,380
Environmental sciences, n.e.c.	NA	0	0	410	3,997	3,437	4,354	6,697
Math & computer sciences, total	NA	13,587	14,041	14,540	17,501	22,462	26,359	28,272
Mathematics	NA	NA	NA	8,913	11,656	11,872	12,947	15,279
Computer sciences	NA	NA	NA	5,627	5,815	9,553	12,618	10,781
Math & computer sciences, n.e.c.	NA	NA	NA	0	30	1,037	794	2,212
Engineering, total	NA	35,627	30,611	35,572	49,068	53,205	55,904	70,550
Aeronautical	NA	4,852	4,694	6,231	7,140	9,165	9,910	10,467
Astronautical	NA	1,860	1,832	2,266	1,425	1,700	0	0
Chemical	NA	909	860	0	648	486	0	3,393
Civil	NA	0	0	18	10	374	132	72
Electrical	NA	9,459	8,252	12,435	17,559	18,995	19,135	26,021
Mechanical	NA	3,449	2,729	3,562	7,275	8,364	9,563	10,833
Metallurgy & materials	NA	15,098	12,244	11,060	14,604	14,007	17,146	19,751
Engineering, n.e.c.	NA	0	0	0	407	114	18	13
Social sciences, total	NA	226	272	118	112	138	185	747
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	0	0	0	0	0	0
Political science	NA	0	0	0	0	0	0	168
Sociology	NA	226	32	118	112	138	173	27
Social sciences, n.e.c.	NA	0	240	0	0	0	12	552
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	0	240	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	90	0	0	287	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 2C. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	244,405	305,365	360,432	405,373	408,777	475,013	476,160	492,378
Life sciences, total	14,300	25,304	25,831	33,201	38,787	36,000	35,517	42,061
Biol & agricultural, total	11,489	13,501	18,345	22,615	26,840	23,036	23,288	27,220
Biol (excl environmental)	10,334	11,234	15,528	16,753	24,077	20,433	20,146	24,800
Environmental biology	1,155	2,267	2,817	5,862	2,763	2,603	3,142	2,420
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	2,811	11,803	7,486	10,556	11,947	12,964	12,229	14,121
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	30	0	0	0	720
Psychology, total	10,652	11,268	13,009	15,981	18,868	18,123	22,204	21,719
Biological aspects	53	0	0	3,617	3,738	3,976	4,658	5,441
Social aspects	10,431	11,268	13,009	12,185	14,722	13,982	17,266	3,661
Psychological sciences, n.e.c.	168	0	0	179	408	165	280	12,617
Physical sciences, total	49,892	61,460	60,801	68,940	73,363	83,914	86,026	81,535
Astronomy	4,558	4,022	3,057	3,727	4,722	5,960	6,620	4,241
Chemistry	20,725	25,939	29,102	32,053	36,673	38,563	40,881	37,149
Physics	24,415	31,337	28,465	32,382	31,786	39,310	38,506	40,115
Physical sciences, n.e.c.	194	162	177	778	182	81	19	30
Environmental sciences, total	44,842	56,725	63,790	70,480	65,681	80,511	78,577	79,472
Atmospheric sciences	5,210	8,265	10,689	13,228	12,682	20,208	16,997	18,394
Geological sciences	1,906	3,628	5,095	6,218	16,810	30,358	27,638	23,123
Oceanography	33,224	38,794	39,699	42,928	36,132	29,815	33,907	37,894
Environmental sciences, n.e.c.	4,502	6,038	8,307	8,106	57	130	35	61
Math & computer sciences, total	43,222	53,180	71,026	73,365	66,405	70,251	71,739	76,895
Mathematics	20,009	23,844	27,000	29,798	31,474	34,708	32,160	31,829
Computer sciences	18,059	25,279	33,252	27,819	23,706	24,157	24,705	27,219
Math & computer sciences, n.e.c.	5,154	4,057	10,774	15,748	11,225	11,386	14,874	17,847
Engineering, total	81,241	97,418	115,781	133,406	134,345	176,365	172,609	188,528
Aeronautical	10,673	13,278	14,390	16,899	14,566	22,763	24,815	19,320
Astronautical	0	2,099	5,991	2,434	2,109	4,431	4,616	3,591
Chemical	2,424	1,469	255	1,215	1,285	1,556	2,065	1,529
Civil	751	966	1,433	2,081	1,985	5,826	6,202	7,525
Electrical	28,399	34,740	34,965	50,312	51,618	55,447	59,194	55,094
Mechanical	13,785	14,278	23,150	23,170	25,909	26,949	24,925	21,584
Metallurgy & materials	25,205	30,528	35,217	37,170	36,840	58,969	50,770	71,427
Engineering, n.e.c.	4	60	380	125	33	424	22	8,458
Social sciences, total	256	10	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	236	0	0	0	0	0	0	0
Sociology	20	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	10	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	10,194	10,000	11,328	9,849	9,488	2,168

See explanatory information, if any, and SOURCE at end of table.

Table 2C. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	511,857	523,586	545,946	598,972	763,675	728,482	708,444	678,537
Life sciences, total	39,953	39,944	48,413	72,581	84,759	90,969	51,755	56,377
Biol & agricultural, total	28,447	28,246	36,480	57,196	49,684	54,032	41,686	42,967
Biol (excl environmental)	26,033	21,630	27,889	31,272	32,579	29,287	26,901	29,351
Environmental biology	2,414	6,616	8,591	25,924	16,935	24,745	14,785	13,616
Agricultural	0	0	0	0	170	0	0	0
Medical sciences, total	11,506	11,200	11,933	15,385	31,013	36,937	9,755	11,130
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	498	0	0	4,062	0	314	2,280
Psychology, total	20,972	23,387	17,854	17,008	18,667	14,479	16,341	17,999
Biological aspects	7,239	6,033	4,962	6,082	8,309	6,052	8,221	14,043
Social aspects	3,351	8,778	9,219	9,262	8,658	6,855	5,379	1,658
Psychological sciences, n.e.c.	10,382	8,576	3,673	1,664	1,700	1,572	2,741	2,298
Physical sciences, total	85,861	81,591	80,650	95,288	110,347	112,272	121,756	100,327
Astronomy	3,997	2,261	0	506	6,238	7,050	4,949	1,806
Chemistry	38,515	37,511	38,914	48,295	49,986	52,846	60,598	52,706
Physics	43,337	41,804	39,380	45,286	54,094	52,280	56,203	39,921
Physical sciences, n.e.c.	12	15	2,356	1,201	29	96	6	5,894
Environmental sciences, total	91,018	84,365	100,921	98,737	105,682	129,577	87,039	89,780
Atmospheric sciences	15,388	9,763	13,054	15,199	12,195	18,216	18,615	20,328
Geological sciences	29,150	29,917	32,438	26,298	35,992	56,508	24,412	16,091
Oceanography	46,480	44,021	55,389	55,290	56,349	54,393	41,629	43,950
Environmental sciences, n.e.c.	0	664	40	1,950	1,146	460	2,383	9,411
Math & computer sciences, total	77,475	89,205	90,045	97,884	117,006	111,238	114,740	95,132
Mathematics	30,987	35,706	25,482	38,805	38,374	43,165	30,940	32,697
Computer sciences	32,086	53,317	47,173	57,936	78,350	67,025	81,856	58,504
Math & computer sciences, n.e.c.	14,402	182	17,390	1,143	282	1,048	1,944	3,931
Engineering, total	196,349	204,849	207,199	210,862	272,102	268,817	310,967	318,636
Aeronautical	19,792	26,602	13,092	18,839	12,966	24,513	15,884	19,484
Aeronautical	3,577	926	4,753	6,636	2,372	3,242	3,207	5,472
Chemical	656	84	17	1,824	5,476	3,540	4,960	7,546
Civil	8,544	7,537	12,248	4,625	4,046	3,230	3,460	3,170
Electrical	55,984	55,691	49,775	61,857	97,864	98,433	99,449	99,258
Mechanical	27,409	24,714	32,358	39,299	56,809	61,559	57,200	55,556
Metallurgy & materials	78,357	87,115	92,468	72,654	76,353	67,624	102,412	95,449
Engineering, n.e.c.	2,030	2,180	2,488	5,128	16,216	6,676	24,395	32,701
Social sciences, total	0	0	823	3,205	17,066	861	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	823	3,205	17,066	861	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	229	245	41	3,407	38,046	269	5,846	286

See explanatory information, if any, and SOURCE at end of table.

Table 2C. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	558,027	546,040	560,067	653,311	1,121,671	967,037	813,911
Life sciences, total	43,091	51,746	75,009	125,344	422,038	322,209	143,923
Biol & agricultural, total	30,392	29,687	35,965	35,553	56,073	NA	NA
Biol (excl environmental)	25,308	24,760	27,958	24,478	47,985	NA	NA
Environmental biology	5,084	4,927	8,007	11,075	8,076	NA	NA
Agricultural	0	0	0	0	12	NA	NA
Medical sciences, total	12,699	22,035	27,494	67,883	345,908	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	24	11,550	21,908	20,057	NA	NA
Psychology, total	17,205	13,831	3,216	14,450	9,822	11,110	8,960
Biological aspects	14,388	11,531	2,292	4,919	9,724	NA	NA
Social aspects	1,779	1,357	0	7,777	0	NA	NA
Psychological sciences, n.e.c.	1,038	943	924	1,754	98	NA	NA
Physical sciences, total	86,499	89,702	84,994	92,697	124,101	123,152	130,136
Astronomy	153	6,270	2,117	0	0	NA	NA
Chemistry	30,289	33,816	34,796	40,876	46,646	NA	NA
Physics	50,307	44,419	43,031	42,810	66,577	NA	NA
Physical sciences, n.e.c.	5,750	5,197	5,050	9,011	10,878	NA	NA
Environmental sciences, total	70,900	62,532	71,609	72,510	87,710	79,968	81,732
Atmospheric sciences	14,491	13,990	7,340	8,634	9,842	NA	NA
Geological sciences	6,175	4,953	2,431	2,756	7,244	NA	NA
Oceanography	41,539	36,249	61,612	59,751	70,624	NA	NA
Environmental sciences, n.e.c.	8,695	7,340	226	1,369	0	NA	NA
Math & computer sciences, total	86,903	78,900	70,388	74,903	117,041	124,011	122,553
Mathematics	18,470	18,651	13,151	23,324	16,877	NA	NA
Computer sciences	52,936	44,227	37,267	46,299	57,813	NA	NA
Math & computer sciences, n.e.c.	15,497	16,022	19,970	5,280	42,351	NA	NA
Engineering, total	251,653	249,329	248,818	265,964	357,609	302,281	321,571
Aeronautical	8,785	15,563	14,693	14,134	7,948	NA	NA
Astronautical	3,505	1,889	114	11,137	2,309	NA	NA
Chemical	5,581	8,960	10,014	7,271	5,857	NA	NA
Civil	2,547	2,557	1,096	4,023	572	NA	NA
Electrical	74,192	96,658	94,897	86,411	130,144	NA	NA
Mechanical	46,328	42,956	46,459	42,237	69,640	NA	NA
Metallurgy & materials	66,104	70,236	66,882	76,661	90,714	NA	NA
Engineering, n.e.c.	44,611	10,510	14,663	24,090	50,425	NA	NA
Social sciences, total	0	0	0	415	6	706	1,036
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	415	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	6	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,776	0	6,033	7,028	3,344	3,600	4,000

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2D. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	56,506	57,511	68,270	71,103	85,514	97,215	116,009
Life sciences, total	NA	5,604	0	7,856	7,665	9,414	9,294	9,796
Biol & agricultural, total	NA	5,604	0	7,856	7,665	9,414	9,294	9,696
Biol (excl environmental)	NA	NA	NA	NA	NA	9,414	9,294	9,696
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	0	0	0	0	0	0	0
Clinical medical	NA	0	0	0	0	NA	NA	NA
Other medical	NA	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	0	0	0	0	100
Psychology, total	NA	0	0	0	0	0	0	0
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	0	0	0	0	0	0	0
Physical sciences, total	NA	45,671	48,627	50,590	50,604	57,897	68,533	86,396
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	5,631	7,610	12,589	12,190	10,757	12,806	14,955
Physics	NA	39,377	40,382	38,001	38,414	47,140	55,577	71,141
Physical sciences, n.e.c.	NA	663	635	0	0	0	150	300
Environmental sciences, total	NA	380	548	216	846	1,100	1,840	2,483
Atmospheric sciences	NA	34	0	0	0	0	0	0
Geological sciences	NA	0	548	216	846	1,100	1,790	2,233
Oceanography	NA	346	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	50	250
Math & computer sciences, total	NA	1,103	1,555	447	2,610	3,000	3,455	4,091
Mathematics	NA	NA	NA	290	1,696	1,950	2,246	2,921
Computer sciences	NA	NA	NA	157	914	1,050	1,209	1,170
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	NA	3,748	6,781	9,161	9,378	12,603	14,079	13,087
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	22	0	0	597	303	564	211
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	30	0	0	0	0	90	0
Mechanical	NA	0	0	0	0	0	195	887
Metallurgy & materials	NA	3,419	6,781	9,161	8,781	12,300	13,090	9,642
Engineering, n.e.c.	NA	277	0	0	0	0	140	2,347
Social sciences, total	NA	0	0	0	0	0	0	0
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	0	0	0	0	0	0
Political science	NA	0	0	0	0	0	0	0
Sociology	NA	0	0	0	0	0	0	0
Social sciences, n.e.c.	NA	0	0	0	0	0	0	0
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	0	0	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	0	0	0	1,500	14	156

See explanatory information, if any, and SOURCE at end of table.

Table 2D. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	133,656	135,198	162,264	184,183	211,281	227,360	248,224	272,492
Life sciences, total	12,162	13,221	12,933	13,911	20,926	18,862	26,047	33,197
Biol & agricultural, total	11,962	13,021	12,933	12,695	20,698	18,737	25,218	32,078
Biol (excl environmental)	11,962	13,021	12,933	12,695	20,675	18,353	25,218	31,513
Environmental biology	0	0	0	0	23	384	0	170
Agricultural	0	0	0	0	0	0	0	395
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	200	200	0	1,216	228	125	829	1,119
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	97,472	99,217	120,690	133,325	144,767	145,035	156,230	171,857
Astronomy	0	0	0	0	0	0	0	0
Chemistry	21,536	15,297	18,615	21,460	23,066	24,855	26,054	30,629
Physics	75,436	83,420	102,075	111,800	121,609	120,099	130,176	141,228
Physical sciences, n.e.c.	500	500	0	65	92	81	0	0
Environmental sciences, total	3,095	2,548	4,091	4,106	7,351	7,743	9,533	9,077
Atmospheric sciences	0	0	0	0	312	351	39	25
Geological sciences	2,795	2,548	4,091	4,041	5,037	5,483	7,243	7,135
Oceanography	0	0	0	0	1,432	1,591	1,482	1,676
Environmental sciences, n.e.c.	300	0	0	65	570	318	769	241
Math & computer sciences, total	4,423	4,439	5,642	5,924	10,209	19,382	21,631	21,005
Mathematics	3,350	3,163	3,972	3,393	4,234	12,812	16,978	15,958
Computer sciences	1,073	1,276	1,670	2,531	5,975	6,544	4,632	5,047
Math & computer sciences, n.e.c.	0	0	0	0	0	26	21	0
Engineering, total	16,504	15,773	18,872	26,547	28,012	36,314	34,715	37,355
Aeronautical	0	0	0	0	0	11	0	0
Astronautical	0	0	0	0	0	0	13	0
Chemical	1,173	0	1,088	6,309	2,669	6,229	4,713	4,924
Civil	0	0	0	0	51	359	112	0
Electrical	0	0	0	318	139	226	95	0
Mechanical	1,820	2,291	2,691	3,904	6,871	7,468	9,038	9,214
Metallurgy & materials	11,430	11,900	13,305	14,098	15,296	18,301	19,318	21,310
Engineering, n.e.c.	2,081	1,582	1,788	1,918	2,986	3,720	1,426	1,907
Social sciences, total	0	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	36	370	16	24	68	1

See explanatory information, if any, and SOURCE at end of table.

Table 2D. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	301,409	334,436	395,483	404,740	371,448	363,731	369,311	488,802
Life sciences, total	38,236	38,420	47,430	51,821	56,602	55,215	57,654	56,822
Biol & agricultural, total	36,606	36,744	45,944	50,151	55,295	54,175	56,016	55,826
Biol (excl environmental)	36,527	36,514	45,578	49,852	54,420	54,175	56,016	55,776
Environmental biology	79	230	188	0	875	0	0	50
Agricultural	0	0	178	299	0	0	0	0
Medical sciences, total	380	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,250	1,676	1,486	1,670	1,307	1,040	1,638	996
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	185,913	199,041	233,857	208,789	209,885	211,084	211,327	286,936
Astronomy	0	0	0	0	0	0	0	0
Chemistry	33,940	35,225	32,932	35,766	38,905	37,346	37,308	43,314
Physics	151,973	162,904	199,510	172,811	170,980	173,650	173,996	243,612
Physical sciences, n.e.c.	0	912	1,415	212	0	88	23	10
Environmental sciences, total	23,039	37,178	40,105	40,186	50,069	46,712	50,152	92,418
Atmospheric sciences	4,250	17,649	22,486	22,343	28,257	28,504	27,813	20,629
Geological sciences	14,393	16,004	14,387	13,794	17,847	14,200	17,551	19,938
Oceanography	3,889	3,318	2,610	3,606	3,447	3,725	4,472	3,350
Environmental sciences, n.e.c.	507	207	622	443	518	283	316	48,501
Math & computer sciences, total	18,557	20,397	20,155	19,105	12,170	10,880	13,272	13,525
Mathematics	13,727	17,155	16,280	15,122	7,575	8,570	0	0
Computer sciences	4,830	3,242	3,875	3,983	4,595	2,310	4,364	4,106
Math & computer sciences, n.e.c.	0	0	0	0	0	0	8,908	9,419
Engineering, total	35,648	39,383	53,936	84,789	41,837	38,554	36,767	38,994
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	188	6,077	6,790	6,699	5,636	7,185	5,892	2,638
Civil	0	0	0	56	0	0	69	31
Electrical	0	0	0	0	0	0	80	0
Mechanical	9,183	8,992	10,790	9,735	10,185	8,434	8,399	11,213
Metallurgy & materials	21,368	20,949	20,961	19,722	20,882	18,886	17,868	20,391
Engineering, n.e.c.	4,909	3,365	15,395	48,577	5,134	4,049	4,459	4,721
Social sciences, total	0	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	16	17	0	50	885	1,286	139	107

See explanatory information, if any, and SOURCE at end of table.

Table 2D. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Page 4 of 4

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	459,362	449,065	473,789	484,527	535,166	511,849	569,887
Life sciences, total	42,602	45,661	51,390	57,949	66,119	63,824	67,466
Biol & agricultural, total	42,145	45,506	51,251	57,311	66,119	NA	NA
Biol (excl environmental)	42,145	45,506	51,251	57,311	66,119	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	457	155	139	638	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	298,288	300,550	314,893	324,173	347,235	332,867	367,558
Astronomy	0	0	0	0	0	NA	NA
Chemistry	42,014	39,621	46,494	44,869	57,774	NA	NA
Physics	255,537	260,929	268,399	279,304	289,095	NA	NA
Physical sciences, n.e.c.	737	0	0	0	366	NA	NA
Environmental sciences, total	66,947	60,553	64,044	70,982	68,892	69,649	71,619
Atmospheric sciences	19,373	20,550	21,165	27,323	25,453	NA	NA
Geological sciences	20,857	26,332	28,064	26,267	21,396	NA	NA
Oceanography	4,137	1,928	2,905	4,289	3,231	NA	NA
Environmental sciences, n.e.c.	22,580	11,743	11,910	13,103	18,812	NA	NA
Math & computer sciences, total	9,681	9,893	17,500	8,959	26,547	15,368	31,895
Mathematics	7,297	7,280	14,304	6,112	14,637	NA	NA
Computer sciences	2,384	2,613	3,196	2,847	11,910	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	41,769	32,403	25,944	22,464	26,373	30,141	31,349
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	3,065	3,336	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	9,949	10,438	9,234	8,629	11,261	NA	NA
Metallurgy & materials	24,673	18,629	15,753	13,835	15,112	NA	NA
Engineering, n.e.c.	4,082	0	957	0	0	NA	NA
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	75	5	18	0	0	0	0

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: Data shown for fiscal years 1973-74 and 1975-76 represent obligations of the Atomic Energy Commission and the Energy Research & Development Administration, respectively. In fiscal year 1982 the Bonneville Power Administration became part of the Department of Energy.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2E. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	555,960	580,191	634,379	719,343	816,653	1,020,679	1,120,999
Life sciences, total	NA	502,046	530,248	582,746	659,039	745,472	935,629	997,703
Biol & agricultural, total	NA	312,127	328,714	365,675	411,065	465,892	595,138	591,883
Biol (excl environmental)	NA	NA	NA	NA	NA	465,892	595,138	591,847
Environmental biology	NA	NA	NA	NA	NA	0	0	36
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	171,315	181,735	193,685	220,336	249,064	302,529	361,833
Clinical medical	NA	3,888	2,391	1,220	3,221	NA	NA	NA
Other medical	NA	167,427	179,344	192,465	217,115	NA	NA	NA
Life sciences, n.e.c.	NA	18,604	19,799	23,386	27,638	30,516	37,962	43,987
Psychology, total	NA	15,032	14,642	13,992	15,025	18,683	22,685	32,024
Biological aspects	NA	6,814	5,337	5,774	5,495	7,091	7,600	11,084
Social aspects	NA	3,901	4,725	3,178	3,842	5,113	5,245	5,989
Psychological sciences, n.e.c.	NA	4,317	4,580	5,040	5,688	6,479	9,840	14,951
Physical sciences, total	NA	15,278	16,352	17,664	19,922	22,757	27,964	38,201
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	14,868	15,916	17,184	19,381	22,124	27,221	36,248
Physics	NA	410	436	480	541	633	743	1,953
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	1,045	1,217	1,146	1,444	1,383	1,493	2,044
Mathematics	NA	NA	NA	1,146	1,444	1,383	1,373	2,026
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	120	18
Engineering, total	NA	4,420	4,689	5,160	5,823	6,665	8,768	18,423
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	4,420	4,689	5,160	5,823	6,665	8,768	18,423
Social sciences, total	NA	14,901	8,639	9,738	13,396	16,825	16,337	20,809
Anthropology	NA	426	693	246	231	229	278	412
Economics	NA	4,364	1,530	1,838	1,790	1,817	1,817	1,810
Political science	NA	687	30	0	65	51	205	271
Sociology	NA	5,856	2,133	3,946	4,230	4,825	6,215	7,893
Social sciences, n.e.c.	NA	3,568	4,253	3,708	7,080	9,903	7,822	10,423
History	NA	54	150	NA	NA	NA	NA	NA
Linguistics	NA	485	298	NA	NA	NA	NA	NA
Other social sciences	NA	3,029	3,805	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	3,238	4,404	3,933	4,694	4,868	7,803	11,795

See explanatory information, if any, and SOURCE at end of table.

