

Federal Funds for Research and Development :

Fiscal Years 1970–2003

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

Detailed Statistical Tables

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National Science Foundation



August 2004

National Science Foundation

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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 1970–2003. They reflect research funding levels as reported by Federal agencies in the survey series. All agencies that were identified as conducting R&D programs were surveyed.

Research totals in these tables are given in obligations. 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 1970 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 judgment of 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 1970 through 2001 and those estimated for fiscal years 2002 and 2003.
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.

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.

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 for total research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	4,900,798	5,123,171	5,547,696	5,581,429	6,175,240	6,729,708	7,619,332
Life sciences, total	1,439,815	1,587,773	1,848,951	1,931,101	2,265,140	2,455,195	2,649,696
Biol & agricultural, total	865,630	942,832	1,079,707	1,123,238	1,316,179	1,452,179	1,535,798
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	542,795	596,717	713,194	758,585	910,836	951,095	1,042,935
Clinical medical	374,252	391,019	464,191	494,240	565,660	550,563	586,666
Other medical	168,543	205,698	249,003	264,345	345,176	400,532	456,269
Life sciences, n.e.c.	31,390	48,224	56,050	49,278	38,125	51,921	70,963
Psychology, total	107,577	108,029	116,326	109,924	133,419	139,192	143,996
Biological aspects	32,345	31,337	36,894	32,407	49,322	37,442	43,816
Social aspects	53,460	54,066	50,725	47,702	51,962	57,069	54,920
Psychological sciences, n.e.c.	21,772	22,626	28,707	29,815	32,135	44,681	45,260
Physical sciences, total	946,246	905,380	1,020,342	981,740	1,016,069	1,096,644	1,258,892
Astronomy	136,455	126,852	136,405	123,085	136,030	168,319	163,093
Chemistry	227,536	205,519	246,837	262,485	280,366	285,554	328,444
Physics	554,570	528,783	573,591	543,236	556,641	594,954	709,263
Physical sciences, n.e.c.	27,685	44,226	63,509	52,934	43,032	47,817	58,092
Environmental sciences, total	485,567	534,346	567,599	580,527	636,327	727,269	769,284
Atmospheric sciences	232,780	259,873	241,330	246,590	288,296	302,248	289,312
Geological sciences	152,809	156,010	161,091	168,390	157,063	191,713	227,162
Oceanography	79,752	95,833	116,453	97,888	120,014	143,792	163,967
Environmental sciences, n.e.c.	20,226	22,630	48,725	67,659	70,954	89,516	88,843
Math & computer sciences, total	94,945	106,599	120,710	114,762	114,268	125,260	157,794
Mathematics	NA	NA	NA	NA	NA	NA	69,871
Computer sciences	NA	NA	NA	NA	NA	NA	73,583
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	14,340
Engineering, total	1,539,336	1,486,722	1,450,694	1,370,581	1,563,733	1,717,777	2,068,655
Aeronautical	335,960	290,467	209,467	232,671	336,099	345,070	526,827
Astronautical	177,791	153,208	65,570	45,934	97,471	99,080	179,386
Chemical	109,448	105,482	77,073	71,958	61,453	83,863	88,270
Civil	71,099	76,748	123,290	106,177	103,623	125,596	105,905
Electrical	283,505	277,931	333,660	297,577	269,240	286,968	297,685
Mechanical	178,337	189,159	174,749	212,937	131,712	162,480	185,680
Metallurgy & materials	136,467	157,421	182,066	172,507	190,646	221,846	274,909
Engineering, n.e.c.	246,729	236,306	284,819	230,820	373,489	392,874	409,993
Social sciences, total	212,262	303,986	306,894	298,790	292,196	301,816	392,456
Anthropology	8,642	11,705	13,156	11,814	13,396	13,850	13,588
Economics	77,707	72,782	81,766	88,144	117,976	126,238	137,577
Political science	7,827	4,997	4,581	7,097	8,461	11,693	7,239
Sociology	37,803	105,300	119,378	102,073	64,294	54,907	53,646
Social sciences, n.e.c.	80,283	109,202	88,013	89,662	88,069	95,128	180,406
History	4,631	4,178	4,548	4,890	6,192	6,955	NA
Linguistics	1,712	2,699	3,813	4,187	3,148	3,049	NA
Other social sciences	73,940	102,325	79,652	80,585	78,729	85,124	NA
Other sciences, n.e.c.	75,050	90,336	116,180	194,004	154,088	166,555	178,559

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

Table 1A. Federal obligations for total research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	8,514,115	9,606,758	10,535,005	11,597,378	12,212,780	13,022,185	14,253,525
Life sciences, total	3,007,749	3,427,133	3,848,281	4,192,335	4,435,640	4,745,499	5,177,931
Biol & agricultural, total	1,777,567	2,024,018	2,320,322	2,507,558	2,711,768	2,811,770	3,064,400
Biol (excl environmental)	NA	1,488,450	1,702,249	1,830,611	1,996,635	2,079,260	2,305,543
Environmental biology	NA	184,873	216,553	229,741	220,316	183,532	193,639
Agricultural	NA	350,695	401,520	447,206	494,817	548,978	565,218
Medical sciences, total	1,138,760	1,287,447	1,380,615	1,536,888	1,609,930	1,773,025	1,927,453
Clinical medical	634,377	NA	NA	NA	NA	NA	NA
Other medical	504,383	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	91,422	115,668	147,344	147,889	113,942	160,704	186,078
Psychology, total	156,201	176,667	197,384	199,009	208,898	218,396	240,871
Biological aspects	57,613	53,412	56,767	59,882	57,511	59,586	63,217
Social aspects	54,508	65,392	83,628	94,805	93,488	98,099	104,670
Psychological sciences, n.e.c.	44,080	57,863	56,989	44,322	57,899	60,711	72,984
Physical sciences, total	1,530,171	1,645,647	1,792,554	2,000,612	2,220,534	2,500,381	2,891,439
Astronomy	197,305	213,601	284,429	285,671	281,027	275,784	357,416
Chemistry	370,722	404,993	443,618	454,536	486,877	481,154	520,291
Physics	866,260	942,436	1,022,741	1,182,546	1,345,638	1,610,508	1,854,566
Physical sciences, n.e.c.	95,884	84,617	41,766	77,859	106,992	132,935	159,166
Environmental sciences, total	906,001	1,024,566	1,100,984	1,260,957	1,121,080	1,148,303	1,251,203
Atmospheric sciences	318,366	319,194	348,716	409,513	373,432	425,829	460,684
Geological sciences	269,430	316,360	358,667	401,755	396,082	357,556	333,537
Oceanography	195,894	223,837	220,479	262,124	261,684	261,278	343,510
Environmental sciences, n.e.c.	122,311	165,175	173,122	187,565	89,882	103,640	113,472
Math & computer sciences, total	195,880	216,280	210,301	240,943	278,925	350,080	419,416
Mathematics	96,414	93,352	84,179	90,926	117,726	128,131	133,511
Computer sciences	89,355	107,267	106,266	128,593	121,520	170,938	214,555
Math & computer sciences, n.e.c.	10,111	15,661	19,856	21,424	39,679	51,011	71,350
Engineering, total	2,112,917	2,421,171	2,571,630	2,830,131	3,071,454	3,386,543	3,516,999
Aeronautical	408,847	482,861	624,897	708,134	709,577	741,158	820,565
Astronautical	158,990	165,138	251,140	302,325	303,936	290,734	321,487
Chemical	104,801	149,431	114,291	96,335	147,624	95,118	144,994
Civil	117,354	142,418	125,006	158,781	159,112	201,919	188,465
Electrical	382,727	432,627	417,865	517,142	556,674	612,186	614,944
Mechanical	199,173	234,146	195,876	207,978	204,646	201,228	266,395
Metallurgy & materials	293,833	285,973	249,346	236,184	255,972	309,129	332,524
Engineering, n.e.c.	447,192	528,577	593,209	603,252	733,913	935,071	827,625
Social sciences, total	426,125	489,486	527,310	523,811	497,427	385,939	435,268
Anthropology	12,379	19,526	17,343	17,179	14,537	14,564	12,799
Economics	142,854	163,180	181,915	192,771	206,722	157,102	165,551
Political science	8,479	8,816	13,916	12,170	10,767	7,534	11,147
Sociology	52,157	60,333	64,523	71,435	64,990	52,005	67,815
Social sciences, n.e.c.	210,256	237,631	249,613	230,256	200,411	154,734	177,956
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.	179,071	205,808	286,561	349,580	378,822	287,044	320,398

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

Table 1A. Federal obligations for total research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	14,978,773	16,133,421	16,502,199	17,940,521	18,650,145	20,765,531	21,622,364
Life sciences, total	5,635,948	6,362,498	6,464,318	7,341,436	7,724,461	8,495,111	8,829,849
Biol & agricultural, total	3,325,004	3,755,290	3,861,309	4,358,482	4,573,376	5,020,036	5,178,394
Biol (excl environmental)	2,563,089	2,885,652	2,993,384	3,501,982	3,681,723	3,983,195	4,144,632
Environmental biology	249,953	260,305	264,077	289,556	300,983	367,802	342,344
Agricultural	511,962	609,333	603,848	566,944	590,670	669,039	691,418
Medical sciences, total	2,112,838	2,368,494	2,360,421	2,664,766	2,941,013	3,222,523	3,382,350
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	198,106	238,714	242,588	318,188	210,072	252,552	269,105
Psychology, total	266,672	327,124	333,970	369,513	389,825	421,665	448,601
Biological aspects	80,769	91,197	90,067	98,336	105,259	121,797	130,639
Social aspects	107,767	142,866	143,534	154,462	149,389	149,920	177,453
Psychological sciences, n.e.c.	78,136	93,061	100,369	116,715	135,177	149,948	140,509
Physical sciences, total	2,969,014	3,046,010	3,069,053	3,252,648	3,317,303	3,705,223	3,808,723
Astronomy	382,292	414,743	468,160	522,187	470,838	541,939	597,154
Chemistry	606,411	650,397	662,397	680,267	703,066	782,636	761,675
Physics	1,836,429	1,816,027	1,805,923	1,853,641	1,975,290	2,190,779	2,254,935
Physical sciences, n.e.c.	143,882	164,843	132,573	196,553	168,109	189,869	194,959
Environmental sciences, total	1,275,913	1,403,674	1,481,660	1,511,614	1,606,957	1,773,248	2,174,084
Atmospheric sciences	434,132	485,982	521,305	552,928	587,835	588,036	773,394
Geological sciences	358,990	428,983	443,901	441,737	441,625	542,773	661,114
Oceanography	363,489	398,508	429,660	427,435	460,353	491,907	520,125
Environmental sciences, n.e.c.	119,302	90,201	86,794	89,514	117,144	150,532	219,451
Math & computer sciences, total	440,324	574,898	615,412	640,630	642,884	735,441	840,737
Mathematics	150,983	183,649	184,525	204,477	217,857	236,055	241,339
Computer sciences	214,528	280,270	302,426	297,843	292,714	364,621	562,128
Math & computer sciences, n.e.c.	74,813	110,979	128,461	138,310	132,313	134,765	37,270
Engineering, total	3,624,055	3,617,630	3,738,946	3,906,316	3,956,397	4,442,164	4,226,639
Aeronautical	860,382	737,992	775,567	810,400	801,755	986,805	927,099
Astronautical	396,796	424,742	526,886	624,636	575,371	677,396	580,782
Chemical	144,450	254,334	245,839	215,798	258,074	142,238	241,853
Civil	202,811	216,579	202,947	204,400	214,852	229,779	317,695
Electrical	630,044	626,814	674,419	786,333	731,087	843,097	640,043
Mechanical	190,470	266,995	236,540	233,455	240,771	257,357	268,331
Metallurgy & materials	341,080	439,212	445,041	361,984	456,711	521,001	554,508
Engineering, n.e.c.	858,022	650,962	631,707	669,310	677,776	784,491	696,328
Social sciences, total	436,339	460,014	415,509	480,045	485,794	551,041	629,990
Anthropology	18,579	17,951	13,633	15,244	14,285	13,864	14,386
Economics	147,298	159,652	131,251	148,505	159,528	166,788	197,161
Political science	10,750	14,640	11,630	11,296	12,159	13,489	13,146
Sociology	70,227	66,460	66,969	73,976	81,787	94,079	116,159
Social sciences, n.e.c.	189,485	201,311	192,026	231,024	218,035	262,821	289,138
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.	330,508	341,573	383,331	438,319	526,524	641,638	663,741