Table 2E. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	1,205,602	1,344,941	1,561,279	1,809,238	2,111,771	2,134,799	2,524,405	2,588,490
Life sciences, total	1,076,086	1,233,238	1,433,061	1,668,878	1,947,344	1,955,592	2,318,100	2,333,088
Biol & agricultural, total	646,535	764,741	887,588	1,021,785	1,182,986	1,185,164	1,415,759	1,337,878
Biol (excl environmental)	646,499	764,625	887,372	1,021,174	1,182,782	1,184,774	1,415,492	1,337,459
Environmental biology	36	116	216	93	88	117	173	243
Agricultural	0	0	0	518	116	273	94	176
Medical sciences, total	387,611	425,280	489,017	580,609	674,311	689,434	803,070	943,342
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41,940	43,217	56,456	66,484	90,047	80,994	99,271	51,868
Psychology, total	35,187	28,927	33,593	37,200	46,548	50,334	65,072	80,666
Biological aspects	10,213	9,687	10,467	11,834	14,828	16,636	19,924	22,153
Social aspects	5,653	4,009	5,685	6,443	8,468	9,584	12,367	13,150
Psychological sciences, n.e.c.	19,321	15,231	17,441	18,923	23,252	24,114	32,781	45,363
Physical sciences, total	38,176	38,213	43,120	52,254	62,702	59,620	67,397	74,474
Astronomy	0	0	0	0	0	0	0	0
Chemistry	36,869	36,842	41,862	51,205	61,250	58,970	66,404	72,904
Physics	1,307	1,371	1,258	1,049	1,452	608	949	1,534
Physical sciences, n.e.c.	0	0	0	0	0	42	44	36
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	2,230	2,402	2,096	2,272	2,513	2,524	3,139	3,444
Mathematics	2,230	2,402	2,096	2,272	2,401	2,524	3,105	3,367
Computer sciences	0	0	0	0	112	0	34	77
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	20,162	17,897	18,181	18,037	17,277	20,557	24,243	28,173
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	20,162	17,897	18,181	18,037	17,277	20,557	24,243	28,173
Social sciences, total	19,979	10,389	17,370	15,717	14,938	13,939	19,835	24,878
Anthropology	246	303	142	222	199	423	924	800
Economics	1,215	496	315	784	1,054	1,228	1,945	1,987
Political science	349	265	428	844	981	989	426	517
Sociology	7,646	5,754	12,153	9,729	9,192	8,706	12,768	10,392
Social sciences, n.e.c.	10,523	3,571	4,332	4,138	3,512	2,593	3,772	11,182
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	13,782	13,875	13,858	14,880	20,449	32,233	26,619	43,767

See explanatory information, if any, and SOURCE at end of table.

Table 2E. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	2,727,729	2,903,656	3,167,998	3,189,599	3,576,211	3,680,348	3,555,562	3,991,923
Life sciences, total	2,463,730	2,617,071	2,827,368	2,915,800	3,184,346	3,271,736	3,095,781	3,470,179
Biol & agricultural, total	1,388,946	1,464,748	1,579,829	1,595,996	1,676,592	1,696,355	1,545,042	1,719,322
Biol (excl environmental)	1,388,526	1,464,280	1,578,080	1,595,928	1,676,506	1,696,299	1,545,014	1,719,294
Environmental biology	220	366	538	68	86	56	28	28
Agricultural	200	102	1,211	0	0	0	0	0
Medical sciences, total	1,006,683	1,070,597	1,163,401	1,266,289	1,450,774	1,520,779	1,478,909	1,639,882
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	68,101	81,726	84,138	53,515	56,980	54,602	71,830	110,975
Psychology, total	89,192	105,027	127,526	56,010	135,801	145,293	134,770	148,500
Biological aspects	26,851	32,324	38,327	0	0	0	0	5,589
Social aspects	16,961	25,167	36,759	0	0	0	0	2,395
Psychological sciences, n.e.c.	45,380	47,536	52,440	56,010	135,801	145,293	134,770	140,516
Physical sciences, total	63,941	67,742	72,532	84,271	83,164	82,111	70,052	62,274
Astronomy	0	0	0	0	0	0	0	0
Chemistry	61,453	64,936	69,190	80,123	77,362	76,967	62,229	55,488
Physics	2,345	2,657	3,342	4,148	5,802	5,144	7,823	6,786
Physical sciences, n.e.c.	143	149	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	7,112	11,976
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	7,112	11,976
Math & computer sciences, total	3,095	4,037	4,402	3,593	4,363	4,827	18,135	33,931
Mathematics	3,080	3,674	4,037	3,593	4,363	4,689	12,090	16,367
Computer sciences	15	363	365	0	0	138	6,045	17,564
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	25,356	25,306	27,958	31,774	29,537	29,486	54,406	57,484
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	25,356	25,306	27,958	31,774	29,537	29,486	54,406	57,484
Social sciences, total	30,088	24,248	28,822	13,983	36,473	34,218	36,270	36,726
Anthropology	334	481	855	0	0	0	0	0
Economics	4,194	1,543	1,508	0	0	0	0	0
Political science	788	936	576	0	0	0	0	0
Sociology	14,574	10,073	11,941	0	0	0	0	0
Social sciences, n.e.c.	10,198	11,215	13,942	13,983	36,473	34,218	36,270	36,726
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	52,327	60,225	79,390	84,168	102,527	112,677	139,036	170,853

See explanatory information, if any, and SOURCE at end of table.

Table 2E. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	4,241,826	4,467,813	5,299,827	5,991,475	6,858,722	7,804,963	9,060,467
Life sciences, total	3,775,910	3,976,802	4,717,378	4,849,823	6,214,567	7,072,377	8,210,038
Biol & agricultural, total	2,070,200	2,180,342	2,586,374	3,607,583	5,525,616	NA	NA
Biol (excl environmental)	2,070,200	2,180,342	2,586,374	3,607,583	5,525,616	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	1,586,538	1,670,948	1,982,119	991,852	635,251	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	119,172	125,512	148,885	250,388	53,700	NA	NA
Psychology, total	170,220	179,159	212,523	464,024	154,770	176,017	204,332
Biological aspects	6,809	6,743	7,999	0	0	NA	NA
Social aspects	3,404	2,868	3,402	0	0	NA	NA
Psychological sciences, n.e.c.	160,007	169,548	201,122	464,024	154,770	NA	NA
Physical sciences, total	64,005	67,464	80,028	193,627	155,709	177,086	205,571
Astronomy	0	0	0	0	0	NA	NA
Chemistry	61,812	65,152	77,285	188,415	138,459	NA	NA
Physics	2,193	2,312	2,743	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	5,212	17,250	NA	NA
Environmental sciences, total	11,504	12,063	14,309	114,720	82,250	93,541	108,589
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	0	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	11,504	12,063	14,309	114,720	82,250	NA	NA
Math & computer sciences, total	13,056	13,850	16,429	39,885	10,027	11,403	13,237
Mathematics	6,267	6,648	7,886	39,885	10,027	NA	NA
Computer sciences	6,789	7,202	8,543	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	31,971	33,508	39,748	122,073	75,399	85,750	99,543
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	16,526	25,228	NA	NA
Engineering, n.e.c.	31,971	33,508	39,748	105,547	50,171	NA	NA
Social sciences, total	35,924	37,976	45,048	73,746	37,751	42,933	49,839
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	35,924	37,976	45,048	73,746	37,751	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	139,236	146,991	174,364	133,577	128,249	145,856	169,318

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2F. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	31,396	32,586	29,266	31,914	35,746	47,284	51,912
Life sciences, total	NA	16,172	15,128	15,858	17,255	18,162	25,905	24,337
Biol & agricultural, total	NA	9,267	7,418	12,090	12,055	13,536	19,638	18,013
Biol (excl environmental)	NA	NA	NA	NA	NA	13,536	19,638	17,977
Environmental biology	NA	NA	NA	NA	NA	0	0	36
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	6,905	7,648	2,102	2,073	1,868	1,197	1,111
Clinical medical	NA	3,577	2,391	1,220	1,153	NA	NA	NA
Other medical	NA	3,328	5,257	882	920	NA	NA	NA
Life sciences, n.e.c.	NA	0	62	1,666	3,127	2,758	5,070	5,213
Psychology, total	NA	10,715	10,062	8,952	9,337	12,204	12,991	17,205
Biological aspects	NA	6,814	5,337	5,774	5,495	7,091	7,600	11,084
Social aspects	NA	3,901	4,725	3,178	3,842	5,113	5,245	5,989
Psychological sciences, n.e.c.	NA	0	0	0	0	0	146	132
Physical sciences, total	NA	169	323	24	16	214	220	497
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	169	323	24	16	214	220	497
Physics	NA	0	0	0	0	0	0	0
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	274	399	246	429	231	120	18
Mathematics	NA	NA	NA	246	429	231	0	0
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	120	18
Engineering, total	NA	0	0	0	0	56	15	36
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	0	0	0	0	56	15	36
Social sciences, total	NA	4,066	5,705	4,033	4,449	4,879	6,278	8,027
Anthropology	NA	426	693	246	231	229	278	412
Economics	NA	0	29	76	65	75	125	36
Political science	NA	0	30	0	63	45	125	216
Sociology	NA	3,101	1,490	3,176	3,464	4,022	5,009	6,354
Social sciences, n.e.c.	NA	539	3,463	535	626	508	741	1,009
History	NA	54	150	NA	NA	NA	NA	NA
Linguistics	NA	485	298	NA	NA	NA	NA	NA
Other social sciences	NA	0	3,015	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	969	153	428	0	1,755	1,792

See explanatory information, if any, and SOURCE at end of table.

Table 2F. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	49,205	46,699	51,820	70,680	83,504	91,877	117,637	133,262
Life sciences, total	23,659	23,632	27,923	42,204	49,915	55,063	73,033	83,726
Biol & agricultural, total	16,163	14,781	16,567	28,046	31,033	36,501	50,035	53,985
Biol (excl environmental)	16,127	14,781	16,567	27,528	30,917	36,228	49,853	53,591
Environmental biology	36	0	0	0	0	0	88	218
Agricultural	0	0	0	518	116	273	94	176
Medical sciences, total	6,534	7,233	8,825	11,511	16,975	16,144	20,323	25,397
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	962	1,618	2,531	2,647	1,907	2,418	2,675	4,344
Psychology, total	16,224	13,984	16,448	18,559	23,393	26,332	32,736	36,020
Biological aspects	10,213	9,687	10,467	11,834	14,828	16,636	19,924	22,153
Social aspects	5,653	4,009	5,685	6,443	8,468	9,584	12,367	13,150
Psychological sciences, n.e.c.	358	288	296	282	97	112	445	717
Physical sciences, total	233	205	181	175	245	281	616	1,152
Astronomy	0	0	0	0	0	0	0	0
Chemistry	233	205	181	175	245	281	616	1,152
Physics	0	0	0	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	0	171	67	112	112	128	230	216
Mathematics	0	171	67	112	0	128	230	216
Computer sciences	0	0	0	0	112	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	35	0	0	0	0	0	0	0
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	35	0	0	0	0	0	0	0
Social sciences, total	6,533	5,851	6,074	6,618	7,939	8,092	9,539	10,660
Anthropology	246	303	142	222	199	423	924	800
Economics	60	131	23	66	410	685	933	818
Political science	325	265	428	844	981	989	426	517
Sociology	4,846	4,664	5,166	5,019	5,636	5,449	6,700	7,908
Social sciences, n.e.c.	1,056	488	315	467	713	546	556	617
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	2,521	2,856	1,127	3,012	1,900	1,981	1,483	1,488

See explanatory information, if any, and SOURCE at end of table.

Table 2F. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	167,479	215,597	262,340	NA	NA	NA	NA	NA
Life sciences, total	108,177	131,190	155,417	NA	NA	NA	NA	NA
Biol & agricultural, total	68,585	85,478	107,579	NA	NA	NA	NA	NA
Biol (excl environmental)	68,186	85,058	105,964	NA	NA	NA	NA	NA
Environmental biology	199	318	404	NA	NA	NA	NA	NA
Agricultural	200	102	1,211	NA	NA	NA	NA	NA
Medical sciences, total	33,953	37,841	35,922	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	5,639	7,871	11,916	NA	NA	NA	NA	NA
Psychology, total	44,540	58,545	75,934	NA	NA	NA	NA	NA
Biological aspects	26,851	32,324	38,327	NA	NA	NA	NA	NA
Social aspects	16,961	25,167	36,759	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	728	1,054	848	NA	NA	NA	NA	NA
Physical sciences, total	775	1,071	1,110	NA	NA	NA	NA	NA
Astronomy	0	0	0	NA	NA	NA	NA	NA
Chemistry	775	1,071	1,110	NA	NA	NA	NA	NA
Physics	0	0	0	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, total	0	0	0	NA	NA	NA	NA	NA
Atmospheric sciences	0	0	0	NA	NA	NA	NA	NA
Geological sciences	0	0	0	NA	NA	NA	NA	NA
Oceanography	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Math & computer sciences, total	186	705	545	NA	NA	NA	NA	NA
Mathematics	186	342	180	NA	NA	NA	NA	NA
Computer sciences	0	363	365	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Engineering, total	0	806	569	NA	NA	NA	NA	NA
Aeronautical	0	0	0	NA	NA	NA	NA	NA
Astronautical	0	0	0	NA	NA	NA	NA	NA
Chemical	0	0	0	NA	NA	NA	NA	NA
Civil	0	0	0	NA	NA	NA	NA	NA
Electrical	0	0	0	NA	NA	NA	NA	NA
Mechanical	0	0	0	NA	NA	NA	NA	NA
Metallurgy & materials	0	0	0	NA	NA	NA	NA	NA
Engineering, n.e.c.	0	806	569	NA	NA	NA	NA	NA
Social sciences, total	12,517	14,267	16,105	NA	NA	NA	NA	NA
Anthropology	334	481	855	NA	NA	NA	NA	NA
Economics	830	1,543	1,508	NA	NA	NA	NA	NA
Political science	788	936	576	NA	NA	NA	NA	NA
Sociology	9,247	10,073	11,941	NA	NA	NA	NA	NA
Social sciences, n.e.c.	1,318	1,234	1,225	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,284	9,013	12,660	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

Table 2F. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	NA	NA	NA	NA	NA	NA	NA
Life sciences, total	NA	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	NA	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	NA	NA	NA	NA	NA	NA	NA
Environmental biology	NA	NA	NA	NA	NA	NA	NA
Agricultural	NA	NA	NA	NA	NA	NA	NA
Medical sciences, total	NA	NA	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Psychology, total	NA	NA	NA	NA	NA	NA	NA
Biological aspects	NA	NA	NA	NA	NA	NA	NA
Social aspects	NA	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Physical sciences, total	NA	NA	NA	NA	NA	NA	NA
Astronomy	NA	NA	NA	NA	NA	NA	NA
Chemistry	NA	NA	NA	NA	NA	NA	NA
Physics	NA	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, total	NA	NA	NA	NA	NA	NA	NA
Atmospheric sciences	NA	NA	NA	NA	NA	NA	NA
Geological sciences	NA	NA	NA	NA	NA	NA	NA
Oceanography	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	NA	NA	NA	NA	NA	NA	NA
Mathematics	NA	NA	NA	NA	NA	NA	NA
Computer sciences	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Engineering, total	NA	NA	NA	NA	NA	NA	NA
Aeronautical	NA	NA	NA	NA	NA	NA	NA
Astronautical	NA	NA	NA	NA	NA	NA	NA
Chemical	NA	NA	NA	NA	NA	NA	NA
Civil	NA	NA	NA	NA	NA	NA	NA
Electrical	NA	NA	NA	NA	NA	NA	NA
Mechanical	NA	NA	NA	NA	NA	NA	NA
Metallurgy & materials	NA	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Social sciences, total	NA	NA	NA	NA	NA	NA	NA
Anthropology	NA	NA	NA	NA	NA	NA	NA
Economics	NA	NA	NA	NA	NA	NA	NA
Political science	NA	NA	NA	NA	NA	NA	NA
Sociology	NA	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

**Table 2G. Federal obligations to universities and colleges for basic research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	513,932	545,216	600,008	677,091	767,602	965,810	1,062,958
Life sciences, total	NA	485,563	515,120	566,888	639,716	725,188	909,724	973,366
Biol & agricultural, total	NA	302,860	321,296	353,585	399,010	452,356	575,500	573,870
Biol (excl environmental)	NA	NA	NA	NA	NA	452,356	575,500	573,870
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	164,099	174,087	191,583	216,195	245,074	301,332	360,722
Clinical medical	NA	0	0	0	0	NA	NA	NA
Other medical	NA	164,099	174,087	191,583	216,195	NA	NA	NA
Life sciences, n.e.c.	NA	18,604	19,737	21,720	24,511	27,758	32,892	38,774
Psychology, total	NA	4,317	4,580	5,040	5,688	6,479	9,694	14,819
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	4,317	4,580	5,040	5,688	6,479	9,694	14,819
Physical sciences, total	NA	15,109	16,029	17,640	19,906	22,543	27,744	37,704
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	14,699	15,593	17,160	19,365	21,910	27,001	35,751
Physics	NA	410	436	480	541	633	743	1,953
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	771	818	900	1,015	1,152	1,373	2,026
Mathematics	NA	NA	NA	900	1,015	1,152	1,373	2,026
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	NA	4,420	4,689	5,160	5,823	6,609	8,753	18,387
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	4,420	4,689	5,160	5,823	6,609	8,753	18,387
Social sciences, total	NA	514	545	600	677	763	2,474	6,653
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	0	0	0	0	0	0
Political science	NA	0	0	0	0	0	0	0
Sociology	NA	0	0	0	0	0	0	0
Social sciences, n.e.c.	NA	514	545	600	677	763	2,474	6,653
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	514	545	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	3,238	3,435	3,780	4,266	4,868	6,048	10,003

See explanatory information, if any, and SOURCE at end of table.

**Table 2G. Federal obligations to universities and colleges for basic research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	1,150,213	1,296,428	1,502,084	1,733,130	2,024,067	2,039,122	2,399,688	2,451,575
Life sciences, total	1,052,427	1,209,606	1,405,138	1,626,674	1,897,429	1,900,529	2,245,067	2,249,362
Biol & agricultural, total	630,372	749,960	871,021	993,739	1,151,953	1,148,663	1,365,724	1,283,893
Biol (excl environmental)	630,372	749,844	870,805	993,646	1,151,865	1,148,546	1,365,639	1,283,868
Environmental biology	0	116	216	93	88	117	85	25
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	381,077	418,047	480,192	569,098	657,336	673,290	782,747	917,945
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	40,978	41,599	53,925	63,837	88,140	78,576	96,596	47,524
Psychology, total	18,963	14,943	17,145	18,641	23,155	24,002	32,336	44,646
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	18,963	14,943	17,145	18,641	23,155	24,002	32,336	44,646
Physical sciences, total	37,943	38,008	42,939	52,079	62,457	59,339	66,781	73,322
Astronomy	0	0	0	0	0	0	0	0
Chemistry	36,636	36,637	41,681	51,030	61,005	58,689	65,788	71,752
Physics	1,307	1,371	1,258	1,049	1,452	608	949	1,534
Physical sciences, n.e.c.	0	0	0	0	0	42	44	36
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	2,230	2,231	2,029	2,160	2,401	2,396	2,909	3,228
Mathematics	2,230	2,231	2,029	2,160	2,401	2,396	2,875	3,151
Computer sciences	0	0	0	0	0	0	34	77
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	20,127	17,897	18,181	18,037	17,277	20,557	24,243	28,173
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	20,127	17,897	18,181	18,037	17,277	20,557	24,243	28,173
Social sciences, total	7,262	2,724	3,921	3,671	2,799	2,047	3,216	10,565
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	7,262	2,724	3,921	3,671	2,799	2,047	3,216	10,565
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	11,261	11,019	12,731	11,868	18,549	30,252	25,136	42,279

See explanatory information, if any, and SOURCE at end of table.

**Table 2G. Federal obligations to universities and colleges for basic research,
by detailed field of science & engineering: HHS, National Institutes of
Health, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	2,551,559	2,688,059	2,905,658	3,189,599	3,576,211	3,680,102	3,555,562	3,991,923
Life sciences, total	2,355,553	2,485,881	2,671,951	2,915,800	3,184,346	3,271,490	3,095,781	3,470,179
Biol & agricultural, total	1,320,361	1,379,270	1,472,250	1,595,996	1,676,592	1,696,355	1,545,042	1,719,322
Biol (excl environmental)	1,320,340	1,379,222	1,472,116	1,595,928	1,676,506	1,696,299	1,545,014	1,719,294
Environmental biology	21	48	134	68	86	56	28	28
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	972,730	1,032,756	1,127,479	1,266,289	1,450,774	1,520,533	1,478,909	1,639,882
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	62,462	73,855	72,222	53,515	56,980	54,602	71,830	110,975
Psychology, total	44,652	46,482	51,592	56,010	135,801	145,293	134,770	148,500
Biological aspects	0	0	0	0	0	0	0	5,589
Social aspects	0	0	0	0	0	0	0	2,395
Psychological sciences, n.e.c.	44,652	46,482	51,592	56,010	135,801	145,293	134,770	140,516
Physical sciences, total	63,166	66,671	71,422	84,271	83,164	82,111	70,052	62,274
Astronomy	0	0	0	0	0	0	0	0
Chemistry	60,678	63,865	68,080	80,123	77,362	76,967	62,229	55,488
Physics	2,345	2,657	3,342	4,148	5,802	5,144	7,823	6,786
Physical sciences, n.e.c.	143	149	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	7,112	11,976
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	7,112	11,976
Math & computer sciences, total	2,909	3,332	3,857	3,593	4,363	4,827	18,135	33,931
Mathematics	2,894	3,332	3,857	3,593	4,363	4,689	12,090	16,367
Computer sciences	15	0	0	0	0	138	6,045	17,564
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	25,356	24,500	27,389	31,774	29,537	29,486	54,406	57,484
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	25,356	24,500	27,389	31,774	29,537	29,486	54,406	57,484
Social sciences, total	8,880	9,981	12,717	13,983	36,473	34,218	36,270	36,726
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	8,880	9,981	12,717	13,983	36,473	34,218	36,270	36,726
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	51,043	51,212	66,730	84,168	102,527	112,677	139,036	170,853

See explanatory information, if any, and SOURCE at end of table.