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

Table 1A. Federal obligations for total research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	23,968,377	24,490,598	26,890,497	27,411,209	28,434,396	28,259,764	29,365,289
Life sciences, total	9,621,981	9,910,481	10,772,095	11,284,348	11,811,035	12,064,328	12,661,324
Biol & agricultural, total	5,597,871	5,633,586	6,059,320	6,102,967	6,402,544	6,629,921	6,544,034
Biol (excl environmental)	4,457,803	4,435,052	4,789,907	4,745,811	4,925,399	5,309,947	5,320,190
Environmental biology	459,747	510,987	556,492	629,923	806,850	703,960	582,523
Agricultural	680,321	687,547	712,921	727,233	670,295	616,014	641,321
Medical sciences, total	3,460,299	3,909,934	4,404,435	4,862,125	4,972,195	4,973,353	5,532,730
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	563,811	366,961	308,340	319,256	436,296	461,054	584,560
Psychology, total	482,400	298,129	550,682	548,355	622,596	525,009	545,366
Biological aspects	140,192	34,615	37,200	48,121	58,816	62,808	57,759
Social aspects	197,457	100,946	134,739	116,821	156,303	83,430	96,688
Psychological sciences, n.e.c.	144,751	162,568	378,743	383,413	407,477	378,771	390,919
Physical sciences, total	4,235,336	4,439,162	4,426,961	4,253,469	4,278,334	3,922,951	4,149,179
Astronomy	631,657	739,057	686,281	747,590	764,458	728,958	774,740
Chemistry	828,420	896,179	843,155	874,448	863,510	881,115	845,777
Physics	2,460,930	2,578,194	2,638,367	2,443,142	2,451,210	1,991,294	2,067,632
Physical sciences, n.e.c.	314,329	225,732	259,158	188,289	199,156	321,584	461,030
Environmental sciences, total	2,149,783	2,207,616	2,608,489	2,838,192	2,854,437	3,019,710	3,045,653
Atmospheric sciences	802,700	767,276	984,118	1,095,008	1,135,553	1,085,721	1,164,349
Geological sciences	728,749	735,671	797,865	837,954	848,307	784,267	691,791
Oceanography	398,579	458,908	467,350	496,767	407,317	574,300	597,702
Environmental sciences, n.e.c.	219,755	245,761	359,156	408,463	463,260	575,422	591,811
Math & computer sciences, total	903,705	1,160,294	1,225,416	1,301,620	1,579,053	1,571,584	1,671,848
Mathematics	227,616	318,666	290,785	342,321	258,607	254,460	301,632
Computer sciences	584,941	771,777	826,085	830,187	1,013,851	1,119,827	1,264,678
Math & computer sciences, n.e.c.	91,148	69,851	108,546	129,112	306,595	197,297	105,538
Engineering, total	4,944,471	4,976,967	5,499,419	5,479,428	5,708,441	5,680,939	5,690,260
Aeronautical	1,016,232	874,592	1,193,030	1,222,704	1,248,257	1,249,363	1,352,714
Astronautical	653,094	630,408	493,978	499,068	546,530	526,559	596,293
Chemical	304,303	297,478	245,526	238,181	246,145	215,149	234,978
Civil	304,987	330,240	251,994	277,946	339,430	300,152	275,607
Electrical	729,905	759,007	881,462	741,792	756,299	669,704	622,213
Mechanical	335,514	337,246	466,868	378,091	412,485	294,014	254,596
Metallurgy & materials	710,667	727,206	695,691	851,399	815,331	988,975	860,657
Engineering, n.e.c.	889,769	1,020,790	1,270,870	1,270,247	1,343,964	1,437,023	1,493,202
Social sciences, total	727,290	689,699	674,889	647,387	678,708	654,560	696,334
Anthropology	15,982	14,097	13,739	16,227	21,718	18,330	20,977
Economics	187,423	211,560	204,716	193,308	206,513	194,206	205,229
Political science	17,022	22,556	29,220	25,372	22,332	16,668	14,052
Sociology	183,979	80,688	76,703	68,107	47,833	41,201	25,868
Social sciences, n.e.c.	322,884	360,798	350,511	344,373	380,312	384,155	430,208
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.	903,411	808,250	1,132,546	1,058,410	901,792	820,683	905,325

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

Table 1A. Federal obligations for total research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	30,922,269	33,527,514	38,470,630	44,713,736	49,808,767	53,376,884
Life sciences, total	13,557,574	15,422,452	17,964,701	23,057,305	25,868,385	28,672,784
Biol & agricultural, total	7,073,840	8,047,666	12,375,003	14,116,442	NA	NA
Biol (excl environmental)	5,706,572	6,477,638	10,740,022	12,379,954	NA	NA
Environmental biology	604,483	720,612	740,025	728,802	NA	NA
Agricultural	762,785	849,416	894,956	1,007,686	NA	NA
Medical sciences, total	5,996,325	6,801,169	4,463,771	6,585,198	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	487,409	573,617	1,125,927	2,355,665	NA	NA
Psychology, total	590,968	632,623	1,626,660	741,926	838,637	955,171
Biological aspects	41,592	18,034	8,191	13,639	NA	NA
Social aspects	97,490	66,644	56,017	59,799	NA	NA
Psychological sciences, n.e.c.	451,886	547,945	1,562,452	668,488	NA	NA
Physical sciences, total	4,209,679	4,066,156	4,787,950	4,600,770	5,145,158	5,200,445
Astronomy	732,150	757,859	880,267	759,195	NA	NA
Chemistry	819,030	814,936	1,225,601	1,024,918	NA	NA
Physics	2,131,758	2,221,916	2,405,361	2,461,747	NA	NA
Physical sciences, n.e.c.	526,741	271,445	276,721	354,910	NA	NA
Environmental sciences, total	3,061,979	3,095,261	3,328,771	3,251,676	3,667,503	3,878,793
Atmospheric sciences	1,174,426	1,176,493	1,104,344	1,113,559	NA	NA
Geological sciences	603,316	660,169	639,155	673,782	NA	NA
Oceanography	559,794	656,599	673,034	681,084	NA	NA
Environmental sciences, n.e.c.	724,443	602,000	912,238	783,251	NA	NA
Math & computer sciences, total	1,836,842	1,980,628	2,205,594	2,610,603	2,751,255	2,866,091
Mathematics	334,063	345,312	432,927	396,381	NA	NA
Computer sciences	1,398,740	1,516,077	1,659,570	2,022,782	NA	NA
Math & computer sciences, n.e.c.	104,039	119,239	113,097	191,440	NA	NA
Engineering, total	5,895,423	6,263,420	6,346,381	8,197,018	8,951,400	9,160,639
Aeronautical	1,596,427	1,609,733	1,463,898	2,430,055	NA	NA
Astronautical	631,111	620,596	514,988	752,732	NA	NA
Chemical	190,147	203,170	196,519	199,036	NA	NA
Civil	244,126	328,510	239,220	288,422	NA	NA
Electrical	639,349	698,721	744,787	889,720	NA	NA
Mechanical	249,551	240,404	289,300	319,249	NA	NA
Metallurgy & materials	789,098	788,027	918,102	1,080,822	NA	NA
Engineering, n.e.c.	1,555,614	1,774,259	1,979,567	2,236,982	NA	NA
Social sciences, total	806,129	854,873	1,050,392	1,008,632	1,027,186	1,050,327
Anthropology	18,186	18,305	15,883	15,606	NA	NA
Economics	230,450	216,560	249,492	234,064	NA	NA
Political science	20,224	20,164	22,583	19,518	NA	NA
Sociology	100,831	83,832	90,608	95,471	NA	NA
Social sciences, n.e.c.	436,438	516,012	671,826	643,973	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	963,675	1,212,101	1,160,181	1,245,806	1,559,243	1,592,634

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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	271,925	292,152	337,169	354,106	365,064	401,944	442,224
Life sciences, total	166,681	180,092	211,000	221,411	227,136	251,947	279,279
Biol & agricultural, total	163,802	176,891	207,263	217,365	223,089	247,370	274,148
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	2,879	3,201	3,737	4,046	4,047	4,577	5,131
Clinical medical	2,762	3,066	3,737	4,046	4,047	4,577	5,131
Other medical	117	135	0	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	32	31	42	26	26	0	75
Biological aspects	0	0	0	0	0	0	0
Social aspects	32	31	42	26	26	0	75
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	36,908	38,665	45,450	47,438	48,744	49,792	53,126
Astronomy	0	0	0	0	0	0	0
Chemistry	30,186	31,561	37,573	39,318	40,278	42,130	44,932
Physics	6,722	7,026	7,877	8,120	8,466	7,662	8,194
Physical sciences, n.e.c.	0	78	0	0	0	0	0
Environmental sciences, total	4,838	5,428	6,217	6,737	7,326	11,601	12,497
Atmospheric sciences	1,818	2,006	2,420	2,737	2,954	5,163	5,565
Geological sciences	3,020	3,422	1,045	979	1,037	977	4,981
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	2,752	3,021	3,335	5,461	1,951
Math & computer sciences, total	686	718	1,617	1,971	2,145	2,825	3,807
Mathematics	NA	NA	NA	NA	NA	NA	3,807
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	28,909	30,011	31,445	32,742	34,243	35,073	37,094
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,200	3,903	3,245	3,313	3,447	3,181	3,049
Civil	3,312	3,580	4,560	4,912	5,215	4,814	5,205
Electrical	87	58	214	225	244	224	298
Mechanical	1,454	1,635	1,774	1,899	2,045	2,381	2,575
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	19,856	20,835	21,652	22,393	23,292	24,473	25,967
Social sciences, total	33,663	36,816	41,170	43,506	45,301	50,700	56,338
Anthropology	0	0	0	12	11	0	0
Economics	31,857	34,924	38,580	40,980	42,534	47,605	53,099
Political science	43	51	38	33	37	0	0
Sociology	1,364	1,452	1,969	1,958	2,010	1,946	2,649
Social sciences, n.e.c.	399	389	583	523	709	1,149	590
History	149	180	250	269	260	362	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	250	209	333	254	449	787	NA
Other sciences, n.e.c.	208	391	228	275	143	6	8

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

Table 1B. Federal obligations for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	524,020	594,484	631,920	657,435	740,984	766,463	817,558
Life sciences, total	334,176	403,820	436,301	457,817	509,424	530,864	570,556
Biol & agricultural, total	328,417	393,890	428,541	449,804	497,582	517,912	556,659
Biol (excl environmental)	NA	51,044	64,535	61,784	66,055	62,133	62,454
Environmental biology	NA	45,118	74,545	67,759	60,032	52,655	53,530
Agricultural	NA	297,728	289,461	320,261	371,495	403,124	440,675
Medical sciences, total	5,759	6,445	7,760	8,013	11,842	12,952	13,897
Clinical medical	5,759	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	3,485	0	0	0	0	0
Psychology, total	85	101	102	106	0	185	104
Biological aspects	0	0	0	0	0	0	0
Social aspects	85	101	102	106	0	185	104
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	63,434	52,104	50,645	52,633	58,716	62,202	67,611
Astronomy	0	0	0	0	0	0	0
Chemistry	53,796	47,843	47,204	48,907	54,485	58,416	63,840
Physics	9,638	4,261	3,441	3,726	4,231	3,786	3,771
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	14,104	14,625	13,644	13,772	15,197	13,479	13,455
Atmospheric sciences	4,935	5,810	5,057	4,922	5,159	5,048	5,303
Geological sciences	6,898	8,815	8,587	8,850	10,038	8,431	8,152
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	2,271	0	0	0	0	0	0
Math & computer sciences, total	3,845	4,713	4,072	2,751	18,702	18,697	13,229
Mathematics	3,845	4,713	4,072	2,751	18,702	18,697	13,229
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	44,190	44,599	45,453	46,627	50,709	51,176	54,665
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,163	3,656	4,793	4,457	5,278	5,794	6,181
Civil	6,457	6,503	4,384	4,318	4,694	3,904	3,965
Electrical	360	257	422	329	242	313	345
Mechanical	2,847	2,421	3,354	3,762	3,906	4,274	4,479
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	30,363	31,762	32,500	33,761	36,589	36,891	39,695
Social sciences, total	64,186	74,522	81,703	83,729	88,236	89,860	97,938
Anthropology	0	15	0	19	61	0	0
Economics	60,016	68,317	75,138	76,582	81,078	83,248	91,842
Political science	0	0	71	72	714	316	297
Sociology	3,531	4,883	5,302	5,921	5,638	5,682	5,016
Social sciences, n.e.c.	639	1,307	1,192	1,135	745	614	783
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	0	0	0	0