Table 2G. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	4,241,826	4,467,813	5,299,827	5,991,475	6,858,722	7,804,963	9,060,467
Life sciences, total	3,775,910	3,976,802	4,717,378	4,849,823	6,214,567	7,072,377	8,210,038
Biol & agricultural, total	2,070,200	2,180,342	2,586,374	3,607,583	5,525,616	NA	NA
Biol (excl environmental)	2,070,200	2,180,342	2,586,374	3,607,583	5,525,616	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	1,586,538	1,670,948	1,982,119	991,852	635,251	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	119,172	125,512	148,885	250,388	53,700	NA	NA
Psychology, total	170,220	179,159	212,523	464,024	154,770	176,017	204,332
Biological aspects	6,809	6,743	7,999	0	0	NA	NA
Social aspects	3,404	2,868	3,402	0	0	NA	NA
Psychological sciences, n.e.c.	160,007	169,548	201,122	464,024	154,770	NA	NA
Physical sciences, total	64,005	67,464	80,028	193,627	155,709	177,086	205,571
Astronomy	0	0	0	0	0	NA	NA
Chemistry	61,812	65,152	77,285	188,415	138,459	NA	NA
Physics	2,193	2,312	2,743	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	5,212	17,250	NA	NA
Environmental sciences, total	11,504	12,063	14,309	114,720	82,250	93,541	108,589
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	0	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	11,504	12,063	14,309	114,720	82,250	NA	NA
Math & computer sciences, total	13,056	13,850	16,429	39,885	10,027	11,403	13,237
Mathematics	6,267	6,648	7,886	39,885	10,027	NA	NA
Computer sciences	6,789	7,202	8,543	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	31,971	33,508	39,748	122,073	75,399	85,750	99,543
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	16,526	25,228	NA	NA
Engineering, n.e.c.	31,971	33,508	39,748	105,547	50,171	NA	NA
Social sciences, total	35,924	37,976	45,048	73,746	37,751	42,933	49,839
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	35,924	37,976	45,048	73,746	37,751	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	139,236	146,991	174,364	133,577	128,249	145,856	169,318

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2H. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	61,285	64,548	67,157	71,988	88,341	96,785	112,751
Life sciences, total	NA	3,312	3,745	3,415	4,554	5,289	5,840	7,441
Biol & agricultural, total	NA	1,786	1,969	2,111	2,462	5,289	2,626	3,942
Biol (excl environmental)	NA	NA	NA	NA	NA	5,289	2,282	3,522
Environmental biology	NA	NA	NA	NA	NA	0	344	340
Agricultural	NA	NA	NA	NA	NA	0	0	80
Medical sciences, total	NA	1,052	1,444	952	1,251	0	1,244	1,317
Clinical medical	NA	239	401	272	268	NA	NA	NA
Other medical	NA	813	1,043	680	983	NA	NA	NA
Life sciences, n.e.c.	NA	474	332	352	841	0	1,970	2,182
Psychology, total	NA	466	782	754	568	412	484	649
Biological aspects	NA	37	49	0	55	71	86	97
Social aspects	NA	0	135	133	90	82	90	105
Psychological sciences, n.e.c.	NA	429	598	621	423	259	308	447
Physical sciences, total	NA	35,775	33,245	32,141	32,568	39,780	41,665	43,991
Astronomy	NA	20,498	17,900	16,076	15,392	17,343	18,766	21,950
Chemistry	NA	2,922	3,056	3,621	3,717	3,410	3,705	3,877
Physics	NA	11,111	9,744	9,418	9,964	14,705	14,837	14,237
Physical sciences, n.e.c.	NA	1,244	2,545	3,026	3,495	4,322	4,357	3,927
Environmental sciences, total	NA	14,587	16,465	20,915	21,511	25,965	29,307	35,258
Atmospheric sciences	NA	5,560	8,133	9,449	10,818	13,476	14,515	19,789
Geological sciences	NA	4,039	5,029	8,143	6,703	8,370	12,318	10,879
Oceanography	NA	82	130	184	235	214	479	618
Environmental sciences, n.e.c.	NA	4,906	3,173	3,139	3,755	3,905	1,995	3,972
Math & computer sciences, total	NA	196	503	272	754	1,048	1,062	1,847
Mathematics	NA	NA	NA	0	483	675	914	1,163
Computer sciences	NA	NA	NA	0	271	373	148	579
Math & computer sciences, n.e.c.	NA	NA	NA	272	0	0	0	105
Engineering, total	NA	6,949	8,437	8,493	10,630	14,774	16,620	22,073
Aeronautical	NA	3,664	4,776	4,562	5,050	7,196	8,354	10,558
Astronautical	NA	384	177	189	357	496	705	995
Chemical	NA	61	70	172	90	56	62	173
Civil	NA	112	57	96	48	10	55	55
Electrical	NA	635	510	711	1,036	1,159	1,694	1,900
Mechanical	NA	307	248	401	365	975	934	1,448
Metallurgy & materials	NA	1,033	1,463	1,349	2,577	3,615	3,186	5,080
Engineering, n.e.c.	NA	753	1,136	1,013	1,107	1,267	1,630	1,864
Social sciences, total	NA	0	65	39	82	5	134	187
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	3	1	82	0	0	22
Political science	NA	0	24	38	0	0	0	0
Sociology	NA	0	0	0	0	0	0	25
Social sciences, n.e.c.	NA	0	38	0	0	5	134	140
History	NA	0	25	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	0	13	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	1,306	1,128	1,321	1,068	1,673	1,305

See explanatory information, if any, and SOURCE at end of table.

Table 2H. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	124,418	125,876	140,081	148,442	176,886	182,928	220,060	254,936
Life sciences, total	8,267	10,781	12,538	14,092	15,576	12,795	15,378	19,257
Biol & agricultural, total	4,892	7,133	6,973	8,096	8,660	7,645	10,022	12,316
Biol (excl environmental)	4,049	5,809	5,948	7,139	7,397	6,734	8,834	11,308
Environmental biology	494	437	200	130	447	335	444	316
Agricultural	349	887	825	827	816	576	744	692
Medical sciences, total	1,238	1,402	1,558	1,664	2,509	2,134	2,509	3,345
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,137	2,246	4,007	4,332	4,407	3,016	2,847	3,596
Psychology, total	864	1,051	1,814	1,397	1,975	1,863	2,167	2,270
Biological aspects	128	226	231	242	227	243	264	273
Social aspects	99	210	333	297	353	236	270	297
Psychological sciences, n.e.c.	637	615	1,250	858	1,395	1,384	1,633	1,700
Physical sciences, total	48,599	47,763	49,625	56,340	63,030	67,308	76,068	84,202
Astronomy	22,029	22,817	26,325	30,747	33,371	34,212	36,548	41,381
Chemistry	5,364	5,233	4,342	3,853	3,946	3,970	3,969	4,674
Physics	17,112	15,211	13,733	14,421	16,569	20,094	22,935	27,050
Physical sciences, n.e.c.	4,094	4,502	5,225	7,319	9,144	9,032	12,616	11,097
Environmental sciences, total	38,236	36,210	39,127	38,748	52,843	48,083	66,890	72,787
Atmospheric sciences	22,129	20,160	20,286	18,985	27,854	25,319	32,453	27,691
Geological sciences	11,428	10,399	12,703	13,430	17,665	14,836	17,274	17,796
Oceanography	1,237	2,519	2,933	3,062	3,653	3,318	6,999	5,963
Environmental sciences, n.e.c.	3,442	3,132	3,205	3,271	3,671	4,610	10,164	21,337
Math & computer sciences, total	1,934	2,496	4,089	4,315	6,339	8,739	10,525	17,364
Mathematics	776	813	757	383	737	721	888	965
Computer sciences	423	1,006	2,384	3,380	4,491	6,884	7,987	15,178
Math & computer sciences, n.e.c.	735	677	948	552	1,111	1,134	1,650	1,221
Engineering, total	24,355	26,668	31,947	32,070	35,624	41,638	45,445	52,530
Aeronautical	11,923	11,638	13,753	14,601	14,231	18,311	18,104	20,737
Astronautical	824	1,264	1,905	2,608	2,553	4,039	3,711	6,124
Chemical	253	348	935	254	553	901	1,330	1,408
Civil	112	320	542	0	332	309	113	232
Electrical	2,281	2,466	2,789	3,303	3,614	4,213	4,839	4,464
Mechanical	1,794	2,496	3,180	2,548	4,374	3,120	4,922	5,858
Metallurgy & materials	5,255	5,853	6,538	6,085	7,260	6,893	7,071	8,603
Engineering, n.e.c.	1,913	2,283	2,305	2,671	2,707	3,852	5,355	5,104
Social sciences, total	199	50	296	286	81	83	107	186
Anthropology	0	50	0	6	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	25
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	199	0	296	280	81	83	107	161
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,964	857	645	1,194	1,418	2,419	3,480	6,340

See explanatory information, if any, and SOURCE at end of table.

Table 2H. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	298,712	307,909	357,838	402,370	420,977	421,481	480,168	478,446
Life sciences, total	20,802	23,115	27,089	30,551	30,489	28,102	43,437	41,585
Biol & agricultural, total	12,069	13,167	15,754	17,087	16,296	15,413	19,869	22,239
Biol (excl environmental)	10,338	10,511	13,899	14,138	14,570	13,422	17,804	19,725
Environmental biology	1,378	2,072	1,403	2,183	1,206	1,110	1,765	1,879
Agricultural	353	584	452	766	520	881	300	635
Medical sciences, total	5,058	5,870	5,181	5,778	6,615	5,236	7,363	5,002
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,675	4,078	6,154	7,686	7,578	7,453	16,205	14,344
Psychology, total	3,054	3,673	2,323	3,904	3,270	3,387	1,897	1,680
Biological aspects	84	85	71	40	62	73	85	0
Social aspects	806	910	563	478	383	397	190	118
Psychological sciences, n.e.c.	2,164	2,678	1,689	3,386	2,825	2,917	1,622	1,562
Physical sciences, total	100,279	96,619	120,292	144,146	152,105	150,751	176,757	212,119
Astronomy	48,127	42,140	57,695	73,561	68,076	73,963	87,808	131,010
Chemistry	5,126	5,832	5,583	5,100	6,123	5,138	5,239	2,898
Physics	34,181	36,755	39,933	47,749	54,911	48,826	50,396	52,006
Physical sciences, n.e.c.	12,845	11,892	17,081	17,736	22,995	22,824	33,314	26,205
Environmental sciences, total	78,028	85,356	100,006	122,423	121,148	120,524	138,676	122,154
Atmospheric sciences	35,582	36,899	40,528	54,963	46,664	48,439	51,056	47,074
Geological sciences	17,300	16,980	19,671	19,330	22,401	20,105	18,826	17,036
Oceanography	5,383	8,718	9,023	15,974	12,467	13,091	12,785	10,168
Environmental sciences, n.e.c.	19,763	22,759	30,784	32,156	39,616	38,889	56,009	47,876
Math & computer sciences, total	23,169	24,679	22,911	18,688	21,117	15,014	23,152	22,130
Mathematics	886	944	623	873	684	689	837	541
Computer sciences	21,039	21,902	20,190	16,497	16,732	11,770	17,170	17,197
Math & computer sciences, n.e.c.	1,244	1,833	2,098	1,318	3,701	2,555	5,145	4,392
Engineering, total	64,554	63,849	71,981	67,234	72,832	75,305	72,867	61,559
Aeronautical	25,583	26,103	28,161	22,605	24,154	29,028	26,694	20,498
Astronautical	7,661	7,730	8,552	8,823	9,485	8,059	10,452	10,467
Chemical	1,183	1,633	2,064	1,610	2,192	2,414	2,473	1,546
Civil	91	151	340	162	180	208	195	145
Electrical	6,675	6,397	6,754	4,856	5,541	4,982	4,536	6,666
Mechanical	7,404	7,216	9,261	8,504	8,996	9,523	8,071	9,792
Metallurgy & materials	9,248	8,975	9,878	12,733	13,527	13,303	9,014	6,731
Engineering, n.e.c.	6,709	5,644	6,971	7,941	8,757	7,788	11,432	5,714
Social sciences, total	65	84	90	39	331	162	413	135
Anthropology	0	0	0	0	0	0	0	0
Economics	27	0	0	0	0	0	0	0
Political science	25	0	0	0	0	0	0	0
Sociology	0	74	90	0	212	87	0	19
Social sciences, n.e.c.	13	10	0	39	119	75	413	116
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	8,761	10,534	13,146	15,385	19,685	28,236	22,969	17,084

See explanatory information, if any, and SOURCE at end of table.

Table 2H. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	519,823	495,494	557,451	519,788	583,992	583,992	583,992
Life sciences, total	45,645	36,015	40,962	44,983	40,340	40,340	40,340
Biol & agricultural, total	26,911	15,389	20,402	22,066	19,264	NA	NA
Biol (excl environmental)	25,521	14,003	18,764	20,198	17,592	NA	NA
Environmental biology	755	979	1,085	1,060	1,041	NA	NA
Agricultural	635	407	553	808	631	NA	NA
Medical sciences, total	4,104	4,144	3,939	4,918	7,379	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	14,630	16,482	16,621	17,999	13,697	NA	NA
Psychology, total	3,244	3,763	3,833	2,522	2,769	2,769	2,769
Biological aspects	0	27	66	539	417	NA	NA
Social aspects	0	447	450	1,147	1,424	NA	NA
Psychological sciences, n.e.c.	3,244	3,289	3,317	836	928	NA	NA
Physical sciences, total	201,551	178,838	212,186	167,587	192,627	192,627	192,627
Astronomy	114,165	103,004	129,568	96,480	110,333	NA	NA
Chemistry	11,465	9,858	7,214	6,958	9,220	NA	NA
Physics	57,540	49,400	58,113	42,834	47,121	NA	NA
Physical sciences, n.e.c.	18,381	16,576	17,291	21,315	25,953	NA	NA
Environmental sciences, total	163,271	172,307	167,105	157,748	136,522	136,522	136,522
Atmospheric sciences	88,227	52,234	83,765	61,805	56,042	NA	NA
Geological sciences	14,819	60,343	23,696	13,924	11,019	NA	NA
Oceanography	11,392	8,848	8,332	9,708	7,908	NA	NA
Environmental sciences, n.e.c.	48,833	50,882	51,312	72,311	61,553	NA	NA
Math & computer sciences, total	18,113	15,367	22,515	14,922	17,756	17,756	17,756
Mathematics	791	716	1,145	693	726	NA	NA
Computer sciences	13,026	10,785	16,763	13,543	15,997	NA	NA
Math & computer sciences, n.e.c.	4,296	3,866	4,607	686	1,033	NA	NA
Engineering, total	67,503	66,396	87,826	64,873	80,230	80,230	80,230
Aeronautical	26,953	26,726	30,803	24,354	23,146	NA	NA
Astronautical	7,207	3,031	28,256	1,276	2,870	NA	NA
Chemical	1,437	1,465	1,495	1,847	2,179	NA	NA
Civil	169	0	91	0	160	NA	NA
Electrical	5,819	5,506	5,968	3,049	6,588	NA	NA
Mechanical	7,834	8,079	8,252	7,110	7,551	NA	NA
Metallurgy & materials	10,550	12,786	12,961	9,067	12,420	NA	NA
Engineering, n.e.c.	7,534	8,803	0	18,170	25,316	NA	NA
Social sciences, total	191	299	325	977	230	230	230
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	220	NA	NA
Sociology	52	162	187	0	0	NA	NA
Social sciences, n.e.c.	139	137	138	977	10	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	20,305	22,509	22,699	66,176	113,518	113,518	113,518

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 2I. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	306,938	378,721	391,923	474,892	502,019	574,137	642,924
Life sciences, total	NA	64,696	79,272	80,850	85,113	94,807	111,026	119,394
Biol & agricultural, total	NA	64,522	79,272	80,741	84,920	93,440	109,264	119,329
Biol (excl environmental)	NA	NA	NA	NA	NA	66,482	72,003	84,222
Environmental biology	NA	NA	NA	NA	NA	26,958	37,261	35,107
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	174	0	0	193	0	0	0
Clinical medical	NA	172	0	0	0	NA	NA	NA
Other medical	NA	2	0	0	193	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	109	0	1,367	1,762	65
Psychology, total	NA	5,280	7,896	7,567	9,557	8,369	10,686	10,449
Biological aspects	NA	3,430	5,730	5,177	7,036	5,244	7,434	7,196
Social aspects	NA	1,850	2,166	2,390	2,521	3,125	3,220	3,253
Psychological sciences, n.e.c.	NA	0	0	0	0	0	32	0
Physical sciences, total	NA	88,134	106,056	110,557	138,605	146,147	150,126	165,719
Astronomy	NA	8,777	8,569	9,845	14,453	15,724	16,121	15,668
Chemistry	NA	29,900	38,765	36,127	48,659	51,542	55,342	62,288
Physics	NA	49,457	58,722	64,585	75,460	78,862	78,663	87,638
Physical sciences, n.e.c.	NA	0	0	0	33	19	0	125
Environmental sciences, total	NA	67,515	79,622	82,823	113,301	121,957	155,566	170,939
Atmospheric sciences	NA	14,042	18,089	17,830	25,442	32,906	40,313	48,720
Geological sciences	NA	23,184	27,285	30,393	34,627	36,821	50,656	56,153
Oceanography	NA	30,289	34,236	34,579	53,222	52,196	64,502	65,947
Environmental sciences, n.e.c.	NA	0	12	21	10	34	95	119
Math & computer sciences, total	NA	20,522	24,860	29,890	34,290	37,364	36,514	43,332
Mathematics	NA	NA	NA	16,828	19,716	20,938	21,008	24,490
Computer sciences	NA	NA	NA	13,056	14,574	16,426	15,506	18,842
Math & computer sciences, n.e.c.	NA	NA	NA	6	0	0	0	0
Engineering, total	NA	36,198	54,362	53,993	62,613	62,199	66,325	81,819
Aeronautical	NA	630	22	0	560	570	867	1,046
Astronautical	NA	56	0	0	0	0	0	0
Chemical	NA	5,490	10,033	10,031	8,159	8,439	11,912	13,131
Civil	NA	4,656	3,593	3,548	5,927	6,027	9,388	14,941
Electrical	NA	8,740	10,423	13,226	17,800	17,770	16,140	19,561
Mechanical	NA	6,446	6,457	6,461	6,068	6,149	10,034	12,319
Metallurgy & materials	NA	8,458	13,440	13,706	16,151	13,507	14,213	17,398
Engineering, n.e.c.	NA	1,722	10,394	7,021	7,948	9,737	3,771	3,423
Social sciences, total	NA	19,185	23,056	25,491	28,107	27,551	27,837	28,590
Anthropology	NA	3,571	3,088	2,971	3,304	4,776	5,551	5,347
Economics	NA	4,945	6,209	4,990	7,238	7,633	7,511	7,545
Political science	NA	1,205	1,268	1,620	1,961	2,604	3,085	3,133
Sociology	NA	1,750	2,277	1,960	2,927	3,048	3,195	3,474
Social sciences, n.e.c.	NA	7,714	10,214	13,950	12,677	9,490	8,495	9,091
History	NA	850	762	NA	NA	NA	NA	NA
Linguistics	NA	1,200	1,230	NA	NA	NA	NA	NA
Other social sciences	NA	5,664	8,222	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	5,408	3,597	752	3,306	3,625	16,057	22,682

See explanatory information, if any, and SOURCE at end of table.

Table 2I. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	667,979	674,313	736,502	831,736	943,136	937,141	1,021,981	1,070,194
Life sciences, total	124,617	120,897	129,672	154,398	173,499	170,053	187,673	188,579
Biol & agricultural, total	124,538	120,882	129,672	154,167	170,807	168,281	186,069	188,330
Biol (excl environmental)	89,979	90,709	96,835	111,792	124,286	121,620	137,805	141,222
Environmental biology	34,552	30,172	32,791	42,274	46,521	46,661	48,264	47,108
Agricultural	7	1	46	101	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	79	15	0	231	2,692	1,772	1,604	249
Psychology, total	9,448	6,519	7,200	8,566	11,147	9,501	7,815	10,938
Biological aspects	6,835	4,821	4,981	5,905	7,723	6,538	5,296	7,174
Social aspects	2,588	1,566	2,216	2,661	3,396	2,951	2,479	3,383
Psychological sciences, n.e.c.	25	132	3	0	28	12	40	381
Physical sciences, total	195,115	202,472	221,219	265,514	281,022	275,331	308,228	316,472
Astronomy	15,822	19,349	20,490	32,584	27,137	27,013	27,545	27,630
Chemistry	74,819	75,909	81,399	98,008	105,762	101,323	104,369	107,603
Physics	104,020	107,132	119,095	134,198	145,825	145,731	128,557	133,962
Physical sciences, n.e.c.	454	82	235	724	2,298	1,264	47,757	47,277
Environmental sciences, total	154,636	159,720	176,499	174,900	204,269	198,573	213,514	215,427
Atmospheric sciences	39,354	39,950	37,042	51,941	48,443	49,915	51,695	51,302
Geological sciences	45,604	49,590	37,546	42,916	50,124	46,953	50,939	50,957
Oceanography	66,198	70,179	101,868	79,727	103,761	101,691	110,839	109,306
Environmental sciences, n.e.c.	3,480	1	43	316	1,941	14	41	3,862
Math & computer sciences, total	50,641	55,956	63,879	66,546	86,779	87,705	106,500	108,102
Mathematics	28,741	30,273	34,378	37,972	47,550	50,773	55,556	61,064
Computer sciences	21,033	25,683	29,501	28,574	39,229	36,932	50,940	47,038
Math & computer sciences, n.e.c.	867	0	0	0	0	0	4	0
Engineering, total	92,058	97,955	107,080	127,086	145,150	150,621	130,666	139,406
Aeronautical	0	287	100	46	578	115	132	255
Astronautical	121	169	116	0	0	0	0	0
Chemical	15,861	14,878	16,520	21,861	23,103	24,586	24,393	26,608
Civil	16,527	17,634	20,449	27,414	27,980	22,627	22,629	23,659
Electrical	22,237	23,847	26,045	31,267	29,009	31,994	31,237	38,627
Mechanical	11,216	13,013	14,833	15,760	17,051	19,312	19,753	21,596
Metallurgy & materials	20,693	21,367	21,752	22,563	36,424	36,210	19,335	19,400
Engineering, n.e.c.	5,403	6,760	7,265	8,175	11,005	15,777	13,187	9,261
Social sciences, total	23,856	19,382	20,951	26,696	28,712	26,522	26,093	28,275
Anthropology	5,164	5,014	5,286	6,157	6,112	6,333	6,495	6,654
Economics	5,220	4,820	5,220	7,072	8,332	7,135	6,376	6,699
Political science	2,713	1,708	1,696	2,193	2,884	1,683	2,573	2,933
Sociology	2,980	2,085	1,810	2,882	3,044	2,887	2,424	2,538
Social sciences, n.e.c.	7,779	5,755	6,939	8,392	8,340	8,484	8,225	9,451
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	17,608	11,412	10,002	8,030	12,558	18,835	41,492	62,995

See explanatory information, if any, and SOURCE at end of table.