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

Table 1B. Federal obligations for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	834,887	910,940	896,406	918,907	985,206	1,002,222	1,061,286
Life sciences, total	595,136	707,909	694,480	707,956	772,332	786,269	824,112
Biol & agricultural, total	575,317	685,547	672,898	684,668	751,006	764,415	799,579
Biol (excl environmental)	78,050	76,026	87,525	90,275	100,812	97,574	116,412
Environmental biology	91,433	110,940	114,783	128,346	138,408	141,913	152,390
Agricultural	405,834	498,581	470,590	466,047	511,786	524,928	530,777
Medical sciences, total	19,819	22,362	21,582	23,288	21,326	21,854	24,533
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	0	0
Psychology, total	169	175	177	246	263	242	292
Biological aspects	0	0	0	0	263	0	0
Social aspects	169	175	177	246	0	242	292
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	72,768	62,032	62,201	69,178	64,792	64,774	71,924
Astronomy	0	0	0	0	0	0	0
Chemistry	69,002	57,951	58,635	64,997	60,799	60,992	67,767
Physics	3,766	4,081	3,566	4,181	3,993	3,782	4,157
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	13,176	12,127	11,541	11,714	12,030	11,569	13,014
Atmospheric sciences	5,027	4,761	4,356	4,348	4,245	4,269	4,321
Geological sciences	8,149	7,366	7,185	7,366	7,785	7,300	8,693
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	14,441	14,477	13,661	10,767	11,168	10,514	12,004
Mathematics	14,441	12,869	12,819	9,769	10,401	9,408	10,642
Computer sciences	0	1,608	842	998	767	1,106	1,362
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	56,719	28,724	31,085	33,861	31,744	34,517	38,885
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	6,352	5,620	6,041	6,899	7,699	7,235	7,291
Civil	4,039	4,330	5,262	6,003	5,749	5,415	6,129
Electrical	344	127	178	2,481	795	375	389
Mechanical	3,897	3,627	2,682	3,931	3,807	3,776	4,304
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	42,087	15,020	16,922	14,547	13,694	17,716	20,772
Social sciences, total	82,478	85,496	83,261	85,185	92,877	94,337	101,055
Anthropology	0	0	0	0	0	0	0
Economics	71,978	74,994	72,638	74,983	81,993	83,787	90,777
Political science	131	465	290	448	359	430	511
Sociology	9,580	9,574	9,613	9,351	9,948	9,269	8,833
Social sciences, n.e.c.	789	463	720	403	577	851	934
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	0	0	0	0

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

Table 1B. Federal obligations for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,175,465	1,260,996	1,251,725	1,322,500	1,298,830	1,220,004	1,290,106
Life sciences, total	914,171	956,473	948,882	1,000,609	987,217	919,292	988,828
Biol & agricultural, total	892,271	927,256	919,451	970,761	959,578	894,516	965,531
Biol (excl environmental)	142,099	136,446	144,332	133,123	130,157	119,188	146,549
Environmental biology	179,848	186,212	190,491	206,493	206,547	200,077	204,399
Agricultural	570,324	604,598	584,628	631,145	622,874	575,251	614,583
Medical sciences, total	21,900	29,217	29,431	29,848	27,628	24,765	23,297
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	11	11	0
Psychology, total	323	442	562	452	448	452	356
Biological aspects	0	0	0	0	0	0	0
Social aspects	323	442	562	452	448	452	356
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	80,439	86,763	89,082	94,996	88,918	91,575	93,359
Astronomy	0	0	40	0	0	0	0
Chemistry	76,030	82,825	85,205	90,552	84,631	86,990	89,036
Physics	4,409	3,938	3,837	4,444	4,287	4,585	4,323
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	15,680	12,154	12,394	12,327	13,421	13,162	12,781
Atmospheric sciences	6,025	10,770	11,045	10,610	11,815	11,582	11,424
Geological sciences	9,655	1,384	1,349	1,717	1,597	1,571	1,357
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	9	9	0
Math & computer sciences, total	13,358	15,793	15,439	17,878	17,880	16,362	14,177
Mathematics	11,930	13,268	13,135	15,279	15,385	14,270	14,177
Computer sciences	1,428	2,525	2,304	2,599	2,495	2,092	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	43,527	65,274	59,768	65,625	69,431	62,755	59,873
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	7,943	7,121	5,743	6,560	7,705	8,435	7,813
Civil	6,466	5,095	5,331	6,416	5,997	5,376	4,975
Electrical	627	689	686	432	460	336	599
Mechanical	4,405	3,611	3,518	3,386	3,425	3,238	3,084
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	24,086	48,758	44,490	48,831	51,844	45,370	43,402
Social sciences, total	107,967	121,599	123,003	126,827	117,789	113,087	117,507
Anthropology	0	27	25	285	284	254	260
Economics	98,288	110,217	113,546	116,464	108,827	104,381	106,995
Political science	544	0	0	0	0	0	0
Sociology	9,060	11,355	9,432	10,078	8,678	8,452	10,252
Social sciences, n.e.c.	75	0	0	0	0	0	0
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	2,498	2,595	3,786	3,726	3,319	3,225

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

Table 1B. Federal obligations for total research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	1,333,905	1,488,059	1,611,466	1,803,720	1,879,223	1,815,760
Life sciences, total	1,037,559	1,200,396	1,307,003	1,467,652	1,536,925	1,469,228
Biol & agricultural, total	1,013,259	1,175,697	1,277,871	1,436,065	NA	NA
Biol (excl environmental)	128,843	152,653	180,942	207,917	NA	NA
Environmental biology	224,489	262,122	307,391	301,141	NA	NA
Agricultural	659,927	760,922	789,538	927,007	NA	NA
Medical sciences, total	24,300	24,699	29,132	31,587	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	410	340	384	409	463	433
Biological aspects	0	0	384	409	NA	NA
Social aspects	410	340	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	87,338	89,502	82,041	96,408	105,380	107,272
Astronomy	0	0	0	0	NA	NA
Chemistry	82,210	84,854	77,565	91,500	NA	NA
Physics	5,128	4,648	4,476	4,908	NA	NA
Physical sciences, n.e.c.	0	0	0	0	NA	NA
Environmental sciences, total	10,355	10,031	10,244	11,873	12,384	11,819
Atmospheric sciences	8,937	8,908	9,013	10,559	NA	NA
Geological sciences	1,418	1,123	1,231	1,314	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	NA	NA
Math & computer sciences, total	15,068	12,178	13,606	14,604	16,075	15,538
Mathematics	15,068	12,178	13,606	14,604	NA	NA
Computer sciences	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	57,335	56,351	56,717	68,232	71,243	70,196
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	8,069	8,504	6,510	7,141	NA	NA
Civil	5,745	4,745	4,683	5,045	NA	NA
Electrical	635	586	706	791	NA	NA
Mechanical	3,405	3,597	3,274	3,529	NA	NA
Metallurgy & materials	0	0	0	0	NA	NA
Engineering, n.e.c.	39,481	38,919	41,544	51,726	NA	NA
Social sciences, total	122,385	116,624	138,486	141,369	133,165	137,914
Anthropology	275	248	282	299	NA	NA
Economics	112,479	106,234	121,816	127,588	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	9,631	10,142	16,388	13,482	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	3,455	2,637	2,985	3,173	3,588	3,360

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 for total research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	94,114	113,674	143,394	130,155	129,189	144,420	155,713
Life sciences, total	24,157	29,929	42,122	38,773	30,155	40,980	41,920
Biol & agricultural, total	24,157	29,929	42,052	38,773	30,155	40,980	41,920
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	0	0	70	0	0	0	0
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	70	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	1,096	1,291	690	125	151	151	209
Biological aspects	529	656	97	0	0	0	0
Social aspects	567	635	593	125	151	151	209
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	17,156	19,179	19,973	22,458	23,169	20,554	22,811
Astronomy	823	755	660	682	677	748	666
Chemistry	7,402	7,150	8,094	9,700	9,318	6,243	7,137
Physics	8,598	11,150	10,935	12,076	13,174	13,563	15,008
Physical sciences, n.e.c.	333	124	284	0	0	0	0
Environmental sciences, total	22,090	28,159	38,804	39,034	46,886	53,010	56,872
Atmospheric sciences	15,109	18,715	25,808	22,648	29,867	34,916	36,865
Geological sciences	4,545	6,420	8,844	1,946	917	1,355	1,339
Oceanography	2,436	3,024	4,152	14,440	16,102	16,739	18,668
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,347	901	1,286	1,365	1,293	2,314	3,900
Mathematics	NA	NA	NA	NA	NA	NA	1,870
Computer sciences	NA	NA	NA	NA	NA	NA	2,030
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	15,689	26,145	34,617	22,858	22,397	18,941	18,117
Aeronautical	125	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	956	1,185	1,625	0	80	80	62
Civil	4,064	11,808	9,982	5,024	5,987	5,686	5,599
Electrical	4,919	4,017	10,700	4,516	3,854	3,025	3,268
Mechanical	1,080	1,615	2,968	1,140	764	923	872
Metallurgy & materials	1,928	1,915	2,608	1,935	1,950	1,979	2,124
Engineering, n.e.c.	2,617	5,605	6,734	10,243	9,762	7,248	6,192
Social sciences, total	10,826	4,836	5,799	5,542	5,138	7,750	8,634
Anthropology	0	0	0	0	0	0	0
Economics	10,430	4,314	5,350	5,416	4,976	7,593	8,414
Political science	0	0	0	0	0	0	0
Sociology	396	522	449	126	162	157	220
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	1,753	3,234	103	0	0	720	3,250

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

Table 1C. Federal obligations for total research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	176,129	192,775	219,458	254,433	249,375	276,055	284,841
Life sciences, total	49,950	48,347	53,899	53,592	55,984	58,827	12,702
Biol & agricultural, total	49,790	48,347	53,899	53,592	55,984	58,659	11,079
Biol (excl environmental)	NA	0	0	0	153	134	550
Environmental biology	NA	0	0	0	531	1,544	2,039
Agricultural	NA	48,347	53,899	53,592	55,300	56,981	8,490
Medical sciences, total	160	0	0	0	0	168	1,623
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	160	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	203	263	232	223	303	192	290
Biological aspects	0	0	0	0	0	0	72
Social aspects	203	263	232	223	303	192	218
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	27,799	32,507	35,519	38,698	43,112	46,330	49,623
Astronomy	530	1,458	634	645	473	540	655
Chemistry	9,545	8,198	8,944	9,492	11,803	13,041	13,975
Physics	17,724	22,851	25,889	28,486	30,836	32,749	34,993
Physical sciences, n.e.c.	0	0	52	75	0	0	0
Environmental sciences, total	61,652	71,182	79,617	105,590	103,654	119,290	152,866
Atmospheric sciences	37,478	34,931	36,017	40,533	42,514	53,434	50,844
Geological sciences	1,146	1,527	1,797	1,880	1,873	2,484	2,051
Oceanography	23,028	34,379	41,720	63,140	59,190	62,952	94,182
Environmental sciences, n.e.c.	0	345	83	37	77	420	5,789
Math & computer sciences, total	4,903	5,273	6,591	8,990	11,486	13,675	12,504
Mathematics	1,994	4,226	5,146	5,410	6,547	6,575	6,623
Computer sciences	2,909	1,047	1,445	2,409	3,166	5,226	3,938
Math & computer sciences, n.e.c.	0	0	0	1,171	1,773	1,874	1,943
Engineering, total	23,852	24,838	32,245	40,572	28,502	32,013	37,421
Aeronautical	0	20	29	85	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	492	389	1,017	720	1,023	1,971	1,313
Civil	5,497	6,284	9,702	14,084	3,620	5,333	8,817
Electrical	4,098	4,634	7,787	13,112	10,950	10,006	8,488
Mechanical	1,389	1,938	3,514	1,589	2,096	1,761	2,440
Metallurgy & materials	2,410	2,295	2,776	5,338	5,789	7,083	7,818
Engineering, n.e.c.	9,966	9,278	7,420	5,644	5,024	5,859	8,545
Social sciences, total	7,026	10,323	11,243	6,735	4,287	3,624	7,675
Anthropology	0	0	0	0	0	0	0
Economics	6,810	10,114	10,963	6,486	3,878	3,262	6,218
Political science	0	0	140	89	116	184	1,076
Sociology	216	209	140	160	293	178	219
Social sciences, n.e.c.	0	0	0	0	0	0	162
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.	744	42	112	33	2,047	2,104	11,760

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

Table 1C. Federal obligations for total research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