Table 2I. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	1,173,233	1,236,487	1,346,812	1,436,153	1,447,145	1,553,943	1,598,304	1,619,627
Life sciences, total	205,243	208,337	234,348	245,292	257,907	262,199	280,242	262,585
Biol & agricultural, total	204,962	207,522	233,111	245,054	251,124	260,706	273,148	262,585
Biol (excl environmental)	153,914	146,093	162,351	181,909	184,741	193,095	202,512	197,566
Environmental biology	51,048	61,429	70,760	63,145	66,383	67,611	70,636	65,019
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	281	815	1,237	238	6,783	1,493	7,094	0
Psychology, total	11,745	9,630	1,392	9,454	8,883	10,508	11,566	10,192
Biological aspects	7,740	3,871	354	4,743	4,561	3,710	2,590	0
Social aspects	3,599	5,745	306	3,781	3,904	4,674	6,626	2,018
Psychological sciences, n.e.c.	406	14	732	930	418	2,124	2,350	8,174
Physical sciences, total	341,655	377,168	385,360	414,777	374,753	364,526	386,841	329,748
Astronomy	24,208	33,516	39,512	114,723	36,146	38,559	48,141	39,537
Chemistry	114,410	125,758	145,975	126,560	116,411	138,832	138,396	139,562
Physics	151,714	180,424	188,608	168,168	159,434	162,075	167,238	133,791
Physical sciences, n.e.c.	51,323	37,470	11,265	5,326	62,762	25,060	33,066	16,858
Environmental sciences, total	231,175	248,534	280,389	290,870	280,235	304,435	289,497	293,978
Atmospheric sciences	55,044	55,333	61,982	59,611	62,738	68,847	100,698	62,064
Geological sciences	54,875	60,217	96,899	100,909	97,944	108,841	99,770	75,402
Oceanography	116,991	123,260	66,762	72,757	72,329	74,314	50,357	144,747
Environmental sciences, n.e.c.	4,265	9,724	54,746	57,593	47,224	52,433	38,672	11,765
Math & computer sciences, total	121,774	155,005	156,865	188,704	196,015	206,786	164,669	265,887
Mathematics	63,015	67,359	70,644	86,832	79,258	73,774	74,933	75,407
Computer sciences	58,759	87,646	85,921	101,872	116,457	129,202	89,039	190,480
Math & computer sciences, n.e.c.	0	0	300	0	300	3,810	697	0
Engineering, total	158,416	119,557	187,110	154,857	158,185	267,002	309,107	315,548
Aeronautical	276	532	579	2,861	2,616	74	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	29,296	24,544	33,106	31,139	24,422	23,889	27,034	26,640
Civil	26,159	25,141	22,376	22,867	21,980	23,418	32,383	30,564
Electrical	47,411	33,136	41,693	38,347	43,033	47,627	33,834	36,100
Mechanical	23,747	20,851	30,446	24,883	23,192	25,514	38,800	4,899
Metallurgy & materials	21,336	4,787	23,637	17,978	17,041	108,677	129,030	121,573
Engineering, n.e.c.	10,191	10,566	35,273	16,782	25,901	37,803	48,026	95,772
Social sciences, total	30,683	35,045	30,472	38,725	40,843	45,874	60,368	57,111
Anthropology	7,309	7,292	6,739	6,922	6,416	5,855	10,786	9,232
Economics	7,304	9,363	9,661	10,933	10,501	6,948	10,216	9,822
Political science	3,111	2,743	3,780	3,938	3,878	4,537	6,590	4,631
Sociology	2,711	3,058	2,976	4,975	4,442	4,373	5,419	2,693
Social sciences, n.e.c.	10,248	12,589	7,316	11,957	15,606	24,161	27,357	30,733
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	72,542	83,211	70,876	93,474	130,324	92,613	96,014	84,578

See explanatory information, if any, and SOURCE at end of table.

Table 2I. Federal obligations to universities and colleges for basic research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	1,689,420	1,775,848	1,966,898	2,129,078	2,371,712	2,530,135	2,651,680
Life sciences, total	280,072	307,290	350,218	392,426	387,182	413,044	432,886
Biol & agricultural, total	280,072	307,290	350,218	392,426	387,182	NA	NA
Biol (excl environmental)	213,719	242,033	263,527	297,107	298,744	NA	NA
Environmental biology	66,353	65,257	86,691	95,319	88,438	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	4,238	4,200	4,238	5,008	3,862	4,120	4,317
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	4,238	4,200	4,238	5,008	3,862	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	379,675	367,824	422,784	429,572	448,591	478,555	501,545
Astronomy	39,011	38,923	40,864	47,655	49,493	NA	NA
Chemistry	121,142	117,612	134,921	133,065	147,014	NA	NA
Physics	123,428	122,919	166,220	161,573	159,184	NA	NA
Physical sciences, n.e.c.	96,094	88,370	80,779	87,279	92,900	NA	NA
Environmental sciences, total	306,132	294,680	334,729	330,751	361,896	386,069	404,616
Atmospheric sciences	66,569	66,550	74,646	72,393	80,544	NA	NA
Geological sciences	80,775	78,292	88,962	92,677	104,146	NA	NA
Oceanography	146,633	139,365	159,763	152,295	163,247	NA	NA
Environmental sciences, n.e.c.	12,155	10,473	11,358	13,386	13,959	NA	NA
Math & computer sciences, total	273,204	320,358	357,114	419,413	525,523	560,626	587,558
Mathematics	79,679	84,130	84,966	99,559	105,187	NA	NA
Computer sciences	193,525	236,228	272,148	319,854	420,336	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	300,637	337,206	319,062	353,657	387,810	413,715	433,590
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	28,421	31,205	32,779	35,010	38,555	NA	NA
Civil	27,304	22,452	30,879	32,181	36,189	NA	NA
Electrical	40,857	39,517	37,448	35,666	44,378	NA	NA
Mechanical	5,841	7,098	6,049	5,493	5,040	NA	NA
Metallurgy & materials	102,303	101,922	109,265	117,766	119,689	NA	NA
Engineering, n.e.c.	95,911	135,012	102,642	127,541	143,959	NA	NA
Social sciences, total	66,722	65,028	86,445	82,765	91,799	97,931	102,636
Anthropology	10,214	10,157	10,775	10,967	11,137	NA	NA
Economics	12,056	10,817	10,965	12,831	14,006	NA	NA
Political science	4,829	4,546	4,762	5,010	5,703	NA	NA
Sociology	3,740	3,436	3,050	3,548	3,931	NA	NA
Social sciences, n.e.c.	35,883	36,072	56,893	50,409	57,022	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	78,740	79,262	92,308	115,486	165,049	176,075	184,532

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data (such as mechanical engineering). These changes are reflected in the historical data tables.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3A. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	731,872	742,128	833,342	918,135	1,033,579	1,065,310	1,172,344
Life sciences, total	NA	492,516	496,075	528,028	590,117	678,298	655,893	765,144
Biol & agricultural, total	NA	226,886	230,259	235,576	262,158	305,197	308,119	396,271
Biol (excl environmental)	NA	NA	NA	NA	NA	244,153	243,518	324,750
Environmental biology	NA	NA	NA	NA	NA	310	595	2,461
Agricultural	NA	NA	NA	NA	NA	60,734	64,006	69,060
Medical sciences, total	NA	254,765	254,135	275,618	306,846	345,867	312,024	337,578
Clinical medical	NA	242,017	242,435	267,592	293,546	NA	NA	NA
Other medical	NA	12,748	11,771	8,026	13,300	NA	NA	NA
Life sciences, n.e.c.	NA	10,865	11,681	16,834	21,113	27,234	35,750	31,295
Psychology, total	NA	28,749	26,856	30,674	27,457	31,741	46,931	36,948
Biological aspects	NA	12,429	9,091	10,634	9,816	11,462	12,076	13,258
Social aspects	NA	10,389	10,771	12,374	8,935	10,425	12,908	15,075
Psychological sciences, n.e.c.	NA	5,931	6,994	7,666	8,706	9,854	21,947	8,615
Physical sciences, total	NA	36,096	40,271	43,389	55,929	67,120	79,500	85,072
Astronomy	NA	925	1,712	2,312	2,628	1,557	2,436	4,639
Chemistry	NA	14,936	16,240	15,617	19,533	21,314	25,812	23,402
Physics	NA	16,690	20,415	23,293	29,656	41,604	48,491	51,788
Physical sciences, n.e.c.	NA	3,545	1,904	2,167	4,112	2,645	2,761	5,243
Environmental sciences, total	NA	26,125	25,863	40,437	39,159	34,751	45,611	41,738
Atmospheric sciences	NA	9,854	9,151	13,013	10,373	7,724	9,419	11,797
Geological sciences	NA	5,347	4,826	10,956	10,284	8,162	8,578	8,832
Oceanography	NA	8,118	8,341	9,195	9,822	12,325	16,940	9,796
Environmental sciences, n.e.c.	NA	2,806	3,545	7,273	8,680	6,540	10,674	11,313
Math & computer sciences, total	NA	16,289	15,323	11,265	16,246	14,186	18,562	14,809
Mathematics	NA	NA	NA	2,850	3,255	3,099	2,592	2,933
Computer sciences	NA	NA	NA	7,331	12,358	8,634	13,346	9,940
Math & computer sciences, n.e.c.	NA	NA	NA	1,084	633	2,453	2,624	1,936
Engineering, total	NA	52,884	60,589	58,421	81,287	89,369	105,614	115,307
Aeronautical	NA	5,349	5,890	5,926	7,190	6,596	7,493	15,687
Astronautical	NA	895	888	1,030	1,121	831	1,572	6,322
Chemical	NA	2,694	4,651	5,860	7,615	15,230	6,683	3,304
Civil	NA	1,227	1,272	1,720	1,310	1,840	7,340	6,556
Electrical	NA	8,452	8,758	9,439	15,147	15,198	16,486	29,784
Mechanical	NA	4,545	4,955	6,290	7,946	7,429	5,649	7,296
Metallurgy & materials	NA	4,312	3,938	4,588	4,828	5,738	4,685	5,456
Engineering, n.e.c.	NA	25,410	30,237	23,568	36,130	36,507	55,706	40,902
Social sciences, total	NA	48,775	50,893	74,048	84,417	90,329	81,235	73,802
Anthropology	NA	2,630	2,567	2,058	1,396	1,999	2,016	628
Economics	NA	13,747	17,857	17,113	18,718	22,477	24,464	28,338
Political science	NA	500	1,126	462	761	955	1,860	720
Sociology	NA	10,535	7,940	10,487	11,121	12,501	13,901	14,880
Social sciences, n.e.c.	NA	21,363	21,403	43,928	52,421	52,397	38,994	29,236
History	NA	90	433	NA	NA	NA	NA	NA
Linguistics	NA	1,142	722	NA	NA	NA	NA	NA
Other social sciences	NA	20,131	20,248	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	30,438	26,258	47,080	23,523	27,785	31,964	39,524

See explanatory information, if any, and SOURCE at end of table.

Table 3A. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	1,227,916	1,102,431	1,174,573	1,286,642	1,469,086	1,528,998	1,756,442	1,935,828
Life sciences, total	802,567	721,333	758,304	820,635	917,618	943,972	1,122,350	1,282,126
Biol & agricultural, total	418,372	341,275	353,373	379,153	413,943	450,301	547,695	696,277
Biol (excl environmental)	339,393	251,688	257,556	288,871	325,580	369,089	465,175	605,985
Environmental biology	1,649	7,164	6,672	35,755	36,373	33,414	33,233	33,082
Agricultural	77,330	82,423	89,145	54,527	51,990	47,798	49,287	57,210
Medical sciences, total	359,632	351,991	375,042	412,466	468,190	460,661	538,120	547,938
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	24,563	28,067	29,889	29,016	35,485	33,010	36,535	37,911
Psychology, total	36,564	35,736	43,386	49,654	59,916	68,551	89,373	80,792
Biological aspects	12,416	11,186	13,259	15,297	18,466	19,971	25,429	30,188
Social aspects	13,334	9,891	10,529	11,240	12,917	15,097	21,837	22,195
Psychological sciences, n.e.c.	10,814	14,659	19,598	23,117	28,533	33,483	42,107	28,409
Physical sciences, total	90,423	103,879	94,286	115,841	122,097	115,838	123,720	123,200
Astronomy	5,477	6,407	2,072	1,682	678	1,040	997	1,833
Chemistry	28,781	24,321	23,768	30,238	32,501	33,181	34,604	36,620
Physics	52,107	67,413	64,053	81,287	85,458	78,853	82,715	80,829
Physical sciences, n.e.c.	4,058	5,738	4,393	2,634	3,460	2,764	5,404	3,918
Environmental sciences, total	38,756	18,733	32,633	30,507	30,452	30,214	30,716	29,925
Atmospheric sciences	15,327	10,670	12,432	11,774	13,109	15,281	13,086	15,308
Geological sciences	9,597	2,777	10,089	11,003	8,856	9,526	8,260	9,110
Oceanography	8,800	876	6,090	5,627	5,061	4,157	7,250	3,747
Environmental sciences, n.e.c.	5,032	4,410	4,022	2,103	3,426	2,120	2,120	1,760
Math & computer sciences, total	18,779	20,809	25,531	28,961	79,291	85,181	74,758	78,280
Mathematics	4,219	3,414	3,974	4,395	10,503	3,524	2,613	4,366
Computer sciences	9,581	13,881	13,988	11,891	28,657	36,923	22,741	22,620
Math & computer sciences, n.e.c.	4,979	3,514	7,569	12,675	40,131	44,734	49,404	51,294
Engineering, total	128,094	102,495	113,221	133,917	138,214	179,776	188,478	224,199
Aeronautical	16,681	13,292	13,286	13,479	12,627	18,904	23,849	19,716
Astronautical	7,807	6,050	7,384	5,073	6,668	4,695	5,744	8,110
Chemical	2,089	2,617	4,637	21,591	18,021	17,837	22,096	22,235
Civil	7,469	8,172	7,764	9,513	9,920	7,238	11,988	9,241
Electrical	33,165	27,547	27,854	34,985	33,984	46,617	47,849	40,897
Mechanical	7,692	8,380	6,078	9,878	11,803	25,952	17,644	15,683
Metallurgy & materials	6,922	5,694	9,154	7,759	11,330	12,899	11,296	54,346
Engineering, n.e.c.	46,269	30,743	37,064	31,639	33,861	45,634	48,012	53,971
Social sciences, total	77,724	66,881	68,536	61,341	71,358	63,301	75,053	74,161
Anthropology	323	479	307	370	676	834	996	696
Economics	28,950	31,407	35,504	20,202	22,400	20,814	25,295	25,186
Political science	708	715	1,005	1,306	1,313	1,291	679	1,023
Sociology	13,541	13,381	10,367	14,241	15,465	13,822	16,037	18,206
Social sciences, n.e.c.	34,202	20,899	21,353	25,222	31,504	26,540	32,046	29,050
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	35,009	32,565	38,676	45,786	50,140	42,165	51,994	43,145

See explanatory information, if any, and SOURCE at end of table.

Table 3A. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	2,305,387	2,316,970	2,546,043	2,415,337	2,767,824	2,970,499	3,052,385	2,930,387
Life sciences, total	1,493,203	1,464,072	1,638,923	1,530,595	1,724,251	1,872,816	1,954,705	2,005,387
Biol & agricultural, total	828,613	784,473	858,004	778,632	849,566	906,764	909,365	1,016,300
Biol (excl environmental)	688,792	681,956	743,540	652,180	721,711	779,283	777,654	893,762
Environmental biology	72,033	40,995	46,125	47,439	52,241	50,575	54,154	47,952
Agricultural	67,788	61,522	68,339	79,013	75,614	76,906	77,557	74,586
Medical sciences, total	615,916	634,115	743,734	731,494	842,514	939,138	968,237	922,986
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	48,674	45,484	37,185	20,469	32,171	26,914	77,103	66,101
Psychology, total	93,105	95,757	107,049	42,654	120,849	141,126	116,979	79,099
Biological aspects	36,272	36,405	42,341	327	452	175	691	3,102
Social aspects	27,073	30,071	32,595	8,505	3,800	5,623	9,445	3,929
Psychological sciences, n.e.c.	29,760	29,281	32,113	33,822	116,597	135,328	106,843	72,068
Physical sciences, total	146,923	172,647	170,390	194,058	230,984	235,076	217,632	126,857
Astronomy	2,066	4,250	7,182	8,268	9,659	13,045	26,039	20,160
Chemistry	39,197	41,413	39,704	46,697	47,764	52,890	49,650	61,651
Physics	102,149	121,749	119,753	135,387	162,767	158,856	134,174	35,502
Physical sciences, n.e.c.	3,511	5,235	3,751	3,706	10,794	10,285	7,769	9,544
Environmental sciences, total	36,368	32,808	35,831	30,065	31,342	34,623	41,130	44,956
Atmospheric sciences	11,582	9,891	8,024	11,674	8,046	8,842	9,387	6,539
Geological sciences	19,418	15,072	12,934	10,364	14,090	5,731	10,562	8,087
Oceanography	4,192	2,667	1,740	1,659	2,114	2,389	1,778	7,609
Environmental sciences, n.e.c.	1,176	5,178	13,133	6,368	7,092	17,661	19,403	22,721
Math & computer sciences, total	100,640	121,518	103,569	148,604	138,109	189,814	199,808	218,669
Mathematics	3,414	4,302	4,589	4,982	5,508	10,019	14,189	10,889
Computer sciences	42,061	115,443	93,688	138,734	120,466	168,493	176,512	199,181
Math & computer sciences, n.e.c.	55,165	1,773	5,292	4,888	12,135	11,302	9,107	8,599
Engineering, total	264,633	254,518	273,062	279,506	307,956	269,555	299,968	282,701
Aeronautical	26,073	30,808	16,429	12,619	12,399	9,592	10,020	7,564
Astronautical	8,552	11,559	8,583	9,614	8,590	9,407	6,067	1,962
Chemical	10,579	26,126	32,564	28,498	27,643	23,365	30,262	22,270
Civil	11,496	10,056	12,731	12,098	11,528	10,495	15,630	11,014
Electrical	41,466	42,935	44,386	43,475	49,257	39,004	35,787	21,806
Mechanical	19,793	15,711	15,476	16,670	18,145	20,694	21,911	9,116
Metallurgy & materials	63,781	43,703	66,821	60,320	72,759	64,291	59,616	59,612
Engineering, n.e.c.	82,893	73,620	76,072	96,212	107,635	92,707	120,675	149,357
Social sciences, total	85,121	105,242	141,523	104,450	106,616	104,136	92,418	76,663
Anthropology	388	325	1,066	1,065	549	759	726	589
Economics	27,206	29,917	29,997	38,551	36,274	35,498	37,515	34,174
Political science	1,473	1,828	1,624	589	616	442	713	546
Sociology	23,695	42,103	75,433	35,593	26,820	20,240	7,962	6,948
Social sciences, n.e.c.	32,359	31,069	33,403	28,652	42,357	47,197	45,502	34,406
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	85,394	70,408	75,696	85,405	107,717	123,353	129,745	96,055

See explanatory information, if any, and SOURCE at end of table.