Page 3 of 5

Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	296,701	324,179	339,459	338,579	342,330	350,978	376,994
Life sciences, total	13,446	14,633	17,113	12,634	12,274	14,401	14,303
Biol & agricultural, total	12,404	12,495	15,583	11,630	10,999	12,969	12,917
Biol (excl environmental)	0	0	2,599	2,035	0	0	0
Environmental biology	6,420	2,320	2,697	2,818	5,097	6,685	5,975
Agricultural	5,984	10,175	10,287	6,777	5,902	6,284	6,942
Medical sciences, total	1,042	2,138	1,530	1,004	1,275	1,432	1,386
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	0	0
Psychology, total	289	303	330	348	491	406	875
Biological aspects	46	49	50	0	0	0	163
Social aspects	243	254	280	348	491	406	712
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	53,256	54,876	56,743	54,886	61,537	62,119	65,188
Astronomy	682	716	499	569	589	451	436
Chemistry	15,345	17,678	19,133	22,883	23,610	24,375	25,006
Physics	37,229	36,355	37,111	31,434	37,338	37,283	39,671
Physical sciences, n.e.c.	0	127	0	0	0	10	75
Environmental sciences, total	160,798	183,482	200,976	205,437	197,161	200,552	217,380
Atmospheric sciences	59,870	67,686	62,452	59,256	49,379	50,856	56,694
Geological sciences	2,277	2,470	4,491	6,045	4,567	4,364	5,066
Oceanography	90,477	104,506	128,965	136,696	140,881	142,738	152,814
Environmental sciences, n.e.c.	8,174	8,820	5,068	3,440	2,334	2,594	2,806
Math & computer sciences, total	14,404	13,605	12,479	13,019	14,348	14,019	15,222
Mathematics	8,414	7,232	6,298	6,169	6,720	6,225	6,993
Computer sciences	4,238	3,352	3,765	4,510	5,099	5,368	4,967
Math & computer sciences, n.e.c.	1,752	3,021	2,416	2,340	2,529	2,426	3,262
Engineering, total	35,298	39,824	41,723	41,261	49,332	52,742	56,835
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	52	0
Chemical	1,752	1,660	2,642	2,438	2,717	3,208	3,852
Civil	7,104	6,651	4,902	4,492	4,567	4,502	5,860
Electrical	9,355	11,001	10,621	10,653	11,980	12,012	12,375
Mechanical	1,969	2,900	649	885	1,006	1,233	1,496
Metallurgy & materials	6,362	6,895	7,552	8,566	10,615	11,651	11,834
Engineering, n.e.c.	8,756	10,717	15,357	14,227	18,447	20,084	21,418
Social sciences, total	7,660	4,988	5,068	7,146	3,175	2,844	3,226
Anthropology	0	0	0	0	0	0	0
Economics	6,393	3,633	3,680	6,130	2,313	2,003	2,333
Political science	598	637	656	457	333	567	624
Sociology	227	247	248	241	283	12	0
Social sciences, n.e.c.	442	471	484	318	246	262	269
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.	11,550	12,468	5,027	3,848	4,012	3,895	3,965

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

Table 1C. Federal obligations for total research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

Page 4 of 5

Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	449,706	595,909	582,075	718,280	892,318	850,600	808,058
Life sciences, total	68,242	97,883	93,588	111,275	150,587	161,141	139,420
Biol & agricultural, total	65,659	96,224	88,806	105,799	130,462	144,342	113,138
Biol (excl environmental)	10,269	22,981	16,626	22,596	37,907	58,190	24,862
Environmental biology	41,451	60,576	58,872	62,369	70,708	70,621	64,969
Agricultural	13,939	12,667	13,308	20,834	21,847	15,531	23,307
Medical sciences, total	2,583	1,659	4,344	4,785	19,284	16,799	21,586
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	438	691	841	0	4,696
Psychology, total	838	396	324	280	287	300	406
Biological aspects	0	0	0	0	0	0	0
Social aspects	838	396	324	280	287	300	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	406
Physical sciences, total	69,000	75,101	82,417	97,277	102,683	108,656	107,499
Astronomy	442	367	331	2,028	860	587	338
Chemistry	27,138	29,632	30,977	36,869	43,499	47,035	43,231
Physics	41,375	44,305	51,018	58,282	57,586	60,596	63,431
Physical sciences, n.e.c.	45	797	91	98	738	438	499
Environmental sciences, total	184,865	252,651	225,323	302,109	290,811	258,686	257,275
Atmospheric sciences	74,854	105,426	68,679	96,990	140,884	107,209	111,920
Geological sciences	7,793	4,275	6,002	4,387	43,643	36,893	4,131
Oceanography	97,906	139,714	147,560	191,983	95,930	104,934	133,215
Environmental sciences, n.e.c.	4,312	3,236	3,082	8,749	10,354	9,650	8,009
Math & computer sciences, total	28,344	35,390	39,147	49,047	102,369	77,341	78,946
Mathematics	11,293	12,482	12,217	12,229	12,643	13,464	10,538
Computer sciences	13,481	19,516	23,307	31,980	83,784	57,570	60,105
Math & computer sciences, n.e.c.	3,570	3,392	3,623	4,838	5,942	6,307	8,303
Engineering, total	65,562	84,445	94,051	108,426	189,311	186,455	169,957
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	124	0	0	0	0	0
Chemical	4,529	4,769	7,231	5,664	11,998	13,662	19,697
Civil	5,237	4,522	5,959	8,701	13,185	11,314	14,167
Electrical	15,295	20,812	23,994	28,666	56,347	49,179	50,192
Mechanical	2,842	2,951	4,844	5,128	6,702	5,312	4,308
Metallurgy & materials	14,864	20,068	23,431	27,578	56,857	67,643	47,556
Engineering, n.e.c.	22,795	31,199	28,592	32,689	44,222	39,345	34,037
Social sciences, total	12,050	16,165	15,205	16,777	18,827	19,124	18,225
Anthropology	0	0	0	0	0	0	0
Economics	4,590	4,812	4,165	4,320	5,362	5,479	4,946
Political science	4,189	6,389	6,325	6,561	7,690	7,709	7,092
Sociology	2,987	4,737	4,473	5,536	5,229	5,936	5,578
Social sciences, n.e.c.	284	227	242	360	546	0	609
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.	20,805	33,878	32,020	33,089	37,443	38,897	36,330

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

Table 1C. Federal obligations for total research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

Page 5 of 5

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	806,993	848,000	895,916	828,328	911,625	963,529
Life sciences, total	150,568	144,943	165,262	176,446	173,670	159,356
Biol & agricultural, total	135,538	133,097	157,313	169,154	NA	NA
Biol (excl environmental)	35,491	37,486	44,816	33,689	NA	NA
Environmental biology	75,544	72,002	85,070	122,006	NA	NA
Agricultural	24,503	23,609	27,427	13,459	NA	NA
Medical sciences, total	11,312	8,201	6,719	6,083	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,718	3,645	1,230	1,209	NA	NA
Psychology, total	506	1,937	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	506	1,937	0	0	NA	NA
Physical sciences, total	104,488	116,534	115,047	122,127	129,547	142,213
Astronomy	371	384	155	281	NA	NA
Chemistry	41,569	48,654	46,872	40,091	NA	NA
Physics	62,213	67,165	66,873	80,419	NA	NA
Physical sciences, n.e.c.	335	331	1,147	1,336	NA	NA
Environmental sciences, total	250,820	297,394	309,178	286,584	358,116	391,361
Atmospheric sciences	105,181	119,712	118,229	116,251	NA	NA
Geological sciences	4,698	8,316	4,934	34,372	NA	NA
Oceanography	126,409	107,620	146,665	95,066	NA	NA
Environmental sciences, n.e.c.	14,532	61,746	39,350	40,895	NA	NA
Math & computer sciences, total	78,103	77,932	78,836	77,355	75,813	73,526
Mathematics	12,610	12,509	14,777	4,624	NA	NA
Computer sciences	57,589	58,621	55,813	60,228	NA	NA
Math & computer sciences, n.e.c.	7,904	6,802	8,246	12,503	NA	NA
Engineering, total	158,476	149,703	156,907	155,409	164,427	190,002
Aeronautical	0	5	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	6,813	5,347	6,242	5,132	NA	NA
Civil	23,129	14,979	15,360	18,511	NA	NA
Electrical	41,566	41,524	45,079	52,962	NA	NA
Mechanical	3,642	3,877	3,523	5,088	NA	NA
Metallurgy & materials	37,459	34,732	38,149	40,373	NA	NA
Engineering, n.e.c.	45,867	49,239	48,554	33,343	NA	NA
Social sciences, total	21,448	19,289	22,554	10,407	10,052	7,071
Anthropology	0	0	0	0	NA	NA
Economics	5,414	5,018	5,982	2,389	NA	NA
Political science	8,228	8,011	9,242	1,544	NA	NA
Sociology	6,499	6,260	7,330	772	NA	NA
Social sciences, n.e.c.	1,307	0	0	5,702	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	42,584	40,268	48,132	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 1D. Federal obligations for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	1,329,900	1,309,263	1,504,554	1,436,079	1,434,408	1,431,007	1,527,481
Life sciences, total	100,309	91,920	104,037	120,175	116,863	99,411	118,007
Biol & agricultural, total	51,441	44,318	48,926	34,866	39,707	32,808	28,946
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	48,703	47,190	54,866	85,309	76,927	66,298	88,638
Clinical medical	47,052	45,085	52,351	70,780	64,760	48,921	62,117
Other medical	1,651	2,105	2,515	14,529	12,167	17,377	26,521
Life sciences, n.e.c.	165	412	245	0	229	305	423
Psychology, total	29,921	28,655	28,642	37,221	34,250	39,573	40,284
Biological aspects	5,409	4,740	4,946	4,445	4,628	2,198	2,419
Social aspects	13,792	13,567	11,243	18,442	14,980	22,031	22,887
Psychological sciences, n.e.c.	10,720	10,348	12,453	14,334	14,642	15,344	14,978
Physical sciences, total	287,824	248,549	305,186	251,332	232,872	245,107	249,993
Astronomy	11,620	9,450	16,521	9,406	9,540	12,228	9,659
Chemistry	47,092	48,343	50,894	49,474	44,496	44,030	54,562
Physics	203,184	149,327	187,294	148,508	147,589	153,854	141,621
Physical sciences, n.e.c.	25,928	41,429	50,477	43,944	31,247	34,995	44,151
Environmental sciences, total	138,014	149,843	159,401	135,387	130,379	133,775	154,439
Atmospheric sciences	52,266	56,681	61,285	61,713	61,926	69,470	72,384
Geological sciences	27,103	29,084	27,757	22,511	18,592	16,972	24,518
Oceanography	42,832	44,270	49,491	35,585	39,722	38,926	51,885
Environmental sciences, n.e.c.	15,813	19,808	20,868	15,578	10,139	8,407	5,652
Math & computer sciences, total	61,192	64,325	70,683	69,794	70,454	70,917	90,746
Mathematics	NA	NA	NA	NA	NA	NA	30,687
Computer sciences	NA	NA	NA	NA	NA	NA	50,275
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	9,784
Engineering, total	675,253	679,256	773,236	762,882	793,480	770,833	806,387
Aeronautical	84,100	78,253	86,555	94,436	105,219	116,072	113,080
Astronautical	22,915	17,756	17,134	16,144	16,099	15,481	15,386
Chemical	35,179	31,970	24,289	24,030	25,348	16,328	21,288
Civil	14,743	13,104	19,854	23,031	24,186	25,870	34,537
Electrical	200,364	201,937	245,132	223,800	216,336	229,166	215,477
Mechanical	111,452	112,979	103,566	142,728	99,158	109,885	128,054
Metallurgy & materials	68,033	78,918	77,472	82,030	81,122	78,124	81,779
Engineering, n.e.c.	138,467	144,339	199,234	156,683	226,012	179,907	196,786
Social sciences, total	5,123	6,133	8,109	6,800	9,330	5,536	5,213
Anthropology	0	469	392	0	927	0	33
Economics	646	1,018	879	557	1,164	1,068	854
Political science	2,514	1,584	1,056	1,648	355	1,347	891
Sociology	1,360	2,140	4,385	4,040	5,853	1,567	1,745
Social sciences, n.e.c.	603	922	1,397	555	1,031	1,554	1,690
History	0	0	0	0	0	0	NA
Linguistics	111	366	593	8	321	406	NA
Other social sciences	492	556	804	547	710	1,148	NA
Other sciences, n.e.c.	32,264	40,582	55,260	52,488	46,780	65,855	62,412