Table 3A. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: All agencies, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	3,117,100	3,402,738	3,713,143	5,566,653	6,394,679	7,096,307	7,749,268
Life sciences, total	2,217,670	2,434,298	2,674,860	3,672,320	4,844,850	5,446,833	6,041,454
Biol & agricultural, total	1,214,011	1,341,957	1,464,197	2,291,839	4,106,572	NA	NA
Biol (excl environmental)	1,075,060	1,193,468	1,290,802	2,100,785	3,873,546	NA	NA
Environmental biology	51,563	60,449	68,199	84,625	79,917	NA	NA
Agricultural	87,388	88,040	105,196	106,429	153,109	NA	NA
Medical sciences, total	929,439	1,012,819	1,124,037	1,124,229	609,042	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	74,220	79,522	86,626	256,252	129,236	NA	NA
Psychology, total	88,492	96,365	101,759	412,329	182,704	209,061	240,469
Biological aspects	3,906	4,803	3,889	1,165	920	NA	NA
Social aspects	4,708	3,019	3,765	941	933	NA	NA
Psychological sciences, n.e.c.	79,878	88,543	94,105	410,223	180,851	NA	NA
Physical sciences, total	121,948	192,512	198,760	344,423	246,804	264,076	271,993
Astronomy	14,675	25,216	24,447	84,199	108,388	NA	NA
Chemistry	62,330	58,160	70,956	199,278	77,493	NA	NA
Physics	33,008	97,078	90,073	49,141	14,313	NA	NA
Physical sciences, n.e.c.	11,935	12,058	13,284	11,805	46,610	NA	NA
Environmental sciences, total	51,584	49,104	43,222	162,509	175,465	191,166	191,693
Atmospheric sciences	15,470	11,497	14,609	15,440	16,223	NA	NA
Geological sciences	1,472	1,274	767	700	7,456	NA	NA
Oceanography	11,704	10,807	7,984	7,950	13,800	NA	NA
Environmental sciences, n.e.c.	22,938	25,526	19,862	138,419	137,986	NA	NA
Math & computer sciences, total	170,612	185,616	178,994	234,756	246,516	243,766	267,364
Mathematics	5,637	14,969	9,769	41,882	22,176	NA	NA
Computer sciences	160,697	169,378	168,367	185,584	218,894	NA	NA
Math & computer sciences, n.e.c.	4,278	1,269	858	7,290	5,446	NA	NA
Engineering, total	289,125	270,356	320,940	449,430	440,732	459,385	435,776
Aeronautical	13,583	19,818	26,956	31,427	34,303	NA	NA
Astronautical	6,855	3,899	12,587	31,352	19,223	NA	NA
Chemical	24,087	28,279	30,186	35,903	24,736	NA	NA
Civil	15,062	21,254	12,715	14,528	14,147	NA	NA
Electrical	25,463	35,586	53,906	56,657	57,443	NA	NA
Mechanical	6,236	7,819	7,937	8,848	8,012	NA	NA
Metallurgy & materials	57,576	43,063	36,311	46,648	73,388	NA	NA
Engineering, n.e.c.	140,263	110,638	140,342	224,067	209,480	NA	NA
Social sciences, total	80,228	77,545	90,081	149,177	134,455	134,387	134,475
Anthropology	580	576	256	670	675	NA	NA
Economics	34,791	31,171	34,074	42,511	48,524	NA	NA
Political science	560	531	563	531	697	NA	NA
Sociology	8,182	8,065	9,002	12,093	9,630	NA	NA
Social sciences, n.e.c.	36,115	37,202	46,186	93,372	74,929	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	97,441	96,942	104,527	141,709	123,153	147,633	166,044

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: This table shows obligations from the Departments of Agriculture, Defense, Energy, and Health & Human Services; the National Aeronautics & Space Administration; and the National Science Foundation; they represent approximately 94 percent of total Federal applied research obligations to universities and colleges in fiscal years 2001, 2002, and 2003.

Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3B. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	56,284	64,379	72,158	82,805	103,707	114,133	124,197
Life sciences, total	NA	38,228	43,188	49,656	57,288	72,460	79,604	87,694
Biol & agricultural, total	NA	35,798	40,439	46,560	53,830	68,437	75,087	82,908
Biol (excl environmental)	NA	NA	NA	NA	NA	9,883	11,843	13,706
Environmental biology	NA	NA	NA	NA	NA	0	325	276
Agricultural	NA	NA	NA	NA	NA	58,554	62,919	68,926
Medical sciences, total	NA	2,430	2,749	3,096	3,458	4,023	4,517	4,786
Clinical medical	NA	2,430	2,749	3,096	3,458	NA	NA	NA
Other medical	NA	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	0	0	0	0	0
Psychology, total	NA	0	0	0	0	0	0	0
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	0	0	0	0	0	0	0
Physical sciences, total	NA	2,855	3,288	3,623	4,356	5,429	5,364	5,955
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	2,837	3,181	3,603	4,312	5,338	5,317	5,928
Physics	NA	18	107	20	44	91	47	27
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	483	419	437	494	567	672	739
Atmospheric sciences	NA	335	379	437	494	567	663	739
Geological sciences	NA	148	40	0	0	0	9	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	22	78	113	130	264	301	69
Mathematics	NA	NA	NA	113	130	264	301	69
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	NA	1,919	3,030	2,437	2,817	3,491	4,550	4,914
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	70	14
Civil	NA	3	25	2	5	14	104	0
Electrical	NA	8	61	9	21	44	12	0
Mechanical	NA	0	0	0	0	0	81	55
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	1,908	2,944	2,426	2,791	3,433	4,283	4,845
Social sciences, total	NA	12,677	14,376	15,887	17,720	21,496	23,642	24,826
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	11,927	13,527	15,051	16,793	20,412	22,157	23,568
Political science	NA	0	0	0	0	0	0	0
Sociology	NA	747	821	823	917	1,065	1,362	1,247
Social sciences, n.e.c.	NA	3	28	13	10	19	123	11
History	NA	2	6	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	1	22	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	100	0	5	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 3B. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	137,482	145,322	155,710	147,762	149,568	141,723	142,294	152,926
Life sciences, total	97,305	100,730	107,087	107,475	106,944	101,195	102,743	110,512
Biol & agricultural, total	92,363	95,017	101,036	99,627	99,973	94,270	96,048	104,006
Biol (excl environmental)	14,576	11,970	11,732	18,851	18,469	18,822	19,137	18,483
Environmental biology	599	1,011	971	26,787	29,693	28,182	27,723	28,451
Agricultural	77,188	82,036	88,333	53,989	51,811	47,266	49,188	57,072
Medical sciences, total	4,942	5,713	6,051	7,848	6,971	6,925	6,695	6,506
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	6,696	7,436	7,969	7,993	9,297	7,382	6,411	6,695
Astronomy	0	0	0	0	0	0	0	0
Chemistry	6,550	7,339	7,856	7,977	9,297	7,361	6,411	6,695
Physics	146	97	113	16	0	21	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	955	1,114	1,475	954	1,510	1,620	1,288	1,347
Atmospheric sciences	849	942	1,019	770	1,295	1,327	759	874
Geological sciences	106	172	456	184	215	293	529	473
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,332	738	935	839	1,048	743	466	445
Mathematics	1,332	738	935	839	894	729	466	366
Computer sciences	0	0	0	0	154	14	0	79
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	5,462	5,760	6,194	7,660	7,230	8,134	8,236	7,853
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	145	130	152	1	0	0	0	0
Civil	133	108	125	59	264	116	44	33
Electrical	16	14	16	5	0	12	0	0
Mechanical	63	56	65	32	137	6	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	5,105	5,452	5,836	7,563	6,829	8,000	8,192	7,820
Social sciences, total	25,732	29,544	32,050	22,841	23,539	22,649	23,150	26,074
Anthropology	1	0	0	0	0	0	0	0
Economics	24,401	28,039	30,494	18,069	18,956	18,113	18,669	21,074
Political science	10	4	0	0	0	0	0	0
Sociology	1,271	1,463	1,519	4,772	4,583	4,536	4,481	5,000
Social sciences, n.e.c.	49	38	37	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 3B. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	172,027	181,666	210,821	237,563	232,151	236,201	238,285	217,813
Life sciences, total	128,549	134,002	152,958	164,568	163,282	161,666	165,509	153,191
Biol & agricultural, total	122,192	126,987	148,618	160,031	158,527	156,783	160,956	148,601
Biol (excl environmental)	21,062	29,123	39,745	39,605	39,936	36,052	37,535	34,134
Environmental biology	33,655	36,454	41,027	41,463	43,027	45,320	46,838	40,674
Agricultural	67,475	61,410	67,846	78,963	75,564	75,411	76,583	73,793
Medical sciences, total	6,357	7,015	4,340	4,537	4,755	4,883	4,548	4,585
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	5	5
Psychology, total	0	0	0	0	11	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	11	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	6,746	7,721	11,601	14,117	14,015	16,581	15,255	13,230
Astronomy	0	0	0	0	15	0	0	0
Chemistry	6,746	7,721	11,297	14,117	14,000	16,581	15,255	13,230
Physics	0	0	304	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	1,294	1,001	1,670	3,554	3,470	2,484	3,047	2,357
Atmospheric sciences	941	759	1,243	3,302	2,638	1,959	2,188	2,154
Geological sciences	353	242	427	252	832	525	855	199
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	4	4
Math & computer sciences, total	398	329	1,013	1,927	1,334	1,348	1,230	1,092
Mathematics	398	302	612	440	507	334	402	228
Computer sciences	0	27	401	1,487	827	1,014	828	864
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	9,650	10,928	14,371	16,192	12,540	14,768	16,009	12,481
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	44	772	0	0	16	0	0
Civil	0	0	360	0	0	0	0	0
Electrical	0	0	150	0	0	0	0	0
Mechanical	0	0	120	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	9,650	10,884	12,969	16,192	12,540	14,752	16,009	12,481
Social sciences, total	25,390	27,685	29,208	37,205	37,499	39,354	37,235	35,462
Anthropology	0	0	0	0	11	0	0	0
Economics	20,682	23,029	24,663	31,109	32,733	33,090	32,545	30,295
Political science	0	0	0	0	0	0	0	0
Sociology	4,708	4,656	4,545	6,096	4,755	6,264	4,690	5,167
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 3B. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	242,182	234,406	276,655	303,150	372,526	357,796	290,350
Life sciences, total	173,896	176,070	211,631	228,129	279,456	272,680	212,069
Biol & agricultural, total	170,161	171,884	207,611	224,264	274,411	NA	NA
Biol (excl environmental)	40,765	33,167	45,214	48,332	55,136	NA	NA
Environmental biology	43,397	51,215	57,201	70,752	67,249	NA	NA
Agricultural	85,999	87,502	105,196	105,180	152,026	NA	NA
Medical sciences, total	3,735	4,186	4,020	3,865	5,045	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	14,463	10,398	13,356	11,603	17,727	19,735	20,428
Astronomy	0	0	0	0	0	NA	NA
Chemistry	14,392	10,307	13,277	11,546	17,654	NA	NA
Physics	71	91	79	57	73	NA	NA
Physical sciences, n.e.c.	0	0	0	0	0	NA	NA
Environmental sciences, total	2,912	1,412	802	805	1,748	1,394	1,254
Atmospheric sciences	2,566	1,164	672	803	1,746	NA	NA
Geological sciences	346	248	130	2	2	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	0	NA	NA
Math & computer sciences, total	177	488	273	243	344	358	316
Mathematics	177	488	273	243	344	NA	NA
Computer sciences	0	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	12,795	11,193	12,566	13,561	21,357	20,084	20,299
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	166	191	241	104	106	NA	NA
Civil	42	51	52	25	33	NA	NA
Electrical	8	9	9	14	19	NA	NA
Mechanical	15	21	50	18	23	NA	NA
Metallurgy & materials	0	0	0	0	0	NA	NA
Engineering, n.e.c.	12,564	10,921	12,214	13,400	21,176	NA	NA
Social sciences, total	37,939	34,845	38,027	48,699	51,789	43,440	35,879
Anthropology	0	0	0	0	21	NA	NA
Economics	31,327	28,475	30,832	37,525	43,252	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	6,612	6,370	7,195	11,174	8,516	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	0	110	105	105	105

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3C. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	60,706	59,461	79,500	79,159	74,927	92,284	104,354
Life sciences, total	NA	10,882	6,835	6,276	6,711	8,347	8,172	12,441
Biol & agricultural, total	NA	1,346	992	1,191	1,743	1,800	2,127	4,716
Biol (excl environmental)	NA	NA	NA	NA	NA	1,310	1,807	4,232
Environmental biology	NA	NA	NA	NA	NA	310	270	384
Agricultural	NA	NA	NA	NA	NA	180	50	100
Medical sciences, total	NA	9,536	5,843	5,085	4,968	6,497	6,014	7,675
Clinical medical	NA	8,680	4,698	3,884	4,192	NA	NA	NA
Other medical	NA	856	1,145	1,201	776	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	0	0	50	31	50
Psychology, total	NA	574	3,482	2,144	2,167	2,254	2,269	3,162
Biological aspects	NA	66	160	111	86	61	35	0
Social aspects	NA	280	2,209	804	929	718	1,183	2,980
Psychological sciences, n.e.c.	NA	228	1,113	1,229	1,152	1,475	1,051	182
Physical sciences, total	NA	8,595	8,367	9,648	11,339	14,175	18,567	17,228
Astronomy	NA	19	20	25	33	60	0	0
Chemistry	NA	970	733	1,098	1,710	1,696	1,529	2,330
Physics	NA	6,558	6,610	7,423	7,402	10,674	16,928	14,577
Physical sciences, n.e.c.	NA	1,048	1,004	1,102	2,194	1,745	110	321
Environmental sciences, total	NA	8,476	8,086	8,005	7,501	8,668	11,907	6,749
Atmospheric sciences	NA	1,037	1,044	1,283	1,105	1,580	1,924	4,818
Geological sciences	NA	2,151	1,801	2,075	2,613	1,011	492	710
Oceanography	NA	5,034	5,224	4,626	3,693	6,025	9,122	836
Environmental sciences, n.e.c.	NA	254	17	21	90	52	369	385
Math & computer sciences, total	NA	13,611	11,343	7,386	11,982	10,717	14,192	10,421
Mathematics	NA	NA	NA	723	327	303	180	842
Computer sciences	NA	NA	NA	6,600	11,022	7,961	11,611	8,082
Math & computer sciences, n.e.c.	NA	NA	NA	63	633	2,453	2,401	1,497
Engineering, total	NA	18,010	19,928	22,930	38,787	29,601	35,650	53,487
Aeronautical	NA	2,779	2,818	3,320	4,586	4,183	5,336	13,058
Astronautical	NA	450	472	594	786	796	1,157	6,082
Chemical	NA	1,553	2,053	2,083	3,173	2,849	3,317	428
Civil	NA	372	670	1,160	639	461	740	1,266
Electrical	NA	6,452	6,929	6,963	12,222	12,098	14,209	25,422
Mechanical	NA	3,376	3,685	4,531	5,875	5,250	4,204	4,201
Metallurgy & materials	NA	1,019	1,697	2,171	2,613	3,446	2,647	2,417
Engineering, n.e.c.	NA	2,009	1,604	2,108	8,893	518	4,040	613
Social sciences, total	NA	385	783	998	567	897	790	71
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	156	312	141	33	174	0	0
Political science	NA	0	144	352	494	587	781	71
Sociology	NA	120	57	85	40	136	0	0
Social sciences, n.e.c.	NA	109	270	420	0	0	9	0
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	109	270	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	173	637	22,113	105	268	737	795

See explanatory information, if any, and SOURCE at end of table.

Table 3C. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	118,561	107,320	111,771	133,235	178,375	232,388	204,878	236,353
Life sciences, total	15,735	16,578	16,038	21,786	25,613	23,974	24,816	22,805
Biol & agricultural, total	5,604	777	958	1,167	998	931	1,067	839
Biol (excl environmental)	5,163	415	811	1,007	824	745	813	660
Environmental biology	349	276	147	160	174	186	254	179
Agricultural	92	86	0	0	0	0	0	0
Medical sciences, total	10,090	12,548	11,570	16,991	20,784	19,416	19,811	17,934
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41	3,253	3,510	3,628	3,831	3,627	3,938	4,032
Psychology, total	2,900	3,027	4,548	3,724	2,886	5,697	5,790	4,983
Biological aspects	0	0	0	452	0	0	0	0
Social aspects	2,741	2,632	2,901	2,330	1,965	3,065	5,790	4,347
Psychological sciences, n.e.c.	159	395	1,647	942	921	2,632	0	636
Physical sciences, total	16,935	16,606	9,938	20,464	17,011	13,859	12,322	13,131
Astronomy	0	0	398	247	0	185	191	278
Chemistry	2,686	2,124	2,326	2,599	3,742	4,643	4,096	4,130
Physics	13,582	13,474	6,389	16,673	11,798	8,299	6,919	7,663
Physical sciences, n.e.c.	667	1,008	825	945	1,471	732	1,116	1,060
Environmental sciences, total	9,612	6,126	7,588	7,563	7,626	8,965	10,366	12,002
Atmospheric sciences	6,115	4,264	3,308	3,986	4,267	3,978	4,497	6,319
Geological sciences	1,724	739	2,308	1,265	2,150	2,678	976	4,135
Oceanography	1,680	444	1,678	1,809	663	1,709	4,242	1,024
Environmental sciences, n.e.c.	93	679	294	503	546	600	651	524
Math & computer sciences, total	12,916	15,243	18,884	22,430	65,961	79,228	68,976	71,331
Mathematics	982	518	493	383	765	358	366	1,323
Computer sciences	8,152	11,419	11,284	9,564	25,527	34,647	19,878	18,860
Math & computer sciences, n.e.c.	3,782	3,306	7,107	12,483	39,669	44,223	48,732	51,148
Engineering, total	60,068	48,913	53,258	56,507	58,276	98,740	81,331	108,930
Aeronautical	13,754	9,499	9,486	9,770	8,460	15,113	18,602	11,954
Astronautical	6,702	5,409	6,732	4,723	6,471	4,603	5,488	7,514
Chemical	764	465	564	763	533	1,057	1,043	1,022
Civil	2,164	1,783	2,418	2,364	3,328	2,819	1,948	2,874
Electrical	27,029	20,693	22,363	27,383	25,731	35,486	32,565	24,378
Mechanical	3,691	4,421	3,036	4,534	4,446	19,645	7,931	5,949
Metallurgy & materials	3,995	3,508	5,531	4,538	7,862	5,348	5,148	45,724
Engineering, n.e.c.	1,969	3,135	3,128	2,432	1,445	14,669	8,606	9,515
Social sciences, total	2	19	19	59	62	60	62	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	13	12	0	23	36	37	0
Political science	0	0	0	55	24	0	0	0
Sociology	2	6	7	4	15	24	25	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	393	808	1,498	702	940	1,865	1,215	3,171

See explanatory information, if any, and SOURCE at end of table.

Table 3C. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	328,156	271,501	247,870	313,345	326,441	350,154	338,524	392,304
Life sciences, total	51,010	15,232	10,459	28,986	19,842	26,131	34,117	42,412
Biol & agricultural, total	33,196	585	838	1,079	5,930	1,097	1,608	4,915
Biol (excl environmental)	0	187	499	592	276	478	1,350	4,915
Environmental biology	33,196	398	339	487	5,654	619	258	0
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	13,702	9,566	7,967	27,742	11,124	24,750	6,863	33,763
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,112	5,081	1,654	165	2,788	284	25,646	3,734
Psychology, total	5,862	4,928	3,800	8,336	4,267	5,388	6,573	1,301
Biological aspects	0	143	260	195	328	168	170	397
Social aspects	4,214	4,785	3,540	8,141	3,571	5,086	6,403	841
Psychological sciences, n.e.c.	1,648	0	0	0	368	134	0	63
Physical sciences, total	10,469	19,678	16,844	21,106	27,433	22,456	18,688	18,302
Astronomy	305	0	0	0	0	0	0	0
Chemistry	3,456	4,353	2,537	2,617	3,537	4,190	3,021	9,555
Physics	5,167	14,492	13,703	17,714	23,398	17,080	14,688	4,026
Physical sciences, n.e.c.	1,541	833	604	775	498	1,186	979	4,721
Environmental sciences, total	23,217	12,548	10,232	11,399	10,153	16,609	11,075	19,520
Atmospheric sciences	7,188	4,897	2,395	2,821	1,725	2,076	1,961	888
Geological sciences	13,417	5,911	5,934	5,026	3,294	890	1,185	832
Oceanography	2,458	793	953	1,079	972	955	979	5,549
Environmental sciences, n.e.c.	154	947	950	2,473	4,162	12,688	6,950	12,251
Math & computer sciences, total	92,906	106,115	91,506	124,213	115,475	158,425	164,391	187,858
Mathematics	1,178	845	347	1,156	1,342	4,865	4,250	2,322
Computer sciences	37,292	103,720	86,309	119,731	109,577	150,510	155,904	177,884
Math & computer sciences, n.e.c.	54,436	1,550	4,850	3,326	4,556	3,050	4,237	7,652
Engineering, total	120,278	106,460	111,150	116,121	146,943	118,615	101,207	121,933
Aeronautical	12,163	13,449	7,470	5,248	5,987	2,039	5,134	2,610
Astronautical	7,357	9,729	5,955	6,182	7,173	5,056	4,982	799
Chemical	1,418	1,296	1,825	1,234	1,525	1,032	1,079	560
Civil	3,279	4,253	4,676	4,685	4,998	4,368	5,688	2,597
Electrical	22,220	30,544	28,662	28,724	36,726	26,347	19,953	16,346
Mechanical	9,705	7,816	7,268	8,066	9,153	11,537	7,668	6,259
Metallurgy & materials	53,012	31,635	51,976	49,789	61,618	52,039	33,428	50,679
Engineering, n.e.c.	11,124	7,738	3,318	12,193	19,763	16,197	23,275	42,083
Social sciences, total	64	58	90	483	422	223	86	33
Anthropology	0	0	0	418	303	0	0	0
Economics	38	35	54	40	71	41	52	20
Political science	0	0	0	0	0	0	0	0
Sociology	26	23	36	25	48	27	34	13
Social sciences, n.e.c.	0	0	0	0	0	155	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	24,350	6,482	3,789	2,701	1,906	2,307	2,387	945

See explanatory information, if any, and SOURCE at end of table.

Table 3C. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	387,425	416,619	428,896	459,441	574,960	592,012	530,679
Life sciences, total	52,849	79,116	79,932	91,556	103,216	101,333	67,914
Biol & agricultural, total	13,880	41,455	34,430	36,126	39,758	NA	NA
Biol (excl environmental)	12,491	40,917	34,380	35,204	39,056	NA	NA
Environmental biology	0	0	50	173	44	NA	NA
Agricultural	1,389	538	0	749	658	NA	NA
Medical sciences, total	37,729	36,689	41,914	35,977	50,260	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,240	972	3,588	19,453	13,198	NA	NA
Psychology, total	3,401	2,185	171	1,744	1,294	2,974	1,500
Biological aspects	589	1,210	0	749	647	NA	NA
Social aspects	2,812	963	0	749	647	NA	NA
Psychological sciences, n.e.c.	0	12	171	246	0	NA	NA
Physical sciences, total	17,731	18,833	18,483	15,113	14,040	19,604	14,886
Astronomy	0	0	0	0	0	NA	NA
Chemistry	9,188	4,813	1,810	4,839	5,673	NA	NA
Physics	4,616	9,750	15,917	9,601	7,286	NA	NA
Physical sciences, n.e.c.	3,927	4,270	756	673	1,081	NA	NA
Environmental sciences, total	26,742	23,809	16,062	17,390	17,448	23,290	10,005
Atmospheric sciences	5,195	5,694	6,523	4,508	4,421	NA	NA
Geological sciences	105	0	0	0	14	NA	NA
Oceanography	9,201	9,982	7,720	7,632	7,871	NA	NA
Environmental sciences, n.e.c.	12,241	8,133	1,819	5,250	5,142	NA	NA
Math & computer sciences, total	153,343	164,965	155,538	173,704	198,614	192,840	213,023
Mathematics	1,793	10,532	5,522	6,183	4,621	NA	NA
Computer sciences	147,563	153,965	149,798	163,467	192,209	NA	NA
Math & computer sciences, n.e.c.	3,987	468	218	4,054	1,784	NA	NA
Engineering, total	130,743	125,273	148,474	159,557	239,290	241,193	210,886
Aeronautical	6,232	10,553	18,090	22,326	25,643	NA	NA
Astronautical	2,676	12	1,301	957	976	NA	NA
Chemical	581	1,459	2,894	2,192	1,089	NA	NA
Civil	3,055	1,468	572	2,903	2,055	NA	NA
Electrical	20,364	28,828	39,574	37,375	38,095	NA	NA
Mechanical	3,365	5,434	5,029	6,351	5,609	NA	NA
Metallurgy & materials	52,694	37,376	30,796	27,331	55,912	NA	NA
Engineering, n.e.c.	41,776	40,143	50,218	60,122	109,911	NA	NA
Social sciences, total	38	0	0	252	46	48	41
Anthropology	0	0	0	0	7	NA	NA
Economics	25	0	0	75	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	13	0	0	0	2	NA	NA
Social sciences, n.e.c.	0	0	0	177	37	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	2,578	2,438	10,236	125	1,012	10,730	12,424

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3D. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	29,154	54,610	48,053	62,827	89,246	106,539	108,125
Life sciences, total	NA	20,092	33,901	15,357	17,854	25,649	21,809	19,312
Biol & agricultural, total	NA	17,331	32,376	13,129	14,287	20,065	15,873	15,269
Biol (excl environmental)	NA	NA	NA	NA	NA	18,065	14,840	15,235
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	2,000	1,033	34
Medical sciences, total	NA	2,761	1,525	691	1,182	165	66	0
Clinical medical	NA	2,761	1,525	470	674	NA	NA	NA
Other medical	NA	0	0	221	508	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	1,537	2,385	5,419	5,870	4,043
Psychology, total	NA	0	0	0	0	0	0	0
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	0	0	0	0	0	0	0
Physical sciences, total	NA	6,452	9,947	11,284	20,374	27,058	27,916	33,941
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	31	957	850	2,160	1,909	1,340	13
Physics	NA	5,818	8,990	10,434	18,214	25,149	24,711	30,731
Physical sciences, n.e.c.	NA	603	0	0	0	0	1,865	3,197
Environmental sciences, total	NA	2,306	3,680	16,489	17,564	15,640	20,732	22,525
Atmospheric sciences	NA	641	1,173	3,537	1,799	1,306	916	628
Geological sciences	NA	0	0	5,790	5,749	5,487	6,034	5,898
Oceanography	NA	1,665	2,507	4,191	6,026	6,282	7,430	8,654
Environmental sciences, n.e.c.	NA	0	0	2,971	3,990	2,565	6,352	7,345
Math & computer sciences, total	NA	0	0	0	0	0	349	306
Mathematics	NA	NA	NA	0	0	0	58	0
Computer sciences	NA	NA	NA	0	0	0	291	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	306
Engineering, total	NA	304	7,082	4,282	6,454	20,574	29,331	28,342
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	222	0
Chemical	NA	0	1,889	2,896	3,622	11,586	2,892	2,559
Civil	NA	0	0	0	0	500	0	43
Electrical	NA	0	184	0	98	100	739	1,744
Mechanical	NA	0	300	419	695	1,000	397	1,199
Metallurgy & materials	NA	0	0	573	708	1,000	0	0
Engineering, n.e.c.	NA	304	4,709	394	1,331	6,388	25,081	22,797
Social sciences, total	NA	0	0	641	331	325	1,412	891
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	0	641	331	120	0	0
Political science	NA	0	0	0	0	0	454	0
Sociology	NA	0	0	0	0	205	0	0
Social sciences, n.e.c.	NA	0	0	0	0	0	958	891
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	0	0	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	0	0	250	0	4,990	2,808

See explanatory information, if any, and SOURCE at end of table.

Table 3D. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	114,413	100,615	111,111	127,172	124,601	106,909	123,467	111,704
Life sciences, total	21,812	26,031	23,814	24,751	18,581	16,200	15,933	14,011
Biol & agricultural, total	13,504	15,626	14,102	15,708	9,194	7,068	6,741	2,872
Biol (excl environmental)	13,504	15,383	13,390	12,214	8,249	6,289	6,419	2,822
Environmental biology	0	0	0	3,494	945	449	322	50
Agricultural	0	243	712	0	0	330	0	0
Medical sciences, total	5,018	6,320	6,461	5,930	7,514	8,004	8,021	9,975
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,290	4,085	3,251	3,113	1,873	1,128	1,171	1,164
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	42,885	60,399	52,733	60,375	62,384	57,163	58,259	57,942
Astronomy	0	3,414	0	0	0	0	0	0
Chemistry	5,645	3,569	0	4,812	2,952	2,739	2,432	3,142
Physics	35,127	49,473	50,534	55,170	59,112	54,274	55,827	54,073
Physical sciences, n.e.c.	2,113	3,943	2,199	393	320	150	0	727
Environmental sciences, total	17,569	410	12,398	13,414	11,918	10,091	11,274	9,746
Atmospheric sciences	3,423	246	2,245	3,013	3,782	3,465	3,119	3,647
Geological sciences	6,313	0	5,520	6,772	3,952	5,144	5,253	3,254
Oceanography	6,661	0	3,775	3,190	3,634	1,372	2,179	2,167
Environmental sciences, n.e.c.	1,172	164	858	439	550	110	723	678
Math & computer sciences, total	170	117	342	0	7,150	51	131	0
Mathematics	0	0	0	0	7,150	0	73	0
Computer sciences	0	0	0	0	0	3	0	0
Math & computer sciences, n.e.c.	170	117	342	0	0	48	58	0
Engineering, total	30,477	12,110	18,271	27,788	24,467	21,686	32,011	25,926
Aeronautical	0	0	0	0	0	20	0	0
Astronautical	792	234	0	0	0	0	34	0
Chemical	331	173	2,065	18,317	12,513	11,663	12,741	13,388
Civil	529	1,548	0	1,425	642	409	2,965	1,628
Electrical	2,578	1,559	655	1,587	461	1,436	2,507	1,395
Mechanical	1,017	23	5	770	1,593	699	2,334	1,161
Metallurgy & materials	1,650	10	0	1,051	450	1,727	1,589	562
Engineering, n.e.c.	23,580	8,563	15,546	4,638	8,808	5,732	9,841	7,792
Social sciences, total	1,000	434	509	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	1,000	434	509	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	500	1,114	3,044	844	101	1,718	5,859	4,079

See explanatory information, if any, and SOURCE at end of table.

Table 3D. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	135,611	144,501	200,045	200,493	175,944	164,962	188,750	77,621
Life sciences, total	14,361	12,971	73,808	54,768	15,827	28,669	26,454	17,589
Biol & agricultural, total	3,142	1,240	877	2,218	1,932	1,150	557	410
Biol (excl environmental)	2,722	1,090	727	2,068	1,444	975	532	410
Environmental biology	370	100	100	100	438	125	25	0
Agricultural	50	50	50	50	50	50	0	0
Medical sciences, total	11,079	11,590	72,598	52,268	13,679	27,519	25,124	17,179
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	140	141	333	282	216	0	773	0
Psychology, total	0	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0	0
Physical sciences, total	79,789	75,153	70,839	82,658	100,419	97,856	105,517	25,443
Astronomy	0	0	0	0	0	0	0	0
Chemistry	9,766	9,451	6,971	8,567	11,858	7,327	5,736	4,435
Physics	69,573	65,250	62,618	73,185	87,868	85,776	97,148	20,357
Physical sciences, n.e.c.	450	452	1,250	906	693	4,753	2,633	651
Environmental sciences, total	4,697	8,693	6,632	5,987	10,067	4,671	7,997	5,986
Atmospheric sciences	25	172	25	366	241	25	221	0
Geological sciences	4,532	8,215	5,775	4,121	8,803	2,620	6,502	5,367
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	140	306	832	1,500	1,023	2,026	1,274	619
Math & computer sciences, total	0	0	0	0	0	3,000	0	0
Mathematics	0	0	0	0	0	500	0	0
Computer sciences	0	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	2,500	0	0
Engineering, total	31,564	41,923	44,191	49,606	44,854	30,644	44,671	28,497
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	521	16,820	19,326	17,877	16,419	13,346	13,952	11,599
Civil	2,982	2,398	3,070	2,462	3,047	1,597	4,368	3,402
Electrical	2,397	1,942	2,388	1,883	2,373	1,361	2,948	2,169
Mechanical	96	392	67	63	67	83	64	19
Metallurgy & materials	1,178	40	747	694	569	691	395	328
Engineering, n.e.c.	24,390	20,331	18,593	26,627	22,379	13,566	22,944	10,980
Social sciences, total	0	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	5,200	5,761	4,575	7,474	4,777	122	4,111	106

See explanatory information, if any, and SOURCE at end of table.

Table 3D. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1973-2003

[Dollars in thousands]

Page 4 of 4

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	92,851	114,471	88,096	134,013	159,794	186,227	136,621
Life sciences, total	29,968	33,168	22,991	37,844	53,029	69,783	22,160
Biol & agricultural, total	0	0	0	0	438	NA	NA
Biol (excl environmental)	0	0	0	0	438	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	29,968	33,168	22,991	37,274	52,591	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	570	0	NA	NA
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	0	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	24,870	31,695	16,026	39,734	42,011	44,713	48,036
Astronomy	0	0	0	0	0	NA	NA
Chemistry	3,509	4,666	4,711	8,221	7,877	NA	NA
Physics	21,361	26,349	10,850	31,103	0	NA	NA
Physical sciences, n.e.c.	0	680	465	410	34,134	NA	NA
Environmental sciences, total	2,903	3,871	3,920	10,256	17,774	14,243	9,995
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	6,228	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	2,903	3,871	3,920	10,256	11,546	NA	NA
Math & computer sciences, total	0	0	0	0	0	105	105
Mathematics	0	0	0	0	0	NA	NA
Computer sciences	0	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	28,915	45,333	42,191	46,179	46,980	57,383	56,325
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	13,194	17,632	18,610	24,576	14,473	NA	NA
Civil	3,152	5,536	4,752	4,309	4,614	NA	NA
Electrical	2,035	3,605	3,056	2,795	3,063	NA	NA
Mechanical	18	32	27	25	27	NA	NA
Metallurgy & materials	211	275	277	327	30	NA	NA
Engineering, n.e.c.	10,305	18,253	15,469	14,147	24,773	NA	NA
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	6,195	404	2,968	0	0	0	0

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: Data shown for fiscal years 1973-74 and 1975-76 represent obligations of the Atomic Energy Commission and the Energy Research & Development Administration, respectively. In fiscal year 1982 the Bonneville Power Administration became part of the Department of Energy.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3E. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	500,066	496,455	566,115	630,495	705,599	685,759	765,204
Life sciences, total	NA	410,253	405,953	450,530	502,563	567,477	541,106	636,999
Biol & agricultural, total	NA	161,475	152,524	170,421	189,282	214,366	214,750	286,796
Biol (excl environmental)	NA	NA	NA	NA	NA	214,366	214,750	286,747
Environmental biology	NA	NA	NA	NA	NA	0	0	49
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	238,534	242,977	265,555	295,282	332,652	299,865	323,991
Clinical medical	NA	227,418	232,714	259,267	284,240	NA	NA	NA
Other medical	NA	11,116	10,263	6,288	11,042	NA	NA	NA
Life sciences, n.e.c.	NA	10,244	10,452	14,554	17,999	20,459	26,491	26,212
Psychology, total	NA	27,117	22,543	28,437	25,029	29,029	44,151	32,224
Biological aspects	NA	11,693	8,490	10,523	9,705	11,401	12,041	12,925
Social aspects	NA	9,769	8,348	11,570	7,988	9,707	11,372	11,024
Psychological sciences, n.e.c.	NA	5,655	5,705	6,344	7,336	7,921	20,738	8,275
Physical sciences, total	NA	8,842	7,905	8,504	9,299	10,570	14,663	14,070
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	8,473	7,533	8,090	8,846	10,076	13,969	13,066
Physics	NA	369	372	414	453	494	694	1,004
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	1,820	2,063	1,928	2,583	2,298	1,834	1,669
Mathematics	NA	NA	NA	1,928	2,410	2,298	1,611	1,645
Computer sciences	NA	NA	NA	0	173	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	223	24
Engineering, total	NA	11,266	11,080	12,321	16,941	17,606	17,313	9,653
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	171	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	11,095	11,080	12,321	16,941	17,606	17,313	9,653
Social sciences, total	NA	26,254	27,899	45,758	56,041	58,690	46,015	40,431
Anthropology	NA	2,630	2,241	2,028	1,396	1,999	2,016	568
Economics	NA	620	2,944	831	702	851	906	1,374
Political science	NA	0	598	0	133	128	330	375
Sociology	NA	9,668	6,752	9,419	10,008	10,841	12,254	13,133
Social sciences, n.e.c.	NA	13,336	15,364	33,480	43,802	44,871	30,509	24,981
History	NA	82	277	NA	NA	NA	NA	NA
Linguistics	NA	947	554	NA	NA	NA	NA	NA
Other social sciences	NA	12,307	14,533	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	14,514	19,012	18,637	18,039	19,929	20,677	30,158

See explanatory information, if any, and SOURCE at end of table.

Table 3E. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	794,552	680,161	719,781	801,545	921,337	951,519	1,168,574	1,306,854
Life sciences, total	663,969	565,808	599,124	654,906	751,822	788,809	964,584	1,125,026
Biol & agricultural, total	304,795	219,418	227,126	252,611	292,608	337,843	433,132	579,796
Biol (excl environmental)	304,767	219,341	227,007	252,144	292,471	337,616	432,950	579,531
Environmental biology	28	77	119	138	74	86	133	192
Agricultural	0	0	0	329	63	141	49	73
Medical sciences, total	338,590	326,654	350,438	381,047	432,343	425,146	502,918	512,856
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	20,584	19,736	21,560	21,248	26,871	25,820	28,534	32,374
Psychology, total	32,698	32,343	38,598	45,596	56,535	62,569	83,262	75,633
Biological aspects	12,258	11,120	13,150	14,722	18,302	19,928	25,324	30,160
Social aspects	9,999	7,162	7,588	8,872	10,797	11,977	16,024	17,832
Psychological sciences, n.e.c.	10,441	14,061	17,860	22,002	27,436	30,664	41,914	27,641
Physical sciences, total	13,175	8,957	10,859	12,317	14,993	17,014	19,956	19,177
Astronomy	0	0	0	0	0	0	0	0
Chemistry	12,622	8,555	10,023	11,983	13,975	16,035	18,583	18,521
Physics	553	402	836	334	1,018	958	1,350	624
Physical sciences, n.e.c.	0	0	0	0	0	21	23	32
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,745	1,677	1,978	2,999	1,476	2,091	1,439	2,453
Mathematics	1,745	1,677	1,978	2,979	1,332	2,091	1,415	2,392
Computer sciences	0	0	0	20	144	0	24	61
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	12,797	10,431	8,865	11,527	9,790	9,898	14,122	11,215
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	12,797	10,431	8,865	11,527	9,790	9,898	14,122	11,215
Social sciences, total	45,097	32,945	31,122	34,671	43,131	36,433	45,611	42,738
Anthropology	310	403	175	226	223	445	637	534
Economics	1,720	1,588	3,232	843	1,994	1,098	3,074	1,069
Political science	462	368	592	872	769	873	398	684
Sociology	11,912	11,442	8,328	8,892	10,057	8,733	10,946	12,802
Social sciences, n.e.c.	30,693	19,144	18,795	23,838	30,088	25,284	30,556	27,649
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	25,071	28,000	29,235	39,529	43,590	34,705	39,600	30,612

See explanatory information, if any, and SOURCE at end of table.

Table 3E. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	1,500,697	1,520,963	1,682,038	1,450,273	1,800,506	1,959,027	2,044,197	2,040,697
Life sciences, total	1,287,854	1,288,510	1,385,740	1,263,797	1,505,667	1,631,951	1,704,929	1,768,744
Biol & agricultural, total	659,735	643,437	693,151	598,171	667,732	727,347	727,816	842,555
Biol (excl environmental)	659,246	643,095	692,482	598,111	667,655	727,290	727,807	842,541
Environmental biology	264	280	266	60	77	57	9	14
Agricultural	225	62	403	0	0	0	0	0
Medical sciences, total	584,150	605,600	658,365	646,743	811,724	879,835	929,372	865,260
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	43,969	39,473	34,224	18,883	26,211	24,769	47,741	60,929
Psychology, total	87,093	90,604	102,855	32,653	111,575	128,947	106,110	72,164
Biological aspects	36,271	36,243	42,058	0	0	0	21	2,705
Social aspects	22,802	25,210	28,942	79	0	0	25	1,437
Psychological sciences, n.e.c.	28,020	29,151	31,855	32,574	111,575	128,947	106,064	68,022
Physical sciences, total	16,000	15,961	15,541	14,909	15,647	16,078	21,371	30,146
Astronomy	0	0	0	0	0	0	0	0
Chemistry	15,027	14,914	14,482	13,889	14,668	14,972	18,483	26,861
Physics	921	1,047	1,059	1,020	979	1,106	2,888	3,285
Physical sciences, n.e.c.	52	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	6,739	5,797
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	6,739	5,797
Math & computer sciences, total	1,620	1,968	2,440	2,335	3,578	5,431	18,800	17,992
Mathematics	1,586	1,968	2,440	2,173	2,566	3,097	8,022	7,930
Computer sciences	34	0	0	0	845	2,160	10,778	10,062
Math & computer sciences, n.e.c.	0	0	0	162	167	174	0	0
Engineering, total	9,607	9,997	11,840	13,263	14,376	14,818	25,607	27,827
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	9,607	9,997	11,840	13,263	14,376	14,818	25,607	27,827
Social sciences, total	54,196	68,595	107,148	60,206	61,479	57,112	46,511	34,311
Anthropology	388	313	383	0	0	0	0	0
Economics	3,215	3,973	3,898	5,276	1,170	1,123	3,119	2,126
Political science	1,134	1,074	1,157	48	40	0	108	143
Sociology	18,544	36,351	69,802	28,441	20,878	12,915	1,915	1,435
Social sciences, n.e.c.	30,915	26,884	31,908	26,441	39,391	43,074	41,369	30,607
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	44,327	45,328	56,474	63,110	88,184	104,690	114,130	83,716

See explanatory information, if any, and SOURCE at end of table.

Table 3E. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	2,188,682	2,386,224	2,622,795	4,332,719	4,933,303	5,598,695	6,425,148
Life sciences, total	1,941,373	2,117,643	2,329,608	3,290,008	4,384,960	4,978,192	5,714,036
Biol & agricultural, total	1,019,870	1,111,229	1,202,111	2,013,057	3,774,181	NA	NA
Biol (excl environmental)	1,019,870	1,111,229	1,202,111	2,013,057	3,774,181	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	856,822	937,329	1,053,636	1,046,416	500,654	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	64,681	69,085	73,861	230,535	110,125	NA	NA
Psychology, total	83,312	92,170	97,960	408,720	179,793	204,469	237,350
Biological aspects	3,317	3,593	3,889	0	0	NA	NA
Social aspects	1,689	1,649	1,691	30	86	NA	NA
Psychological sciences, n.e.c.	78,306	86,928	92,380	408,690	179,707	NA	NA
Physical sciences, total	31,186	33,945	36,744	170,537	43,377	49,332	57,268
Astronomy	0	0	0	0	0	NA	NA
Chemistry	30,117	32,781	35,484	165,947	39,945	NA	NA
Physics	1,069	1,164	1,260	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	4,590	3,432	NA	NA
Environmental sciences, total	5,605	6,070	6,570	106,250	99,153	112,736	130,831
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	335	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	5,605	6,070	6,570	106,250	98,818	NA	NA
Math & computer sciences, total	8,555	8,777	8,397	35,897	17,974	20,105	23,055
Mathematics	3,434	3,653	3,917	35,390	16,949	NA	NA
Computer sciences	5,121	5,124	4,480	507	200	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	825	NA	NA
Engineering, total	15,577	16,860	18,250	107,515	27,438	31,204	36,224
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	14,555	11,888	NA	NA
Engineering, n.e.c.	15,577	16,860	18,250	92,960	15,550	NA	NA
Social sciences, total	34,057	34,876	41,980	89,210	71,319	78,934	86,156
Anthropology	32	0	0	30	0	NA	NA
Economics	1,209	456	963	2,129	2,034	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	726	921	1,003	49	397	NA	NA
Social sciences, n.e.c.	32,090	33,499	40,014	87,002	68,888	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	69,017	75,883	83,286	124,582	109,289	123,723	140,228

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3F. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	49,195	44,310	48,902	55,829	58,788	67,870	71,846
Life sciences, total	NA	23,179	18,032	20,370	26,155	25,210	27,512	30,666
Biol & agricultural, total	NA	14,650	10,499	14,601	17,449	16,992	16,133	18,819
Biol (excl environmental)	NA	NA	NA	NA	NA	16,992	16,133	18,770
Environmental biology	NA	NA	NA	NA	NA	0	0	49
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	8,529	7,417	2,708	3,442	2,155	2,604	4,539
Clinical medical	NA	4,868	3,442	1,690	2,485	NA	NA	NA
Other medical	NA	3,661	3,975	1,018	957	NA	NA	NA
Life sciences, n.e.c.	NA	0	116	3,061	5,264	6,063	8,775	7,308
Psychology, total	NA	18,237	16,142	17,860	17,418	20,738	23,509	24,131
Biological aspects	NA	11,693	8,490	10,523	9,705	11,401	12,041	12,925
Social aspects	NA	6,544	7,652	7,337	7,713	9,337	11,372	11,024
Psychological sciences, n.e.c.	NA	0	0	0	0	0	96	182
Physical sciences, total	NA	197	298	45	31	15	212	512
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	197	298	45	31	15	212	512
Physics	NA	0	0	0	0	0	0	0
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	509	740	457	798	428	223	24
Mathematics	NA	NA	NA	457	798	428	0	0
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	223	24
Engineering, total	NA	0	0	0	0	103	28	49
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	0	0	0	0	103	28	49
Social sciences, total	NA	7,073	7,563	9,885	10,866	12,294	15,264	14,008
Anthropology	NA	682	1,184	2,028	1,396	1,999	2,016	568
Economics	NA	0	55	100	119	141	232	50
Political science	NA	0	56	0	115	85	231	298
Sociology	NA	5,409	2,770	6,615	8,198	9,126	11,363	11,476
Social sciences, n.e.c.	NA	982	3,498	1,142	1,038	943	1,422	1,616
History	NA	82	277	NA	NA	NA	NA	NA
Linguistics	NA	900	554	NA	NA	NA	NA	NA
Other social sciences	NA	0	2,667	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	0	1,535	285	561	0	1,122	2,456

See explanatory information, if any, and SOURCE at end of table.