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

Table 1D. Federal obligations for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,715,845	1,824,058	2,014,098	2,261,769	2,600,900	2,952,821	3,222,649
Life sciences, total	129,457	137,605	152,829	149,075	172,763	208,840	222,755
Biol & agricultural, total	50,470	44,057	54,042	62,142	74,513	53,020	48,879
Biol (excl environmental)	NA	39,521	48,184	54,693	66,526	42,272	37,478
Environmental biology	NA	4,356	5,683	7,223	7,739	10,520	11,401
Agricultural	NA	180	175	226	248	228	0
Medical sciences, total	77,912	89,563	95,259	83,015	98,152	119,228	134,681
Clinical medical	55,783	NA	NA	NA	NA	NA	NA
Other medical	22,129	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,075	3,985	3,528	3,918	98	36,592	39,195
Psychology, total	50,003	54,091	60,775	63,552	71,311	83,491	88,464
Biological aspects	1,674	1,947	1,201	264	280	118	59
Social aspects	27,741	29,676	46,922	55,047	58,778	68,775	73,078
Psychological sciences, n.e.c.	20,588	22,468	12,652	8,241	12,253	14,598	15,327
Physical sciences, total	312,915	323,907	356,403	410,530	530,076	688,740	760,433
Astronomy	9,454	10,509	12,789	13,194	14,590	16,989	17,076
Chemistry	54,560	63,354	88,098	78,221	90,693	118,147	121,828
Physics	174,468	180,333	244,528	269,385	348,822	445,990	497,464
Physical sciences, n.e.c.	74,433	69,711	10,988	49,730	75,971	107,614	124,065
Environmental sciences, total	120,917	138,683	149,817	181,847	188,623	204,613	255,259
Atmospheric sciences	43,744	47,621	57,235	79,916	83,814	86,496	125,227
Geological sciences	22,849	23,256	21,957	29,886	34,323	36,234	43,015
Oceanography	47,638	53,607	53,715	56,299	58,332	68,291	66,151
Environmental sciences, n.e.c.	6,686	14,199	16,910	15,746	12,154	13,592	20,866
Math & computer sciences, total	94,165	102,332	113,423	137,828	147,480	188,098	221,744
Mathematics	27,209	28,118	28,781	31,360	36,241	44,995	46,721
Computer sciences	57,674	61,000	70,663	89,729	80,823	95,844	114,364
Math & computer sciences, n.e.c.	9,282	13,214	13,979	16,739	30,416	47,259	60,659
Engineering, total	926,212	981,792	1,057,530	1,165,226	1,324,129	1,473,274	1,573,905
Aeronautical	133,563	142,747	189,052	214,221	232,560	252,632	315,003
Astronautical	27,624	29,729	35,930	67,813	69,216	79,504	92,351
Chemical	31,352	29,011	33,291	24,049	31,089	39,029	44,889
Civil	23,214	23,435	27,261	30,149	34,909	40,439	45,730
Electrical	301,178	345,145	363,190	442,299	477,428	493,177	515,578
Mechanical	136,066	157,700	141,635	122,378	136,560	144,000	138,696
Metallurgy & materials	99,622	88,910	92,815	104,171	131,600	159,276	179,343
Engineering, n.e.c.	173,593	165,115	174,356	160,146	210,767	265,217	242,315
Social sciences, total	3,555	5,933	8,442	5,120	4,726	4,845	7,140
Anthropology	0	0	0	0	0	0	0
Economics	252	1,127	100	101	143	703	1,742
Political science	1,404	2,003	1,940	1,245	788	1,393	2,164
Sociology	1,899	2,803	2,381	2,447	3,095	2,586	2,465
Social sciences, n.e.c.	0	0	4,021	1,327	700	163	769
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.	78,621	79,715	114,879	148,591	161,792	100,920	92,949

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

Table 1D. Federal obligations for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	3,048,531	3,168,283	3,227,263	3,347,556	3,239,123	3,656,124	3,529,229
Life sciences, total	244,937	271,951	267,531	293,553	280,414	334,218	284,459
Biol & agricultural, total	56,411	63,120	63,804	75,504	78,036	101,425	74,098
Biol (excl environmental)	44,456	54,168	54,100	64,876	67,463	45,873	58,730
Environmental biology	11,955	8,952	9,704	10,628	10,573	55,552	15,368
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	146,468	170,091	162,933	175,695	158,292	187,832	166,060
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	42,058	38,740	40,794	42,354	44,086	44,961	44,301
Psychology, total	89,598	118,386	113,163	108,855	114,640	111,802	105,612
Biological aspects	6,812	6,913	7,040	8,020	6,708	10,242	12,277
Social aspects	71,120	97,535	90,786	97,134	90,260	75,327	78,308
Psychological sciences, n.e.c.	11,666	13,938	15,337	3,701	17,672	26,233	15,027
Physical sciences, total	689,442	597,479	592,022	555,194	504,074	523,562	498,247
Astronomy	16,822	14,228	15,559	15,387	12,261	12,704	11,719
Chemistry	139,826	156,403	163,350	144,933	124,958	133,544	120,991
Physics	411,784	298,699	313,645	286,846	283,832	294,101	310,035
Physical sciences, n.e.c.	121,010	128,149	99,468	108,028	83,023	83,213	55,502
Environmental sciences, total	217,173	273,853	286,949	263,564	262,808	291,350	279,894
Atmospheric sciences	91,896	100,747	105,870	109,611	104,585	102,544	102,069
Geological sciences	34,747	78,968	78,218	75,363	72,916	95,321	95,735
Oceanography	67,508	79,111	87,175	65,217	71,791	77,404	75,496
Environmental sciences, n.e.c.	23,022	15,027	15,686	13,373	13,516	16,081	6,594
Math & computer sciences, total	213,756	300,376	339,525	330,643	331,446	392,781	445,319
Mathematics	47,771	54,984	56,630	54,989	53,375	64,829	62,590
Computer sciences	103,114	143,715	163,995	149,720	154,455	200,475	355,210
Math & computer sciences, n.e.c.	62,871	101,677	118,900	125,934	123,616	127,477	27,519
Engineering, total	1,488,368	1,502,009	1,505,590	1,629,695	1,636,135	1,836,185	1,762,244
Aeronautical	261,293	206,432	212,925	259,905	233,684	245,287	237,616
Astronautical	79,319	67,691	66,263	67,420	84,706	81,303	79,950
Chemical	38,441	53,278	50,273	46,882	41,949	46,892	37,392
Civil	46,541	66,279	64,900	67,005	68,720	76,955	163,946
Electrical	522,805	526,739	570,373	683,690	626,362	721,779	535,067
Mechanical	127,170	182,629	163,418	142,945	145,245	166,659	182,648
Metallurgy & materials	180,335	260,923	253,736	203,575	294,420	343,371	370,532
Engineering, n.e.c.	232,464	138,038	123,702	158,273	141,049	153,939	155,093
Social sciences, total	3,949	4,711	3,723	2,901	2,655	2,669	1,760
Anthropology	0	0	0	0	0	0	0
Economics	665	1,013	1,466	1,353	1,310	1,399	1,056
Political science	1,129	3,214	1,280	645	471	338	0
Sociology	2,155	484	977	903	874	932	704
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	101,308	99,518	118,760	163,151	106,951	163,557	151,694

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

Table 1D. Federal obligations for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	3,717,908	4,073,406	4,783,484	4,240,602	4,198,428	3,995,505	3,809,817
Life sciences, total	304,812	342,024	373,576	371,420	364,091	280,231	291,299
Biol & agricultural, total	82,229	120,951	137,455	133,167	116,112	93,826	93,558
Biol (excl environmental)	66,197	71,948	86,507	55,027	60,732	60,675	65,878
Environmental biology	16,032	49,003	50,778	78,140	55,380	33,101	26,290
Agricultural	0	0	170	0	0	50	1,390
Medical sciences, total	179,551	220,908	222,550	227,785	205,577	154,483	171,428
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	43,032	165	13,571	10,468	42,402	31,922	26,313
Psychology, total	97,328	112,434	99,614	82,194	119,287	76,511	77,171
Biological aspects	11,032	12,302	15,992	13,633	16,624	33,871	32,381
Social aspects	79,722	77,658	77,594	60,281	89,706	32,276	37,205
Psychological sciences, n.e.c.	6,574	22,474	6,028	8,280	12,957	10,364	7,585
Physical sciences, total	574,706	626,142	674,612	594,474	557,802	376,159	379,532
Astronomy	4,951	9,516	15,097	13,635	7,775	2,559	1,904
Chemistry	138,522	136,608	139,844	148,960	142,398	108,222	112,717
Physics	367,637	407,897	477,494	392,955	369,945	216,639	192,843
Physical sciences, n.e.c.	63,596	72,121	42,177	38,924	37,684	48,739	72,068
Environmental sciences, total	262,666	259,684	263,441	292,029	254,959	402,155	374,358
Atmospheric sciences	81,984	53,486	59,283	69,733	60,177	68,145	63,272
Geological sciences	86,250	74,880	84,402	95,050	62,158	52,944	12,099
Oceanography	86,641	84,721	86,686	88,335	88,137	119,125	117,889
Environmental sciences, n.e.c.	7,791	46,597	33,070	38,911	44,487	161,941	181,098
Math & computer sciences, total	380,536	536,983	575,430	603,290	743,553	626,128	605,184
Mathematics	42,480	86,691	80,967	93,255	101,189	94,180	45,369
Computer sciences	288,556	427,659	473,026	474,625	595,057	483,328	523,539
Math & computer sciences, n.e.c.	49,500	22,633	21,437	35,410	47,307	48,620	36,276
Engineering, total	1,938,019	2,032,672	2,451,480	2,136,063	2,026,201	2,093,394	1,933,425
Aeronautical	224,323	161,992	217,963	167,733	140,315	227,215	220,365
Astronautical	118,184	107,927	105,029	77,330	85,576	81,693	140,930
Chemical	41,853	34,672	69,837	38,280	38,510	44,375	30,315
Civil	160,848	183,970	99,273	81,211	82,857	59,653	60,871
Electrical	584,414	614,971	723,353	574,916	562,307	523,090	474,274
Mechanical	198,341	214,572	352,023	265,053	268,336	225,448	183,934
Metallurgy & materials	493,137	521,562	510,047	492,058	486,747	479,893	403,097
Engineering, n.e.c.	116,919	193,006	373,955	439,482	361,553	452,027	419,639
Social sciences, total	2,598	5,337	19,968	2,511	488	2,387	886
Anthropology	0	652	303	287	0	0	0
Economics	1,064	888	739	365	292	217	373
Political science	0	0	0	0	0	0	0
Sociology	710	592	492	244	196	145	184
Social sciences, n.e.c.	824	3,205	18,434	1,615	0	2,025	329
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.	157,243	158,130	325,363	158,621	132,047	138,540	147,962

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

Table 1D. Federal obligations for total research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	3,969,891	4,142,262	4,920,353	6,806,183	7,011,698	6,510,444
Life sciences, total	438,542	473,764	623,034	1,051,922	1,047,394	861,910
Biol & agricultural, total	155,321	186,363	190,217	246,571	NA	NA
Biol (excl environmental)	137,328	161,919	158,827	229,098	NA	NA
Environmental biology	17,454	24,444	30,641	15,928	NA	NA
Agricultural	539	0	749	1,545	NA	NA
Medical sciences, total	254,965	224,430	241,215	590,076	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	28,256	62,971	191,602	215,275	NA	NA
Psychology, total	74,069	45,823	66,021	71,128	82,482	80,819
Biological aspects	28,661	3,280	6,777	12,540	NA	NA
Social aspects	38,503	10,501	19,292	14,401	NA	NA
Psychological sciences, n.e.c.	6,905	32,042	39,952	44,187	NA	NA
Physical sciences, total	440,286	405,836	403,870	588,705	633,283	573,426
Astronomy	6,270	17,140	0	6,314	NA	NA
Chemistry	124,332	105,643	98,341	155,143	NA	NA
Physics	238,376	224,667	268,974	356,561	NA	NA
Physical sciences, n.e.c.	71,308	58,386	36,555	70,687	NA	NA
Environmental sciences, total	361,300	326,913	335,225	296,788	311,879	272,500
Atmospheric sciences	51,863	51,183	35,256	37,194	NA	NA
Geological sciences	11,242	6,832	6,784	14,208	NA	NA
Oceanography	112,459	182,778	198,318	214,262	NA	NA
Environmental sciences, n.e.c.	185,736	86,120	94,867	31,124	NA	NA
Math & computer sciences, total	658,680	643,403	700,416	946,681	1,032,487	1,083,064
Mathematics	63,966	59,051	65,196	82,383	NA	NA
Computer sciences	561,667	537,990	578,021	750,783	NA	NA
Math & computer sciences, n.e.c.	33,047	46,362	57,199	113,515	NA	NA
Engineering, total	1,805,538	1,950,341	2,500,609	3,571,247	3,500,502	3,257,074
Aeronautical	308,623	350,878	558,787	1,058,239	NA	NA
Astronautical	36,643	41,788	74,338	119,421	NA	NA
Chemical	34,798	34,773	32,446	33,636	NA	NA
Civil	51,871	46,818	83,582	67,057	NA	NA
Electrical	507,238	555,575	602,673	722,771	NA	NA
Mechanical	179,151	168,304	206,096	249,653	NA	NA
Metallurgy & materials	340,555	286,317	332,536	498,808	NA	NA
Engineering, n.e.c.	346,659	465,888	610,151	821,662	NA	NA
Social sciences, total	176	0	19,577	16,826	24,048	16,138
Anthropology	0	0	0	349	NA	NA
Economics	0	0	3,091	0	NA	NA
Political science	0	0	1,965	0	NA	NA
Sociology	176	0	415	87	NA	NA
Social sciences, n.e.c.	0	0	14,106	16,390	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	191,300	296,182	271,601	262,886	379,623	365,513

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 1E. Federal obligations for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	433,117	428,991	417,122	424,784	464,748	593,431	746,499
Life sciences, total	80,719	79,534	79,223	84,661	89,883	128,721	102,926
Biol & agricultural, total	72,649	71,309	71,054	75,002	79,410	119,805	74,978
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	8,070	8,225	8,169	9,659	10,473	8,916	8,523
Clinical medical	8,070	8,225	8,169	9,659	10,473	8,916	3,957
Other medical	0	0	0	0	0	0	4,566
Life sciences, n.e.c.	0	0	0	0	0	0	19,425
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	300,278	294,874	284,885	296,483	320,179	330,974	475,441
Astronomy	0	0	0	0	0	0	0
Chemistry	64,218	60,511	54,087	52,386	61,108	63,642	76,485
Physics	236,060	234,363	230,798	244,097	252,202	264,801	394,237
Physical sciences, n.e.c.	0	0	0	0	6,869	2,531	4,719
Environmental sciences, total	9,462	10,116	14,626	14,200	14,813	16,807	75,174
Atmospheric sciences	5,318	5,812	7,942	7,931	7,493	8,830	14,959
Geological sciences	1,942	2,085	3,711	2,687	1,635	2,956	24,586
Oceanography	2,202	2,219	2,973	2,963	3,557	5,021	13,787
Environmental sciences, n.e.c.	0	0	0	619	2,128	0	21,842
Math & computer sciences, total	5,779	5,309	4,809	4,634	4,018	5,532	5,952
Mathematics	NA	NA	NA	NA	NA	NA	3,862
Computer sciences	NA	NA	NA	NA	NA	NA	2,090
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	36,879	39,158	33,579	24,806	35,855	111,397	84,697
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,589	4,600	4,655	1,074	7,613	24,927	11,876
Civil	0	0	0	0	0	17,000	1,000
Electrical	0	0	0	0	1,295	5,656	100
Mechanical	0	0	0	0	1,363	7,210	2,822
Metallurgy & materials	30,986	33,393	28,057	23,732	24,807	46,928	59,603
Engineering, n.e.c.	1,304	1,165	867	0	777	9,676	9,296
Social sciences, total	0	0	0	0	0	0	2,309
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	2,309
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

Table 1E. Federal obligations for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	891,266	1,102,243	1,131,846	1,277,326	1,413,605	1,696,088	1,961,127
Life sciences, total	114,863	135,116	138,087	146,069	147,500	162,393	146,205
Biol & agricultural, total	81,231	98,019	91,188	99,552	101,926	113,877	103,902
Biol (excl environmental)	NA	96,019	87,954	92,395	101,926	109,814	95,707
Environmental biology	NA	0	0	3,356	0	0	0
Agricultural	NA	2,000	3,234	3,801	0	4,063	8,195
Medical sciences, total	9,028	6,000	7,310	7,285	20,405	22,104	21,867
Clinical medical	2,100	NA	NA	NA	NA	NA	NA
Other medical	6,928	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	24,604	31,097	39,589	39,232	25,169	26,412	20,436
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	552,766	615,841	663,352	792,100	870,387	1,013,658	1,224,018
Astronomy	0	0	0	0	0	300	0
Chemistry	76,302	76,111	72,340	84,313	83,706	105,396	117,599
Physics	469,244	539,664	574,661	690,503	766,895	902,562	1,085,801
Physical sciences, n.e.c.	7,220	66	16,351	17,284	19,786	5,400	20,618
Environmental sciences, total	84,765	90,660	102,563	117,392	82,648	79,356	84,409
Atmospheric sciences	13,433	13,890	15,503	15,937	25,044	27,021	23,916
Geological sciences	28,389	31,898	31,531	32,617	37,955	35,042	42,852
Oceanography	13,354	12,438	13,094	14,284	10,001	11,213	6,971
Environmental sciences, n.e.c.	29,589	32,434	42,435	54,554	9,648	6,080	10,670
Math & computer sciences, total	6,839	7,698	9,233	11,644	14,721	15,105	22,155
Mathematics	4,445	4,809	5,711	7,176	8,173	8,209	9,821
Computer sciences	2,394	2,889	3,522	3,020	3,048	6,351	8,490
Math & computer sciences, n.e.c.	0	0	0	1,448	3,500	545	3,844
Engineering, total	119,347	230,756	204,169	193,120	270,199	420,776	440,219
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	2,025	0	0	2,539	0
Chemical	15,250	41,953	12,173	14,412	30,633	1,061	51,933
Civil	3,700	4,114	0	1,030	20,696	43,770	35,240
Electrical	2,402	17,570	6,767	14,760	13,737	45,095	26,188
Mechanical	4,754	1,286	1,796	25,589	16,981	7,387	75,772
Metallurgy & materials	76,548	90,622	86,188	48,940	52,044	61,166	62,629
Engineering, n.e.c.	16,693	75,211	95,220	88,389	136,108	259,758	188,457
Social sciences, total	2,686	325	2,906	2,269	3,950	3,405	5,941
Anthropology	0	0	0	0	0	0	0
Economics	1,551	120	0	0	0	0	0
Political science	0	0	557	0	0	0	0
Sociology	135	205	0	0	0	0	0
Social sciences, n.e.c.	1,000	0	2,349	2,269	3,950	3,405	5,941
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.	10,000	21,847	11,536	14,732	24,200	1,395	38,180

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

Table 1E. Federal obligations for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	2,024,889	2,141,037	2,040,321	2,097,851	2,235,367	2,431,681	2,570,483
Life sciences, total	143,830	157,468	143,591	160,759	185,244	222,917	214,162
Biol & agricultural, total	99,814	119,224	107,586	123,275	134,842	169,743	160,410
Biol (excl environmental)	96,299	113,738	106,303	122,705	133,752	167,098	159,430
Environmental biology	3,494	5,486	953	322	520	2,445	655
Agricultural	21	0	330	248	570	200	325
Medical sciences, total	20,434	21,565	22,624	21,729	33,117	37,279	36,890
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	23,582	16,679	13,381	15,755	17,285	15,895	16,862
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	1,291,898	1,342,173	1,266,554	1,345,859	1,426,963	1,597,751	1,577,130
Astronomy	0	0	0	0	0	0	0
Chemistry	140,455	142,969	145,906	145,522	162,903	213,381	189,183
Physics	1,149,753	1,195,202	1,116,378	1,197,231	1,258,282	1,376,845	1,376,074
Physical sciences, n.e.c.	1,690	4,002	4,270	3,106	5,778	7,525	11,873
Environmental sciences, total	88,091	87,558	89,636	89,339	86,524	145,933	278,595
Atmospheric sciences	25,747	29,434	32,706	28,665	32,391	37,945	64,653
Geological sciences	42,124	41,237	46,503	46,543	43,037	82,821	99,825
Oceanography	10,572	11,216	5,559	5,869	6,839	6,559	5,990
Environmental sciences, n.e.c.	9,648	5,671	4,868	8,262	4,257	18,608	108,127
Math & computer sciences, total	23,565	40,004	42,962	44,281	47,115	46,863	53,523
Mathematics	9,519	24,069	13,216	28,431	31,216	29,877	30,714
Computer sciences	10,720	15,935	29,228	15,450	15,899	16,986	22,809
Math & computer sciences, n.e.c.	3,326	0	518	400	0	0	0
Engineering, total	439,029	511,283	494,151	442,201	479,524	406,129	435,646
Aeronautical	0	0	216	0	0	0	0
Astronautical	0	0	0	238	0	0	0
Chemical	46,089	136,625	121,576	88,865	134,505	4,493	105,874
Civil	40,601	45,143	42,444	37,228	30,721	29,253	26,570
Electrical	31,957	32,317	34,698	28,161	23,514	22,592	21,118
Mechanical	14,777	30,149	20,506	30,335	26,629	16,165	17,697
Metallurgy & materials	68,743	68,448	82,825	77,094	78,449	78,001	78,454
Engineering, n.e.c.	236,862	198,601	191,886	180,280	185,706	255,625	185,933
Social sciences, total	5,136	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	5,136	0	0	0	0	0	0
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.	33,340	2,551	3,427	15,412	9,997	12,088	11,427

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

Table 1E. Federal obligations for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	3,273,630	3,412,535	3,440,214	3,282,466	3,459,934	3,362,153	3,567,697
Life sciences, total	285,359	305,861	246,275	255,196	256,121	244,691	220,896
Biol & agricultural, total	152,853	164,116	183,079	171,951	201,057	192,181	163,701
Biol (excl environmental)	151,736	162,982	180,678	169,171	198,884	187,181	162,701
Environmental biology	614	460	2,003	2,233	2,173	5,000	1,000
Agricultural	503	674	398	547	0	0	0
Medical sciences, total	115,587	124,092	48,915	70,809	47,374	45,232	52,298
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	16,919	17,653	14,281	12,436	7,690	7,278	4,897
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	1,837,775	1,923,033	1,997,984	1,809,158	1,799,182	1,681,374	1,756,798
Astronomy	0	0	12,566	14,235	0	0	0
Chemistry	187,630	219,290	246,344	225,567	216,712	266,988	236,888
Physics	1,497,100	1,618,395	1,634,384	1,485,254	1,499,497	1,201,667	1,282,212
Physical sciences, n.e.c.	153,045	85,348	104,690	84,102	82,973	212,719	237,698
Environmental sciences, total	238,469	244,054	304,605	303,852	382,213	430,733	350,843
Atmospheric sciences	72,812	83,610	92,565	106,463	97,680	123,264	88,941
Geological sciences	90,313	75,269	116,720	81,599	100,277	89,703	57,374
Oceanography	5,006	6,217	7,539	7,337	8,158	11,622	7,310
Environmental sciences, n.e.c.	70,338	78,958	87,781	108,453	176,098	206,144	197,218
Math & computer sciences, total	142,703	209,073	205,837	201,777	223,195	288,685	411,502
Mathematics	37,048	63,547	68,983	81,910	489	0	86,759
Computer sciences	87,305	116,315	103,384	89,574	97,179	201,015	318,568
Math & computer sciences, n.e.c.	18,350	29,211	33,470	30,293	125,527	87,670	6,175
Engineering, total	723,603	711,344	668,627	665,052	735,085	694,022	802,536
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	803	17,493	0	1,600
Chemical	142,265	135,139	103,630	131,185	121,443	92,325	119,367
Civil	32,303	25,477	32,288	36,512	52,740	37,900	37,166
Electrical	42,873	38,744	43,083	42,235	51,369	24,817	24,264
Mechanical	49,062	43,405	39,997	37,057	37,590	17,602	16,685
Metallurgy & materials	72,898	67,117	66,956	71,762	63,626	263,726	275,859
Engineering, n.e.c.	384,202	401,462	382,673	345,498	390,824	257,652	327,595
Social sciences, total	0	135	500	932	500	0	0
Anthropology	0	0	370	420	500	0	0
Economics	0	135	130	512	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	45,721	19,035	16,386	46,499	63,638	22,648	25,122

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

Table 1E. Federal obligations for total research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	3,787,511	3,919,814	4,100,855	4,593,167	5,236,368	5,375,579
Life sciences, total	255,805	255,047	286,456	301,280	403,831	345,820
Biol & agricultural, total	197,619	197,262	207,287	212,005	NA	NA
Biol (excl environmental)	189,119	188,762	198,817	205,310	NA	NA
Environmental biology	8,500	8,500	8,470	6,695	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	53,695	53,006	73,293	84,500	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,491	4,779	5,876	4,775	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	1,868,593	1,632,032	1,808,135	1,937,483	2,102,411	2,049,034
Astronomy	0	0	0	0	NA	NA
Chemistry	236,788	189,606	202,089	227,317	NA	NA
Physics	1,321,650	1,362,546	1,521,309	1,600,366	NA	NA
Physical sciences, n.e.c.	310,155	79,880	84,737	109,800	NA	NA
Environmental sciences, total	350,010	311,748	296,028	296,638	316,240	319,650
Atmospheric sciences	90,544	94,793	108,190	108,421	NA	NA
Geological sciences	84,298	87,173	84,135	82,261	NA	NA
Oceanography	4,244	5,358	9,300	7,353	NA	NA
Environmental sciences, n.e.c.	170,924	124,424	94,403	98,603	NA	NA
Math & computer sciences, total	494,617	613,570	714,465	824,160	819,725	837,429
Mathematics	93,586	102,332	93,926	119,326	NA	NA
Computer sciences	395,801	506,278	619,239	703,591	NA	NA
Math & computer sciences, n.e.c.	5,230	4,960	1,300	1,243	NA	NA
Engineering, total	797,891	1,087,340	982,395	1,221,963	1,588,485	1,817,905
Aeronautical	0	0	500	772	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	91,325	94,270	89,557	91,452	NA	NA
Civil	37,979	45,707	41,812	45,753	NA	NA
Electrical	25,230	30,837	27,697	30,339	NA	NA
Mechanical	17,499	17,453	14,377	16,891	NA	NA
Metallurgy & materials	260,618	331,177	311,903	338,535	NA	NA
Engineering, n.e.c.	365,240	567,896	496,549	698,221	NA	NA
Social sciences, total	0	0	0	0	0	0
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	20,595	20,077	13,376	11,643	5,676	5,741