Table 3F. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	67,111	67,130	75,783	84,625	100,036	106,982	147,125	179,428
Life sciences, total	31,704	34,005	42,781	47,161	56,630	61,695	87,259	109,760
Biol & agricultural, total	17,338	20,170	22,456	26,358	31,135	36,471	52,947	64,863
Biol (excl environmental)	17,310	20,170	22,456	26,029	31,072	36,330	52,850	64,632
Environmental biology	28	0	0	0	0	0	48	158
Agricultural	0	0	0	329	63	141	49	73
Medical sciences, total	12,113	12,076	16,517	18,905	24,075	23,259	32,001	39,583
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,253	1,759	3,808	1,898	1,420	1,965	2,311	5,314
Psychology, total	22,689	18,636	21,138	23,726	28,936	31,340	41,900	48,893
Biological aspects	12,258	11,120	13,150	14,722	18,302	19,928	25,324	30,160
Social aspects	9,999	7,162	7,588	8,655	10,582	11,355	16,024	17,832
Psychological sciences, n.e.c.	432	354	400	349	52	57	552	901
Physical sciences, total	232	305	282	244	313	317	1,013	969
Astronomy	0	0	0	0	0	0	0	0
Chemistry	232	305	282	244	313	317	1,013	969
Physics	0	0	0	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	0	239	93	194	144	166	315	286
Mathematics	0	239	93	174	0	166	315	286
Computer sciences	0	0	0	20	144	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	49	0	0	0	0	0	0	0
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	49	0	0	0	0	0	0	0
Social sciences, total	10,537	12,270	10,362	11,522	12,990	12,443	15,665	18,646
Anthropology	310	403	175	226	223	445	637	534
Economics	80	183	31	61	221	372	574	558
Political science	431	368	592	872	633	830	398	684
Sociology	8,224	9,481	8,104	8,631	9,238	8,412	10,653	12,674
Social sciences, n.e.c.	1,492	1,835	1,460	1,732	2,675	2,384	3,403	4,196
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,900	1,675	1,127	1,778	1,023	1,021	973	874

See explanatory information, if any, and SOURCE at end of table.

Table 3F. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	240,951	258,522	293,089	NA	NA	NA	NA	NA
Life sciences, total	152,346	163,026	185,020	NA	NA	NA	NA	NA
Biol & agricultural, total	92,501	89,601	103,610	NA	NA	NA	NA	NA
Biol (excl environmental)	92,052	89,344	103,072	NA	NA	NA	NA	NA
Environmental biology	224	195	135	NA	NA	NA	NA	NA
Agricultural	225	62	403	NA	NA	NA	NA	NA
Medical sciences, total	53,031	65,474	74,170	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	6,814	7,951	7,240	NA	NA	NA	NA	NA
Psychology, total	59,962	62,500	71,932	NA	NA	NA	NA	NA
Biological aspects	36,271	36,243	42,058	NA	NA	NA	NA	NA
Social aspects	22,802	25,210	28,942	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	889	1,047	932	NA	NA	NA	NA	NA
Physical sciences, total	859	809	1,052	NA	NA	NA	NA	NA
Astronomy	0	0	0	NA	NA	NA	NA	NA
Chemistry	859	809	1,052	NA	NA	NA	NA	NA
Physics	0	0	0	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, total	0	0	0	NA	NA	NA	NA	NA
Atmospheric sciences	0	0	0	NA	NA	NA	NA	NA
Geological sciences	0	0	0	NA	NA	NA	NA	NA
Oceanography	0	0	0	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Math & computer sciences, total	229	478	776	NA	NA	NA	NA	NA
Mathematics	229	478	776	NA	NA	NA	NA	NA
Computer sciences	0	0	0	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Engineering, total	0	0	0	NA	NA	NA	NA	NA
Aeronautical	0	0	0	NA	NA	NA	NA	NA
Astronautical	0	0	0	NA	NA	NA	NA	NA
Chemical	0	0	0	NA	NA	NA	NA	NA
Civil	0	0	0	NA	NA	NA	NA	NA
Electrical	0	0	0	NA	NA	NA	NA	NA
Mechanical	0	0	0	NA	NA	NA	NA	NA
Metallurgy & materials	0	0	0	NA	NA	NA	NA	NA
Engineering, n.e.c.	0	0	0	NA	NA	NA	NA	NA
Social sciences, total	26,107	26,184	30,089	NA	NA	NA	NA	NA
Anthropology	388	313	383	NA	NA	NA	NA	NA
Economics	967	1,209	790	NA	NA	NA	NA	NA
Political science	961	1,074	1,157	NA	NA	NA	NA	NA
Sociology	17,507	17,799	20,735	NA	NA	NA	NA	NA
Social sciences, n.e.c.	6,284	5,789	7,024	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,448	5,525	4,220	NA	NA	NA	NA	NA

See explanatory information, if any, and SOURCE at end of table.

**Table 3F. Federal obligations to universities and colleges for applied research,
by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, &
Mental Health Administration, fiscal years 1973-2003**

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	NA	NA	NA	NA	NA	NA	NA
Life sciences, total	NA	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	NA	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	NA	NA	NA	NA	NA	NA	NA
Environmental biology	NA	NA	NA	NA	NA	NA	NA
Agricultural	NA	NA	NA	NA	NA	NA	NA
Medical sciences, total	NA	NA	NA	NA	NA	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Psychology, total	NA	NA	NA	NA	NA	NA	NA
Biological aspects	NA	NA	NA	NA	NA	NA	NA
Social aspects	NA	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Physical sciences, total	NA	NA	NA	NA	NA	NA	NA
Astronomy	NA	NA	NA	NA	NA	NA	NA
Chemistry	NA	NA	NA	NA	NA	NA	NA
Physics	NA	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, total	NA	NA	NA	NA	NA	NA	NA
Atmospheric sciences	NA	NA	NA	NA	NA	NA	NA
Geological sciences	NA	NA	NA	NA	NA	NA	NA
Oceanography	NA	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	NA	NA	NA	NA	NA	NA	NA
Mathematics	NA	NA	NA	NA	NA	NA	NA
Computer sciences	NA	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Engineering, total	NA	NA	NA	NA	NA	NA	NA
Aeronautical	NA	NA	NA	NA	NA	NA	NA
Astronautical	NA	NA	NA	NA	NA	NA	NA
Chemical	NA	NA	NA	NA	NA	NA	NA
Civil	NA	NA	NA	NA	NA	NA	NA
Electrical	NA	NA	NA	NA	NA	NA	NA
Mechanical	NA	NA	NA	NA	NA	NA	NA
Metallurgy & materials	NA	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	NA	NA	NA	NA	NA	NA	NA
Social sciences, total	NA	NA	NA	NA	NA	NA	NA
Anthropology	NA	NA	NA	NA	NA	NA	NA
Economics	NA	NA	NA	NA	NA	NA	NA
Political science	NA	NA	NA	NA	NA	NA	NA
Sociology	NA	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	NA	NA	NA	NA	NA	NA

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3G. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	409,762	413,424	459,722	503,694	574,973	576,155	648,214
Life sciences, total	NA	364,852	368,113	409,336	448,489	511,968	494,934	588,770
Biol & agricultural, total	NA	134,115	135,314	150,467	164,859	188,160	191,111	261,910
Biol (excl environmental)	NA	NA	NA	NA	NA	188,160	191,111	261,910
Environmental biology	NA	NA	NA	NA	NA	0	0	0
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	220,493	222,463	247,376	271,038	309,412	286,107	307,956
Clinical medical	NA	220,493	222,463	247,376	271,038	NA	NA	NA
Other medical	NA	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	NA	10,244	10,336	11,493	12,592	14,396	17,716	18,904
Psychology, total	NA	5,655	5,705	6,344	6,951	7,921	20,642	8,093
Biological aspects	NA	0	0	0	0	0	0	0
Social aspects	NA	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	NA	5,655	5,705	6,344	6,951	7,921	20,642	8,093
Physical sciences, total	NA	7,540	7,607	8,459	9,268	10,555	14,451	13,558
Astronomy	NA	0	0	0	0	0	0	0
Chemistry	NA	7,171	7,235	8,045	8,815	10,061	13,757	12,554
Physics	NA	369	372	414	453	494	694	1,004
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	0
Environmental sciences, total	NA	0	0	0	0	0	0	0
Atmospheric sciences	NA	0	0	0	0	0	0	0
Geological sciences	NA	0	0	0	0	0	0	0
Oceanography	NA	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	NA	0	0	0	0	0	0	0
Math & computer sciences, total	NA	1,311	1,323	1,471	1,612	1,870	1,611	1,645
Mathematics	NA	NA	NA	1,471	1,612	1,870	1,611	1,645
Computer sciences	NA	NA	NA	0	0	0	0	0
Math & computer sciences, n.e.c.	NA	NA	NA	0	0	0	0	0
Engineering, total	NA	10,981	11,080	12,321	13,499	15,406	17,285	9,604
Aeronautical	NA	0	0	0	0	0	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	0	0	0	0	0	0	0
Civil	NA	0	0	0	0	0	0	0
Electrical	NA	0	0	0	0	0	0	0
Mechanical	NA	0	0	0	0	0	0	0
Metallurgy & materials	NA	0	0	0	0	0	0	0
Engineering, n.e.c.	NA	10,981	11,080	12,321	13,499	15,406	17,285	9,604
Social sciences, total	NA	5,204	5,250	5,839	6,397	7,324	7,677	3,518
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	0	0	0	0	0	0	0
Political science	NA	0	0	0	0	0	0	0
Sociology	NA	0	0	0	0	0	0	0
Social sciences, n.e.c.	NA	5,204	5,250	5,839	6,397	7,324	7,677	3,518
History	NA	0	0	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	5,204	5,250	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	14,219	14,346	15,952	17,478	19,929	19,555	23,026

See explanatory information, if any, and SOURCE at end of table.

Table 3G. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	662,737	584,278	616,663	684,616	782,819	815,995	986,189	1,091,809
Life sciences, total	607,898	520,354	544,989	590,788	680,011	711,200	855,198	994,783
Biol & agricultural, total	282,418	196,667	203,357	224,053	260,008	299,372	377,775	512,679
Biol (excl environmental)	282,418	196,590	203,238	223,915	259,934	299,286	377,690	512,645
Environmental biology	0	77	119	138	74	86	85	34
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	308,271	305,710	323,880	347,385	394,552	387,973	451,200	455,044
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	17,209	17,977	17,752	19,350	25,451	23,855	26,223	27,060
Psychology, total	8,711	13,707	17,460	21,653	27,384	30,607	41,362	26,740
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	8,711	13,707	17,460	21,653	27,384	30,607	41,362	26,740
Physical sciences, total	12,943	8,652	10,577	12,073	14,680	16,697	18,943	18,208
Astronomy	0	0	0	0	0	0	0	0
Chemistry	12,390	8,250	9,741	11,739	13,662	15,718	17,570	17,552
Physics	553	402	836	334	1,018	958	1,350	624
Physical sciences, n.e.c.	0	0	0	0	0	21	23	32
Environmental sciences, total	0	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0	0
Math & computer sciences, total	1,745	1,438	1,885	2,805	1,332	1,925	1,124	2,167
Mathematics	1,745	1,438	1,885	2,805	1,332	1,925	1,100	2,106
Computer sciences	0	0	0	0	0	0	24	61
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	9,017	10,431	8,865	11,527	9,790	9,898	14,122	11,215
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	9,017	10,431	8,865	11,527	9,790	9,898	14,122	11,215
Social sciences, total	3,768	8,528	9,473	15,610	16,284	14,736	16,813	8,958
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	3,768	8,528	9,473	15,610	16,284	14,736	16,813	8,958
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	18,655	21,168	23,414	30,160	33,338	30,932	38,627	29,738

See explanatory information, if any, and SOURCE at end of table.

Table 3G. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	1,206,661	1,186,398	1,267,783	1,327,544	1,676,402	1,837,307	1,925,342	1,932,429
Life sciences, total	1,103,218	1,083,647	1,147,045	1,193,223	1,420,932	1,547,435	1,612,859	1,679,861
Biol & agricultural, total	564,980	551,222	576,591	593,571	660,686	717,219	717,960	832,297
Biol (excl environmental)	564,940	551,137	576,460	593,511	660,609	717,162	717,951	832,283
Environmental biology	40	85	131	60	77	57	9	14
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	501,083	500,903	545,210	585,469	742,408	816,559	856,970	793,842
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	37,155	31,522	25,244	14,183	17,838	13,657	37,929	53,722
Psychology, total	27,131	28,104	30,923	32,574	111,575	128,947	105,701	71,886
Biological aspects	0	0	0	0	0	0	0	2,705
Social aspects	0	0	0	0	0	0	0	1,159
Psychological sciences, n.e.c.	27,131	28,104	30,923	32,574	111,575	128,947	105,701	68,022
Physical sciences, total	15,141	15,152	14,489	14,909	15,647	16,078	21,371	30,146
Astronomy	0	0	0	0	0	0	0	0
Chemistry	14,168	14,105	13,430	13,889	14,668	14,972	18,483	26,861
Physics	921	1,047	1,059	1,020	979	1,106	2,888	3,285
Physical sciences, n.e.c.	52	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	6,739	5,797
Atmospheric sciences	0	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	6,739	5,797
Math & computer sciences, total	1,391	1,490	1,664	1,706	2,110	2,774	15,980	16,426
Mathematics	1,357	1,490	1,664	1,706	2,110	2,744	7,894	7,923
Computer sciences	34	0	0	0	0	30	8,086	8,503
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0	0
Engineering, total	9,607	9,997	11,840	13,263	14,376	14,818	25,607	27,827
Aeronautical	0	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0	0
Engineering, n.e.c.	9,607	9,997	11,840	13,263	14,376	14,818	25,607	27,827
Social sciences, total	7,294	8,205	9,568	9,943	26,837	28,127	25,800	17,778
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	7,294	8,205	9,568	9,943	26,837	28,127	25,800	17,778
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	42,879	39,803	52,254	61,926	84,925	99,128	111,285	82,708

See explanatory information, if any, and SOURCE at end of table.

Table 3G. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	2,066,746	2,248,050	2,433,388	4,095,183	4,669,365	5,313,559	6,168,295
Life sciences, total	1,839,738	2,000,990	2,165,959	3,089,673	4,163,827	4,738,619	5,500,870
Biol & agricultural, total	1,008,665	1,097,074	1,187,521	1,995,566	3,753,729	NA	NA
Biol (excl environmental)	1,008,665	1,097,074	1,187,521	1,995,566	3,753,729	NA	NA
Environmental biology	0	0	0	0	0	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	773,010	840,764	910,080	873,577	314,840	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	58,063	63,152	68,358	220,530	95,258	NA	NA
Psychology, total	82,936	90,146	97,578	408,690	179,707	204,379	237,255
Biological aspects	3,317	3,593	3,889	0	0	NA	NA
Social aspects	1,659	1,539	1,666	0	0	NA	NA
Psychological sciences, n.e.c.	77,960	85,014	92,023	408,690	179,707	NA	NA
Physical sciences, total	31,186	33,945	36,744	170,537	43,377	49,332	57,268
Astronomy	0	0	0	0	0	NA	NA
Chemistry	30,117	32,781	35,484	165,947	39,945	NA	NA
Physics	1,069	1,164	1,260	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	4,590	3,432	NA	NA
Environmental sciences, total	5,605	6,070	6,570	101,040	98,818	112,384	130,462
Atmospheric sciences	0	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	0	NA	NA
Oceanography	0	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	5,605	6,070	6,570	101,040	98,818	NA	NA
Math & computer sciences, total	6,361	6,969	7,544	35,128	16,687	18,978	22,030
Mathematics	3,053	3,345	3,621	35,128	16,687	NA	NA
Computer sciences	3,308	3,624	3,923	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	15,577	16,860	18,250	107,515	27,438	31,204	36,224
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	0	0	0	0	0	NA	NA
Civil	0	0	0	0	0	NA	NA
Electrical	0	0	0	0	0	NA	NA
Mechanical	0	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	14,555	11,888	NA	NA
Engineering, n.e.c.	15,577	16,860	18,250	92,960	15,550	NA	NA
Social sciences, total	17,503	19,108	20,683	64,952	42,612	48,462	56,258
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	17,503	19,108	20,683	64,952	42,612	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	67,840	73,962	80,060	117,648	96,899	110,201	127,928

KEY: HHS = Department of Health & Human Services
 NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
 n.e.c. = Not elsewhere classified

NOTES: Data shown for fiscal years 1973-78 represent obligations of the Department of Health, Education, and Welfare. In 1979 the Department of Health, Education, and Welfare reorganized to become the Department of Health & Human Services and the Department of Education.

Due to reorganization within the Department of Health & Human Services, the Alcohol, Drug Abuse, & Mental Health Administration ceased to exist as of October 1992, and its research and development functions are reported with the National Institutes of Health data beginning with fiscal year 1992. However, research support for some fields (such as psychology) in fiscal year 1992 seems to be underreported.

Beginning in the fiscal year 2000, the National Institutes of Health classified all of its development activities as research.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 3H. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	23,674	26,169	30,679	33,071	27,957	28,511	33,353
Life sciences, total	NA	2,493	2,770	2,305	3,312	3,011	2,502	2,204
Biol & agricultural, total	NA	376	500	381	627	481	129	188
Biol (excl environmental)	NA	NA	NA	NA	NA	481	125	178
Environmental biology	NA	NA	NA	NA	NA	0	0	10
Agricultural	NA	NA	NA	NA	NA	0	4	0
Medical sciences, total	NA	1,496	1,041	1,191	1,956	2,530	1,562	1,126
Clinical medical	NA	720	749	875	982	NA	NA	NA
Other medical	NA	776	292	316	974	NA	NA	NA
Life sciences, n.e.c.	NA	621	1,229	733	729	0	811	890
Psychology, total	NA	188	237	93	261	458	193	158
Biological aspects	NA	0	10	0	25	0	0	0
Social aspects	NA	140	51	0	18	0	35	0
Psychological sciences, n.e.c.	NA	48	176	93	218	458	158	158
Physical sciences, total	NA	5,718	5,366	7,492	7,461	6,367	7,126	10,091
Astronomy	NA	906	1,692	2,287	2,595	1,497	2,436	4,614
Chemistry	NA	521	736	519	682	339	203	270
Physics	NA	2,397	2,038	3,621	2,266	3,631	3,701	3,902
Physical sciences, n.e.c.	NA	1,894	900	1,065	1,918	900	786	1,305
Environmental sciences, total	NA	7,713	7,813	10,590	11,427	8,388	10,246	9,917
Atmospheric sciences	NA	3,599	2,816	4,585	5,610	4,177	5,845	5,547
Geological sciences	NA	1,498	1,251	1,586	1,114	359	316	896
Oceanography	NA	64	218	148	103	18	346	291
Environmental sciences, n.e.c.	NA	2,552	3,528	4,271	4,600	3,834	3,739	3,183
Math & computer sciences, total	NA	531	1,157	906	715	350	409	910
Mathematics	NA	NA	NA	0	218	37	125	181
Computer sciences	NA	NA	NA	0	497	313	284	635
Math & computer sciences, n.e.c.	NA	NA	NA	906	0	0	0	94
Engineering, total	NA	6,723	7,649	7,863	8,174	7,992	6,997	9,439
Aeronautical	NA	2,570	3,072	2,606	2,514	2,298	2,157	2,629
Astronautical	NA	445	416	436	335	35	193	240
Chemical	NA	220	297	403	280	206	13	33
Civil	NA	102	165	61	76	30	0	0
Electrical	NA	1,242	1,172	1,989	2,265	2,303	1,406	2,203
Mechanical	NA	419	558	848	763	530	941	1,614
Metallurgy & materials	NA	530	985	664	716	430	240	481
Engineering, n.e.c.	NA	1,195	984	856	1,225	2,160	2,047	2,239
Social sciences, total	NA	110	301	183	76	49	15	30
Anthropology	NA	0	0	0	0	0	0	0
Economics	NA	74	0	86	0	0	0	0
Political science	NA	30	211	57	30	29	15	0
Sociology	NA	0	0	0	0	0	0	0
Social sciences, n.e.c.	NA	6	90	40	46	20	0	30
History	NA	6	47	NA	NA	NA	NA	NA
Linguistics	NA	0	0	NA	NA	NA	NA	NA
Other social sciences	NA	0	43	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	198	876	1,247	1,645	1,342	1,023	604

See explanatory information, if any, and SOURCE at end of table.