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 1970-74 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 1F. Federal obligations for total research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	1,007,861	1,169,146	1,395,980	1,421,433	1,830,711	1,914,946	2,117,470
Life sciences, total	833,856	968,663	1,159,573	1,181,278	1,521,078	1,618,442	1,775,180
Biol & agricultural, total	391,951	455,158	544,396	568,008	747,537	778,739	864,765
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	422,978	491,518	588,893	585,754	738,152	790,638	861,609
Clinical medical	266,946	303,477	365,576	365,986	433,355	439,464	476,217
Other medical	156,032	188,041	223,317	219,768	304,797	351,174	385,392
Life sciences, n.e.c.	18,927	21,987	26,284	27,516	35,389	49,065	48,806
Psychology, total	44,637	53,927	60,320	53,253	77,434	61,240	70,604
Biological aspects	15,727	17,769	19,894	17,353	34,565	21,818	27,140
Social aspects	20,119	23,945	27,018	23,022	25,897	19,834	23,325
Psychological sciences, n.e.c.	8,791	12,213	13,408	12,878	16,972	19,588	20,139
Physical sciences, total	27,120	29,508	29,501	30,156	46,696	41,490	45,160
Astronomy	0	0	0	0	0	0	0
Chemistry	25,091	6,089	26,522	27,212	42,824	37,319	40,564
Physics	2,029	21,044	2,979	2,944	3,872	4,171	4,596
Physical sciences, n.e.c.	0	2,375	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	3,441	5,148	5,853	5,594	7,903	8,114	8,350
Mathematics	NA	NA	NA	NA	NA	NA	8,350
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	12,431	14,891	19,911	22,195	27,474	26,384	28,959
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	29	989	1,441	0	0
Civil	0	31	0	0	0	0	0
Electrical	87	0	303	5	122	0	0
Mechanical	0	0	1,305	183	490	0	0
Metallurgy & materials	0	0	0	105	0	0	0
Engineering, n.e.c.	12,344	14,860	18,274	20,913	25,421	26,384	28,959
Social sciences, total	61,540	67,851	84,676	89,504	98,900	99,192	127,620
Anthropology	2,244	3,649	4,642	2,611	4,520	4,299	3,811
Economics	5,098	4,933	5,700	3,600	24,502	23,368	17,931
Political science	511	525	806	650	645	1,368	551
Sociology	18,979	26,779	45,463	53,117	38,534	28,449	29,579
Social sciences, n.e.c.	34,708	31,965	28,065	29,526	30,699	41,708	75,748
History	0	21	47	35	220	572	NA
Linguistics	0	1,871	2,831	2,477	1,475	1,143	NA
Other social sciences	34,708	30,073	25,187	27,014	29,004	39,993	NA
Other sciences, n.e.c.	24,836	29,158	36,146	39,453	51,226	60,084	61,597

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

**Table 1F. Federal obligations for total research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	2,374,231	2,691,474	3,015,669	3,332,777	3,492,241	3,605,584	4,020,846
Life sciences, total	1,980,810	2,262,801	2,517,063	2,786,996	2,949,142	3,107,039	3,479,120
Biol & agricultural, total	965,402	1,116,522	1,305,557	1,422,930	1,539,188	1,589,132	1,816,475
Biol (excl environmental)	NA	1,116,522	1,305,557	1,422,835	1,539,070	1,588,894	1,816,122
Environmental biology	NA	0	0	95	118	238	353
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	953,629	1,078,523	1,124,142	1,266,290	1,324,290	1,427,458	1,546,910
Clinical medical	518,540	NA	NA	NA	NA	NA	NA
Other medical	435,089	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	61,779	67,756	87,364	97,776	85,664	90,449	115,735
Psychology, total	70,405	85,328	104,699	101,566	110,163	111,776	125,802
Biological aspects	27,594	34,409	35,427	41,186	41,986	46,536	47,065
Social aspects	19,960	25,331	28,157	28,454	23,417	23,112	25,677
Psychological sciences, n.e.c.	22,851	25,588	41,115	31,926	44,760	42,128	53,060
Physical sciences, total	51,165	58,311	69,797	79,781	78,306	70,757	84,372
Astronomy	0	0	0	0	0	0	0
Chemistry	46,047	52,472	62,760	69,908	70,070	63,291	74,243
Physics	5,118	5,839	7,037	9,873	8,236	7,466	10,129
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	10,158	10,190	7,607	8,989	9,850	9,370	11,811
Mathematics	9,675	10,034	6,758	8,438	9,850	9,270	11,549
Computer sciences	483	156	92	85	0	100	262
Math & computer sciences, n.e.c.	0	0	757	466	0	0	0
Engineering, total	38,620	42,832	42,100	43,179	48,791	41,369	39,730
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	38,620	42,832	42,100	43,179	48,791	41,369	39,730
Social sciences, total	152,563	159,155	168,740	181,438	166,904	126,210	130,010
Anthropology	2,040	3,409	2,860	980	663	937	550
Economics	15,324	22,824	19,002	20,172	16,143	11,554	12,348
Political science	263	320	849	1,043	1,662	830	1,628
Sociology	24,391	31,753	33,563	40,036	37,776	30,464	44,198
Social sciences, n.e.c.	110,545	100,849	112,466	119,207	110,660	82,425	71,286
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.	70,510	72,857	105,663	130,828	129,085	139,063	150,001

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

**Table 1F. Federal obligations for total research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	4,466,023	5,028,334	5,189,558	6,021,944	6,496,963	7,088,434	7,467,093
Life sciences, total	3,866,589	4,369,941	4,511,606	5,294,100	5,604,153	6,097,316	6,408,890
Biol & agricultural, total	2,055,386	2,342,129	2,436,563	2,881,407	3,012,348	3,253,683	3,401,654
Biol (excl environmental)	2,054,176	2,340,906	2,435,571	2,879,734	3,010,833	3,252,202	3,400,701
Environmental biology	238	516	296	715	1,050	808	789
Agricultural	972	707	696	958	465	673	164
Medical sciences, total	1,690,430	1,869,279	1,923,560	2,203,221	2,489,857	2,706,272	2,868,252
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	120,773	158,533	151,483	209,472	101,948	137,361	138,984
Psychology, total	146,999	171,384	182,884	220,475	232,539	263,148	297,845
Biological aspects	55,888	61,145	64,250	69,431	75,988	87,069	98,256
Social aspects	29,549	36,033	37,156	42,606	45,677	59,768	79,647
Psychological sciences, n.e.c.	61,562	74,206	81,478	108,438	110,874	116,311	119,942
Physical sciences, total	96,771	112,647	114,239	127,295	135,455	120,934	129,193
Astronomy	0	0	0	0	0	0	0
Chemistry	86,304	104,858	104,212	115,480	123,810	107,780	112,170
Physics	10,467	7,789	9,960	11,746	11,573	12,949	16,874
Physical sciences, n.e.c.	0	0	67	69	72	205	149
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	15,385	14,232	12,962	14,432	18,164	16,063	18,875
Mathematics	14,612	12,551	11,466	12,593	16,204	14,448	17,576
Computer sciences	773	1,681	1,496	1,839	1,960	1,615	1,299
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	50,864	42,831	56,480	66,467	78,055	70,086	68,918
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	50,864	42,831	56,480	66,467	78,055	70,086	68,918
Social sciences, total	138,298	137,811	122,188	145,277	157,506	198,727	215,286
Anthropology	635	668	1,451	2,444	1,981	942	1,539
Economics	11,461	9,624	7,570	9,885	11,221	16,605	13,147
Political science	2,545	3,188	3,218	1,902	2,464	2,722	2,690
Sociology	42,600	42,738	38,950	45,991	55,117	66,461	91,148
Social sciences, n.e.c.	81,057	81,593	70,999	85,055	86,723	111,997	106,762
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.	151,117	179,488	189,199	153,898	271,091	322,160	328,086

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

**Table 1F. Federal obligations for total research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	8,162,487	7,945,519	9,192,613	9,736,441	10,075,950	10,545,882	11,228,088
Life sciences, total	6,805,987	7,024,312	7,842,589	8,279,475	8,651,148	9,172,481	9,721,330
Biol & agricultural, total	3,647,162	3,564,993	3,955,120	3,885,333	4,006,581	4,412,474	4,429,730
Biol (excl environmental)	3,644,272	3,564,857	3,945,514	3,885,215	4,006,518	4,412,404	4,429,649
Environmental biology	1,189	136	9,606	118	63	70	81
Agricultural	1,701	0	0	0	0	0	0
Medical sciences, total	2,869,859	3,201,482	3,677,548	4,146,297	4,353,848	4,403,395	4,936,670
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	288,966	257,837	209,921	247,845	290,719	356,612	354,930
Psychology, total	344,105	125,469	361,942	383,386	410,659	369,176	392,026
Biological aspects	111,218	0	0	16,678	21,895	14,226	11,989
Social aspects	99,467	79	0	3,926	8,000	6,711	6,121
Psychological sciences, n.e.c.	133,420	125,390	361,942	362,782	380,764	348,239	373,916
Physical sciences, total	142,276	154,370	163,216	156,351	155,685	154,401	166,615
Astronomy	0	0	0	0	0	0	0
Chemistry	119,896	136,682	142,818	137,420	137,447	137,197	147,911
Physics	22,380	17,679	20,398	18,931	18,238	17,204	18,704
Physical sciences, n.e.c.	0	9	0	0	0	0	0
Environmental sciences, total	0	0	0	0	23,853	29,986	32,165
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	23,853	29,986	32,165
Math & computer sciences, total	18,225	20,254	43,720	62,210	68,945	94,634	103,322
Mathematics	7,623	18,123	22,378	48,727	34,102	40,629	44,484
Computer sciences	902	1,616	21,175	13,309	34,843	53,684	58,495
Math & computer sciences, n.e.c.	9,700	515	167	174	0	321	343
Engineering, total	76,330	83,683	98,274	107,022	135,683	141,948	152,259
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	76,330	83,683	98,274	107,022	135,683	141,948	152,259
Social sciences, total	318,881	235,945	186,128	173,889	171,728	134,717	165,779
Anthropology	2,621	0	0	0	0	0	32
Economics	9,502	8,785	1,652	11,123	14,344	17,365	28,987
Political science	2,570	249	40	2,840	2,502	143	0
Sociology	154,681	43,850	34,024	17,820	2,159	1,629	1,078
Social sciences, n.e.c.	149,507	183,061	150,412	142,106	152,723	115,580	135,682
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.	456,683	301,486	496,744	574,108	458,249	448,539	494,592

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

Table 1F. Federal obligations for total research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	12,018,474	13,714,640	17,913,064	20,648,671	23,407,425	26,788,878
Life sciences, total	10,394,174	11,877,057	14,137,499	18,519,590	20,996,408	24,036,813
Biol & agricultural, total	4,726,466	5,358,375	9,543,108	11,072,397	NA	NA
Biol (excl environmental)	4,726,379	5,358,276	9,543,108	11,072,397	NA	NA
Environmental biology	87	99	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	5,284,521	6,091,357	3,742,826	5,449,309	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	383,187	427,325	851,565	1,997,884	NA	NA
Psychology, total	422,294	479,828	1,463,861	565,058	643,187	759,941
Biological aspects	12,866	14,674	0	0	NA	NA
Social aspects	6,618	7,567	143	179	NA	NA
Psychological sciences, n.e.c.	402,810	457,587	1,463,718	564,879	NA	NA
Physical sciences, total	178,803	203,928	610,772	336,225	382,370	432,672
Astronomy	0	0	0	0	NA	NA
Chemistry	158,732	181,037	594,330	301,295	NA	NA
Physics	20,071	22,891	0	0	NA	NA
Physical sciences, n.e.c.	0	0	16,442	34,930	NA	NA
Environmental sciences, total	34,518	39,369	376,544	306,257	348,633	412,321
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	463	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	34,518	39,369	376,544	305,794	NA	NA
Math & computer sciences, total	113,978	130,261	137,542	58,335	65,119	72,905
Mathematics	47,639	54,277	126,072	45,376	NA	NA
Computer sciences	66,339	75,119	11,470	12,134	NA	NA
Math & computer sciences, n.e.c.	0	865	0	825	NA	NA
Engineering, total	163,397	186,357	385,062	173,674	197,542	225,043
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	52,130	62,683	NA	NA
Engineering, n.e.c.	163,397	186,357	332,932	110,991	NA	NA
Social sciences, total	187,026	184,737	325,235	246,763	272,722	287,625
Anthropology	0	0	30	0	NA	NA
Economics	39,092	17,645	37,149	41,788	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	1,179	1,297	672	1,373	NA	NA
Social sciences, n.e.c.	146,755	165,795	287,384	203,602	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	524,284	613,103	476,549	442,769	501,444	561,558

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: 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.