Table 3H. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	32,734	29,976	29,600	28,445	36,535	41,906	42,964	54,749
Life sciences, total	1,727	2,086	2,540	2,464	4,401	5,383	4,579	2,701
Biol & agricultural, total	168	471	450	787	2,337	3,169	3,059	1,726
Biol (excl environmental)	118	411	450	616	1,974	2,828	2,825	1,654
Environmental biology	0	20	0	47	247	280	184	7
Agricultural	50	40	0	124	116	61	50	65
Medical sciences, total	992	756	522	650	578	1,170	675	667
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	567	859	1,568	1,027	1,486	1,044	845	308
Psychology, total	189	152	102	192	176	77	174	150
Biological aspects	0	0	19	20	0	0	25	27
Social aspects	0	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	189	152	83	172	176	77	149	123
Physical sciences, total	9,098	5,297	5,252	5,320	8,402	10,561	14,427	17,611
Astronomy	5,425	2,981	1,645	1,420	678	817	782	1,549
Chemistry	575	425	271	223	182	276	371	156
Physics	2,162	1,184	2,048	2,398	5,873	7,846	11,539	14,056
Physical sciences, n.e.c.	936	707	1,288	1,279	1,669	1,622	1,735	1,850
Environmental sciences, total	9,234	7,983	7,880	4,962	6,353	6,237	4,261	3,592
Atmospheric sciences	4,925	4,376	4,852	3,417	2,969	5,489	3,034	2,906
Geological sciences	751	253	182	390	1,415	210	276	99
Oceanography	100	240	15	4	0	0	205	32
Environmental sciences, n.e.c.	3,458	3,114	2,831	1,151	1,969	538	746	555
Math & computer sciences, total	1,069	1,487	1,259	1,782	2,377	2,043	1,994	1,968
Mathematics	86	124	77	33	96	40	65	150
Computer sciences	860	1,272	1,062	1,557	1,819	1,540	1,315	1,672
Math & computer sciences, n.e.c.	123	91	120	192	462	463	614	146
Engineering, total	10,245	11,846	11,872	13,097	14,020	17,176	16,902	28,242
Aeronautical	2,927	3,781	3,797	3,669	4,117	3,733	5,195	7,679
Astronautical	298	406	652	350	197	92	222	596
Chemical	12	45	91	0	121	94	157	388
Civil	0	0	0	0	42	0	0	7
Electrical	1,975	1,960	1,436	1,888	1,861	2,026	1,778	2,026
Mechanical	2,240	2,687	1,883	1,900	2,099	2,162	1,849	1,651
Metallurgy & materials	468	467	1,193	628	396	3,553	2,758	4,506
Engineering, n.e.c.	2,325	2,500	2,820	4,662	5,187	5,516	4,943	11,389
Social sciences, total	0	13	0	0	3	3	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	0	0	3	3	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	13	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,172	1,112	695	628	803	426	627	485

See explanatory information, if any, and SOURCE at end of table.

Table 3H. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	88,416	113,906	116,576	109,412	117,998	133,890	107,421	81,718
Life sciences, total	4,103	4,868	7,676	6,414	7,209	8,911	10,018	13,721
Biol & agricultural, total	3,059	3,751	6,278	5,087	4,554	5,626	6,908	10,089
Biol (excl environmental)	2,760	3,286	5,728	4,912	4,401	3,966	5,895	9,256
Environmental biology	261	465	510	175	153	215	39	40
Agricultural	38	0	40	0	0	1,445	974	793
Medical sciences, total	628	344	464	204	1,232	2,151	2,330	2,199
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	416	773	934	1,123	1,423	1,134	780	1,433
Psychology, total	123	170	220	219	1,060	1,724	2,252	1,541
Biological aspects	0	0	0	0	0	0	0	0
Social aspects	40	40	40	62	110	0	2,177	0
Psychological sciences, n.e.c.	83	130	180	157	950	1,724	75	1,541
Physical sciences, total	25,149	40,952	45,150	46,094	59,478	65,895	43,808	27,350
Astronomy	1,614	3,994	7,117	7,718	9,603	12,952	26,029	20,148
Chemistry	89	145	105	138	304	289	591	225
Physics	22,114	35,468	36,670	36,624	48,484	50,490	15,936	5,104
Physical sciences, n.e.c.	1,332	1,345	1,258	1,614	1,087	2,164	1,252	1,873
Environmental sciences, total	3,490	7,246	14,940	6,833	4,640	6,831	9,176	8,231
Atmospheric sciences	2,320	3,325	3,834	4,551	3,326	4,396	4,989	3,472
Geological sciences	186	80	30	184	116	102	171	150
Oceanography	106	0	0	65	50	136	131	598
Environmental sciences, n.e.c.	878	3,841	11,076	2,033	1,148	2,197	3,885	4,011
Math & computer sciences, total	3,039	2,146	2,096	2,429	4,831	7,119	6,261	5,527
Mathematics	112	45	0	0	0	0	80	100
Computer sciences	2,198	1,878	1,654	1,696	2,419	4,941	5,061	4,480
Math & computer sciences, n.e.c.	729	223	442	733	2,412	2,178	1,120	947
Engineering, total	46,867	52,887	41,829	40,904	35,745	37,179	30,972	21,414
Aeronautical	13,819	17,262	8,815	7,241	6,333	7,476	4,886	4,954
Astronautical	1,195	1,830	2,628	3,432	1,417	4,351	1,085	1,163
Chemical	478	438	40	10	215	344	497	258
Civil	0	0	0	0	0	1,044	1,040	40
Electrical	2,314	2,273	2,486	2,144	2,576	3,731	2,953	2,554
Mechanical	2,407	1,837	2,122	1,801	2,432	1,919	1,974	1,905
Metallurgy & materials	5,853	9,963	10,439	6,715	7,282	3,378	10,251	6,124
Engineering, n.e.c.	20,801	19,284	15,299	19,561	15,490	14,936	8,286	4,416
Social sciences, total	0	0	36	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0	0
Economics	0	0	36	0	0	0	0	0
Political science	0	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0	0
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	5,645	5,637	4,629	6,519	5,035	6,231	4,934	3,934

See explanatory information, if any, and SOURCE at end of table.

Table 3H. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	76,267	152,006	187,243	201,250	227,955	227,955	227,955
Life sciences, total	10,571	14,431	15,851	12,264	13,116	13,116	13,116
Biol & agricultural, total	1,087	3,519	5,198	5,873	6,711	NA	NA
Biol (excl environmental)	952	2,863	4,987	1,809	2,847	NA	NA
Environmental biology	135	656	211	3,564	3,439	NA	NA
Agricultural	0	0	0	500	425	NA	NA
Medical sciences, total	1,185	1,447	1,476	697	492	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	8,299	9,465	9,177	5,694	5,913	NA	NA
Psychology, total	1,726	1,992	3,628	1,848	1,597	1,597	1,597
Biological aspects	0	0	0	416	273	NA	NA
Social aspects	154	389	2,074	145	180	NA	NA
Psychological sciences, n.e.c.	1,572	1,603	1,554	1,287	1,144	NA	NA
Physical sciences, total	20,312	82,881	99,573	90,316	112,053	112,053	112,053
Astronomy	14,668	25,215	24,447	83,604	105,629	NA	NA
Chemistry	573	509	8,212	546	517	NA	NA
Physics	3,545	55,188	59,080	4,065	2,431	NA	NA
Physical sciences, n.e.c.	1,526	1,969	7,834	2,101	3,476	NA	NA
Environmental sciences, total	10,415	12,638	15,728	26,389	36,621	36,621	36,621
Atmospheric sciences	7,662	4,587	7,412	9,925	9,844	NA	NA
Geological sciences	279	459	604	461	618	NA	NA
Oceanography	319	246	159	32	4,780	NA	NA
Environmental sciences, n.e.c.	2,155	7,346	7,553	15,971	21,379	NA	NA
Math & computer sciences, total	4,633	6,235	8,171	8,041	16,535	16,535	16,535
Mathematics	50	100	48	0	198	NA	NA
Computer sciences	4,292	5,334	7,483	4,805	13,500	NA	NA
Math & computer sciences, n.e.c.	291	801	640	3,236	2,837	NA	NA
Engineering, total	23,924	25,829	36,890	55,679	40,678	40,678	40,678
Aeronautical	7,351	9,265	8,866	9,101	8,660	NA	NA
Astronautical	4,179	3,887	11,286	30,395	18,247	NA	NA
Chemical	318	347	222	440	166	NA	NA
Civil	40	0	27	0	0	NA	NA
Electrical	2,427	2,694	2,788	3,737	4,476	NA	NA
Mechanical	1,749	1,336	1,878	1,364	1,454	NA	NA
Metallurgy & materials	1,590	1,541	2,860	2,619	3,526	NA	NA
Engineering, n.e.c.	6,270	6,759	8,963	8,023	4,149	NA	NA
Social sciences, total	0	0	0	0	100	100	100
Anthropology	0	0	0	0	0	NA	NA
Economics	0	0	0	0	0	NA	NA
Political science	0	0	0	0	0	NA	NA
Sociology	0	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	100	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	4,686	8,000	7,402	6,713	7,255	7,255	7,255

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: Beginning in fiscal year 2000, the National Aeronautics & Space Administration reclassified Space Station as a physical asset and Space Station Research as equipment, and transferred funding for the program from R&D to R&D plant.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003

Table 31. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1973	1974	1975	1976	1977	1978	1979	1980
Total, all fields	NA	61,988	41,054	36,837	29,778	32,143	38,084	37,111
Life sciences, total	NA	10,568	3,428	3,904	2,389	1,354	2,700	6,494
Biol & agricultural, total	NA	10,560	3,428	3,894	2,389	48	153	6,394
Biol (excl environmental)	NA	NA	NA	NA	NA	48	153	4,652
Environmental biology	NA	NA	NA	NA	NA	0	0	1,742
Agricultural	NA	NA	NA	NA	NA	0	0	0
Medical sciences, total	NA	8	0	0	0	0	0	0
Clinical medical	NA	8	0	0	0	NA	NA	NA
Other medical	NA	0	0	0	0	NA	NA	NA
Life sciences, n.e.c.	NA	0	0	10	0	1,306	2,547	100
Psychology, total	NA	870	594	0	0	0	318	1,404
Biological aspects	NA	670	431	0	0	0	0	333
Social aspects	NA	200	163	0	0	0	318	1,071
Psychological sciences, n.e.c.	NA	0	0	0	0	0	0	0
Physical sciences, total	NA	3,634	5,398	2,838	3,100	3,521	5,864	3,787
Astronomy	NA	0	0	0	0	0	0	25
Chemistry	NA	2,104	3,100	1,457	1,823	1,956	3,454	1,795
Physics	NA	1,530	2,298	1,381	1,277	1,565	2,410	1,547
Physical sciences, n.e.c.	NA	0	0	0	0	0	0	420
Environmental sciences, total	NA	7,147	5,865	4,916	2,173	1,488	2,054	1,808
Atmospheric sciences	NA	4,242	3,739	3,171	1,365	94	71	65
Geological sciences	NA	1,550	1,734	1,505	808	1,305	1,727	1,328
Oceanography	NA	1,355	392	230	0	0	42	15
Environmental sciences, n.e.c.	NA	0	0	10	0	89	214	400
Math & computer sciences, total	NA	305	682	932	836	557	1,477	1,434
Mathematics	NA	NA	NA	86	170	197	317	196
Computer sciences	NA	NA	NA	731	666	360	1,160	1,223
Math & computer sciences, n.e.c.	NA	NA	NA	115	0	0	0	15
Engineering, total	NA	14,662	11,820	8,588	8,114	10,105	11,773	9,472
Aeronautical	NA	0	0	0	90	115	0	0
Astronautical	NA	0	0	0	0	0	0	0
Chemical	NA	750	412	478	540	589	391	270
Civil	NA	750	412	497	590	835	6,496	5,247
Electrical	NA	750	412	478	541	653	120	415
Mechanical	NA	750	412	492	613	649	26	227
Metallurgy & materials	NA	2,763	1,256	1,180	791	862	1,798	2,558
Engineering, n.e.c.	NA	8,899	8,916	5,463	4,949	6,402	2,942	755
Social sciences, total	NA	9,349	7,534	10,581	9,682	8,872	9,361	7,553
Anthropology	NA	0	326	30	0	0	0	60
Economics	NA	970	1,074	363	859	920	1,401	3,396
Political science	NA	470	173	53	104	211	280	274
Sociology	NA	0	310	160	156	254	285	500
Social sciences, n.e.c.	NA	7,909	5,651	9,975	8,563	7,487	7,395	3,323
History	NA	0	103	NA	NA	NA	NA	NA
Linguistics	NA	195	168	NA	NA	NA	NA	NA
Other social sciences	NA	7,714	5,380	NA	NA	NA	NA	NA
Other sciences, n.e.c.	NA	15,453	5,733	5,078	3,484	6,246	4,537	5,159

See explanatory information, if any, and SOURCE at end of table.

Table 31. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1981	1982	1983	1984	1985	1986	1987	1988
Total, all fields	29,905	39,037	46,600	48,483	58,670	54,553	74,265	73,242
Life sciences, total	2,019	10,100	9,701	9,253	10,257	8,411	9,695	7,071
Biol & agricultural, total	1,938	9,966	9,701	9,253	8,833	7,020	7,648	7,038
Biol (excl environmental)	1,265	4,168	4,166	4,039	3,593	2,789	3,031	2,835
Environmental biology	673	5,780	5,435	5,129	5,240	4,231	4,617	4,203
Agricultural	0	18	100	85	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	81	134	0	0	1,424	1,391	2,047	33
Psychology, total	777	214	138	142	319	208	147	26
Biological aspects	158	66	90	103	164	43	80	1
Social aspects	594	97	40	38	155	55	23	16
Psychological sciences, n.e.c.	25	51	8	1	0	110	44	9
Physical sciences, total	1,634	5,184	7,535	9,372	10,010	9,859	12,345	8,644
Astronomy	52	12	29	15	0	38	24	6
Chemistry	703	2,309	3,292	2,644	2,353	2,127	2,711	3,976
Physics	537	2,783	4,133	6,696	7,657	7,455	7,080	4,413
Physical sciences, n.e.c.	342	80	81	17	0	239	2,530	249
Environmental sciences, total	1,386	3,100	3,292	3,614	3,045	3,301	3,527	3,238
Atmospheric sciences	15	842	1,008	588	796	1,022	1,677	1,562
Geological sciences	703	1,613	1,623	2,392	1,124	1,201	1,226	1,149
Oceanography	359	192	622	624	764	1,076	624	524
Environmental sciences, n.e.c.	309	453	39	10	361	2	0	3
Math & computer sciences, total	1,547	1,547	2,133	911	1,279	1,025	1,752	2,083
Mathematics	74	357	491	161	266	306	228	135
Computer sciences	569	1,190	1,642	750	1,013	719	1,524	1,948
Math & computer sciences, n.e.c.	904	0	0	0	0	0	0	0
Engineering, total	8,776	13,435	14,761	17,338	24,431	24,142	35,876	42,033
Aeronautical	0	12	3	40	50	38	52	83
Astronautical	15	1	0	0	0	0	0	0
Chemical	837	1,804	1,765	2,510	4,854	5,023	8,155	7,437
Civil	4,643	4,733	5,221	5,665	5,644	3,894	7,031	4,699
Electrical	1,298	3,321	3,384	4,122	5,931	7,657	10,999	13,098
Mechanical	681	1,193	1,089	2,642	3,528	3,440	5,530	6,922
Metallurgy & materials	809	1,709	2,430	1,542	2,622	2,271	1,801	3,554
Engineering, n.e.c.	493	662	869	817	1,802	1,819	2,308	6,240
Social sciences, total	5,893	3,926	4,836	3,770	4,623	4,156	6,230	5,349
Anthropology	12	76	132	144	453	389	359	162
Economics	2,829	1,767	1,766	1,290	1,424	1,564	3,515	3,043
Political science	236	343	413	379	520	418	281	339
Sociology	356	470	513	573	810	529	585	404
Social sciences, n.e.c.	2,460	1,270	2,012	1,384	1,416	1,256	1,490	1,401
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	7,873	1,531	4,204	4,083	4,706	3,451	4,693	4,798

See explanatory information, if any, and SOURCE at end of table.

Table 3I. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

Field of science & engineering	1989	1990	1991	1992	1993	1994	1995	1996
Total, all fields	80,480	84,433	88,693	104,251	114,784	126,265	135,208	120,234
Life sciences, total	7,326	8,489	8,282	12,062	12,424	15,488	13,678	9,730
Biol & agricultural, total	7,289	8,473	8,242	12,046	10,891	14,761	11,520	9,730
Biol (excl environmental)	3,002	5,175	4,359	6,892	7,999	10,522	4,535	2,506
Environmental biology	4,287	3,298	3,883	5,154	2,892	4,239	6,985	7,224
Agricultural	0	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	37	16	40	16	1,533	727	2,158	0
Psychology, total	27	55	174	1,446	3,936	5,067	2,044	4,093
Biological aspects	1	19	23	132	124	7	500	0
Social aspects	17	36	73	223	108	537	840	1,651
Psychological sciences, n.e.c.	9	0	78	1,091	3,704	4,523	704	2,442
Physical sciences, total	8,770	13,182	10,415	15,174	13,992	16,210	12,993	12,386
Astronomy	147	256	65	550	41	93	10	12
Chemistry	4,113	4,829	4,312	7,369	3,397	9,531	6,564	7,345
Physics	4,374	5,492	5,399	6,844	2,038	4,404	3,514	2,730
Physical sciences, n.e.c.	136	2,605	639	411	8,516	2,182	2,905	2,299
Environmental sciences, total	3,670	3,320	2,357	2,292	3,012	4,028	3,096	3,065
Atmospheric sciences	1,108	738	527	634	116	386	28	25
Geological sciences	930	624	768	781	1,045	1,594	1,849	1,539
Oceanography	1,628	1,874	787	515	1,092	1,298	668	1,462
Environmental sciences, n.e.c.	4	84	275	362	759	750	551	39
Math & computer sciences, total	2,677	10,960	6,514	17,700	12,891	14,491	9,126	6,200
Mathematics	140	1,142	1,190	1,213	1,093	1,223	1,435	309
Computer sciences	2,537	9,818	5,324	15,820	6,798	9,868	3,941	5,891
Math & computer sciences, n.e.c.	0	0	0	667	5,000	3,400	3,750	0
Engineering, total	46,667	32,323	49,681	43,420	53,498	53,531	81,502	70,549
Aeronautical	91	97	144	130	79	77	0	0
Astronautical	0	0	0	0	0	0	0	0
Chemical	8,162	7,528	10,601	9,377	9,484	8,627	14,734	9,853
Civil	5,235	3,405	4,625	4,951	3,483	3,486	4,534	4,975
Electrical	14,535	8,176	10,700	10,724	7,582	7,565	9,933	737
Mechanical	7,585	5,666	5,899	6,740	6,493	7,155	12,205	933
Metallurgy & materials	3,738	2,065	3,659	3,122	3,290	8,183	15,542	2,481
Engineering, n.e.c.	7,321	5,386	14,053	8,376	23,087	18,438	24,554	51,570
Social sciences, total	5,471	8,904	5,041	6,556	7,216	7,447	8,586	6,857
Anthropology	0	12	683	647	235	759	726	589
Economics	3,271	2,880	1,346	2,126	2,300	1,244	1,799	1,733
Political science	339	754	467	541	576	442	605	403
Sociology	417	1,073	1,050	1,031	1,139	1,034	1,323	333
Social sciences, n.e.c.	1,444	4,185	1,495	2,211	2,966	3,968	4,133	3,799
History	NA	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	5,872	7,200	6,229	5,601	7,815	10,003	4,183	7,354

See explanatory information, if any, and SOURCE at end of table.

Table 3I. Federal obligations to universities and colleges for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1973-2003

[Dollars in thousands]

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Field of science & engineering	1997	1998	1999	2000	2001	Preliminary	
						2002	2003
Total, all fields	129,693	99,012	109,458	136,080	126,141	133,622	138,515
Life sciences, total	9,013	13,870	14,847	12,519	11,073	11,729	12,159
Biol & agricultural, total	9,013	13,870	14,847	12,519	11,073	NA	NA
Biol (excl environmental)	982	5,292	4,110	2,383	1,888	NA	NA
Environmental biology	8,031	8,578	10,737	10,136	9,185	NA	NA
Agricultural	0	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	NA	NA
Psychology, total	53	18	0	17	20	21	22
Biological aspects	0	0	0	0	0	NA	NA
Social aspects	53	18	0	17	20	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	0	NA	NA
Physical sciences, total	13,386	14,760	14,578	17,120	17,596	18,639	19,322
Astronomy	7	1	0	595	2,759	NA	NA
Chemistry	4,551	5,084	7,462	8,179	5,827	NA	NA
Physics	2,346	4,536	2,887	4,315	4,523	NA	NA
Physical sciences, n.e.c.	6,482	5,139	4,229	4,031	4,487	NA	NA
Environmental sciences, total	3,007	1,304	140	1,419	2,721	2,882	2,987
Atmospheric sciences	47	52	2	204	212	NA	NA
Geological sciences	742	567	33	237	259	NA	NA
Oceanography	2,184	579	105	286	1,149	NA	NA
Environmental sciences, n.e.c.	34	106	0	692	1,101	NA	NA
Math & computer sciences, total	3,904	5,151	6,615	16,871	13,049	13,823	14,330
Mathematics	183	196	9	66	64	NA	NA
Computer sciences	3,721	4,955	6,606	16,805	12,985	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	0	NA	NA
Engineering, total	77,171	45,868	62,569	66,939	64,989	68,843	71,364
Aeronautical	0	0	0	0	0	NA	NA
Astronautical	0	0	0	0	0	NA	NA
Chemical	9,828	8,650	8,219	8,591	8,902	NA	NA
Civil	8,773	14,199	7,312	7,291	7,445	NA	NA
Electrical	629	450	8,479	12,736	11,790	NA	NA
Mechanical	1,089	996	953	1,090	899	NA	NA
Metallurgy & materials	3,081	3,871	2,378	1,816	2,032	NA	NA
Engineering, n.e.c.	53,771	17,702	35,228	35,415	33,921	NA	NA
Social sciences, total	8,194	7,824	10,074	11,016	11,201	11,865	12,299
Anthropology	548	576	256	640	647	NA	NA
Economics	2,230	2,240	2,279	2,782	3,238	NA	NA
Political science	560	531	563	531	697	NA	NA
Sociology	831	774	804	870	715	NA	NA
Social sciences, n.e.c.	4,025	3,703	6,172	6,193	5,904	NA	NA
History	NA	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	14,965	10,217	635	10,179	5,492	5,820	6,032

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal year, or that the agency or subagency did not exist as such or in that organization in that year)
n.e.c. = Not elsewhere classified

NOTE: The National Science Foundation has made changes to its field of science and engineering coding system, producing changes to some of the fiscal year 1996 field of science data (such as mechanical engineering). These changes are reflected in the historical data tables.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Federal Funds for Research and Development: Fiscal Years 2001, 2002, and 2003