Data shown for fiscal years 1970-78 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.

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 1G. Federal obligations for total research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	NA	NA	NA	122,191	155,616	139,425	136,617
Life sciences, total	NA	NA	NA	62,844	81,006	74,276	69,387
Biol & agricultural, total	NA	NA	NA	22,978	45,157	34,858	46,659
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	39,866	35,849	28,743	16,270
Clinical medical	NA	NA	NA	39,866	25,218	18,705	12,819
Other medical	NA	NA	NA	0	10,631	10,038	3,451
Life sciences, n.e.c.	NA	NA	NA	0	0	10,675	6,458
Psychology, total	NA	NA	NA	36,614	54,222	41,655	44,212
Biological aspects	NA	NA	NA	17,262	34,412	21,818	27,140
Social aspects	NA	NA	NA	19,352	19,810	18,560	17,072
Psychological sciences, n.e.c.	NA	NA	NA	0	0	1,277	0
Physical sciences, total	NA	NA	NA	1,094	2,589	621	93
Astronomy	NA	NA	NA	0	0	0	0
Chemistry	NA	NA	NA	1,094	2,589	621	93
Physics	NA	NA	NA	0	0	0	0
Physical sciences, n.e.c.	NA	NA	NA	0	0	0	0
Environmental sciences, total	NA	NA	NA	0	0	0	0
Atmospheric sciences	NA	NA	NA	0	0	0	0
Geological sciences	NA	NA	NA	0	0	0	0
Oceanography	NA	NA	NA	0	0	0	0
Environmental sciences, n.e.c.	NA	NA	NA	0	0	0	0
Math & computer sciences, total	NA	NA	NA	904	1,803	1,528	1,112
Mathematics	NA	NA	NA	NA	NA	NA	1,112
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	NA	NA	NA	0	0	0	0
Aeronautical	NA	NA	NA	0	0	0	0
Astronautical	NA	NA	NA	0	0	0	0
Chemical	NA	NA	NA	0	0	0	0
Civil	NA	NA	NA	0	0	0	0
Electrical	NA	NA	NA	0	0	0	0
Mechanical	NA	NA	NA	0	0	0	0
Metallurgy & materials	NA	NA	NA	0	0	0	0
Engineering, n.e.c.	NA	NA	NA	0	0	0	0
Social sciences, total	NA	NA	NA	20,735	15,996	17,575	20,684
Anthropology	NA	NA	NA	2,309	1,144	2,524	3,811
Economics	NA	NA	NA	0	0	114	237
Political science	NA	NA	NA	0	0	114	0
Sociology	NA	NA	NA	15,914	13,157	6,461	14,254
Social sciences, n.e.c.	NA	NA	NA	2,512	1,695	8,362	2,382
History	NA	NA	NA	35	220	572	NA
Linguistics	NA	NA	NA	2,477	1,475	1,143	NA
Other social sciences	NA	NA	NA	0	0	6,647	NA
Other sciences, n.e.c.	NA	NA	NA	0	0	3,770	1,129

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

Table 1G. Federal obligations for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	151,966	178,751	213,535	233,536	237,684	246,056	300,352
Life sciences, total	76,950	94,137	114,788	124,808	130,095	134,227	180,139
Biol & agricultural, total	49,423	63,538	75,017	75,250	82,518	79,049	107,023
Biol (excl environmental)	NA	63,538	75,017	75,155	82,400	79,049	107,023
Environmental biology	NA	0	0	95	118	0	0
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	13,051	16,019	18,346	25,594	37,896	45,082	58,576
Clinical medical	10,206	NA	NA	NA	NA	NA	NA
Other medical	2,845	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	14,476	14,580	21,425	23,964	9,681	10,096	14,540
Psychology, total	46,563	57,316	64,167	70,446	71,825	74,652	80,089
Biological aspects	27,594	34,409	35,427	41,186	41,986	46,536	47,065
Social aspects	18,969	22,652	28,157	28,454	23,417	23,112	25,677
Psychological sciences, n.e.c.	0	255	583	806	6,422	5,004	7,347
Physical sciences, total	938	1,261	624	1,467	654	600	2,035
Astronomy	0	0	0	0	0	0	0
Chemistry	938	1,261	624	1,467	654	600	1,994
Physics	0	0	0	0	0	0	41
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,936	1,020	849	551	0	510	424
Mathematics	1,636	864	0	0	0	410	162
Computer sciences	300	156	92	85	0	100	262
Math & computer sciences, n.e.c.	0	0	757	466	0	0	0
Engineering, total	0	209	209	85	84	0	55
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	209	209	85	84	0	55
Social sciences, total	20,827	24,704	29,631	31,912	27,400	29,641	32,764
Anthropology	2,040	3,409	2,860	980	663	937	550
Economics	236	283	420	86	169	345	54
Political science	243	172	419	514	971	830	1,628
Sociology	15,655	18,278	22,991	26,126	20,745	22,962	25,693
Social sciences, n.e.c.	2,653	2,562	2,941	4,206	4,852	4,567	4,839
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.	4,752	104	3,267	4,267	7,626	6,426	4,846

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

**Table 1G. Federal obligations for total research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	336,021	376,421	394,882	473,282	552,392	692,640	801,198
Life sciences, total	198,705	223,333	237,754	289,587	335,126	434,913	488,720
Biol & agricultural, total	121,240	136,294	141,091	170,903	197,042	261,248	291,249
Biol (excl environmental)	120,268	135,233	140,316	169,465	195,647	259,902	290,429
Environmental biology	0	354	79	480	930	673	656
Agricultural	972	707	696	958	465	673	164
Medical sciences, total	72,201	81,341	89,720	112,349	127,967	159,530	178,774
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	5,264	5,698	6,943	6,335	10,117	14,135	18,697
Psychology, total	94,175	104,896	109,070	127,047	138,213	168,548	201,001
Biological aspects	55,888	61,145	64,250	69,431	75,988	87,069	98,256
Social aspects	29,322	35,818	36,095	42,606	45,677	59,768	79,647
Psychological sciences, n.e.c.	8,965	7,933	8,725	15,010	16,548	21,711	23,098
Physical sciences, total	2,313	4,016	5,028	7,567	9,442	9,258	9,926
Astronomy	0	0	0	0	0	0	0
Chemistry	2,301	3,970	4,727	7,371	9,442	9,206	9,926
Physics	12	46	301	196	0	52	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,114	966	615	1,527	1,815	1,539	1,807
Mathematics	341	266	308	552	598	514	994
Computer sciences	773	700	307	975	1,217	1,025	813
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	174	51	173	485	229	616	806
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	174	51	173	485	229	616	806
Social sciences, total	34,602	37,576	37,568	43,073	54,812	69,199	75,006
Anthropology	635	668	1,451	2,444	1,981	942	1,539
Economics	1,228	1,395	1,878	2,361	2,241	3,274	5,485
Political science	2,545	2,750	2,967	1,531	2,252	2,356	2,457
Sociology	24,325	25,503	23,721	27,565	40,621	47,331	50,177
Social sciences, n.e.c.	5,869	7,260	7,551	9,172	7,717	15,296	15,348
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.	4,938	5,583	4,674	3,996	12,755	8,567	23,932

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

**Table 1G. Federal obligations for total research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	922,973	NA	NA	NA	NA	NA	NA
Life sciences, total	554,655	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	339,642	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	337,090	NA	NA	NA	NA	NA	NA
Environmental biology	851	NA	NA	NA	NA	NA	NA
Agricultural	1,701	NA	NA	NA	NA	NA	NA
Medical sciences, total	192,116	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.	22,897	NA	NA	NA	NA	NA	NA
Psychology, total	236,515	NA	NA	NA	NA	NA	NA
Biological aspects	111,218	NA	NA	NA	NA	NA	NA
Social aspects	99,467	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	25,830	NA	NA	NA	NA	NA	NA
Physical sciences, total	11,620	NA	NA	NA	NA	NA	NA
Astronomy	0	NA	NA	NA	NA	NA	NA
Chemistry	11,596	NA	NA	NA	NA	NA	NA
Physics	24	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Environmental sciences, total	0	NA	NA	NA	NA	NA	NA
Atmospheric sciences	0	NA	NA	NA	NA	NA	NA
Geological sciences	0	NA	NA	NA	NA	NA	NA
Oceanography	0	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	2,084	NA	NA	NA	NA	NA	NA
Mathematics	1,182	NA	NA	NA	NA	NA	NA
Computer sciences	902	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Engineering, total	674	NA	NA	NA	NA	NA	NA
Aeronautical	0	NA	NA	NA	NA	NA	NA
Astronautical	0	NA	NA	NA	NA	NA	NA
Chemical	0	NA	NA	NA	NA	NA	NA
Civil	0	NA	NA	NA	NA	NA	NA
Electrical	0	NA	NA	NA	NA	NA	NA
Mechanical	0	NA	NA	NA	NA	NA	NA
Metallurgy & materials	0	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	674	NA	NA	NA	NA	NA	NA
Social sciences, total	89,678	NA	NA	NA	NA	NA	NA
Anthropology	2,621	NA	NA	NA	NA	NA	NA
Economics	4,215	NA	NA	NA	NA	NA	NA
Political science	2,129	NA	NA	NA	NA	NA	NA
Sociology	58,557	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	22,156	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.	27,747	NA	NA	NA	NA	NA	NA

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

Table 1G. Federal obligations for total research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1970-2003

[Dollars in thousands]

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

Data shown for fiscal years 1970-78 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.

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 for total research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	780,444	913,489	1,099,350	1,132,050	1,489,640	1,604,217	1,767,692
Life sciences, total	707,694	827,262	994,242	1,023,151	1,346,018	1,449,129	1,597,281
Biol & agricultural, total	357,493	414,722	494,485	506,897	665,893	715,664	790,253
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	331,274	390,553	473,503	489,322	644,736	695,419	765,030
Clinical medical	175,242	213,701	267,868	281,132	372,528	404,526	441,909
Other medical	156,032	176,852	205,635	208,190	272,208	290,893	323,121
Life sciences, n.e.c.	18,927	21,987	26,254	26,932	35,389	38,046	41,998
Psychology, total	8,693	10,261	12,456	12,878	16,972	18,311	20,139
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	8,693	10,261	12,456	12,878	16,972	18,311	20,139
Physical sciences, total	20,073	23,419	28,089	28,878	37,976	40,869	45,067
Astronomy	0	0	0	0	0	0	0
Chemistry	18,044	0	25,231	25,934	34,104	36,698	40,471
Physics	2,029	21,044	2,858	2,944	3,872	4,171	4,596
Physical sciences, n.e.c.	0	2,375	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	3,092	3,664	4,465	4,625	6,100	6,586	7,238
Mathematics	NA	NA	NA	NA	NA	NA	7,238
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	12,199	14,532	17,804	18,491	24,409	26,384	28,959
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	12,199	14,532	17,804	18,491	24,409	26,384	28,959
Social sciences, total	4,498	5,427	6,734	7,036	9,307	10,086	11,040
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	4,498	5,427	6,734	7,036	9,307	10,086	11,040
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	4,498	5,427	6,734	7,036	9,307	10,086	NA
Other sciences, n.e.c.	24,195	28,924	35,560	36,991	48,858	52,852	57,968

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

**Table 1H. Federal obligations for total research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,968,658	2,232,596	2,530,111	2,787,470	2,948,309	3,124,452	3,478,205
Life sciences, total	1,779,385	2,018,511	2,255,124	2,491,808	2,649,790	2,823,232	3,140,759
Biol & agricultural, total	881,864	1,002,372	1,176,647	1,281,328	1,393,838	1,466,283	1,672,652
Biol (excl environmental)	NA	1,002,372	1,176,647	1,281,328	1,393,838	1,466,045	1,672,299
Environmental biology	NA	0	0	0	0	238	353
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	850,670	962,963	1,012,538	1,136,668	1,181,492	1,276,596	1,366,912
Clinical medical	488,062	NA	NA	NA	NA	NA	NA
Other medical	362,608	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	46,851	53,176	65,939	73,812	74,460	80,353	101,195
Psychology, total	22,388	25,333	40,532	31,120	36,575	37,124	45,713
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	22,388	25,333	40,532	31,120	36,575	37,124	45,713
Physical sciences, total	50,227	57,050	69,173	78,314	77,652	70,157	82,337
Astronomy	0	0	0	0	0	0	0
Chemistry	45,109	51,211	62,136	68,441	69,416	62,691	72,249
Physics	5,118	5,839	7,037	9,873	8,236	7,466	10,088
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	8,039	9,170	6,758	8,438	9,409	8,860	11,387
Mathematics	8,039	9,170	6,758	8,438	9,409	8,860	11,387
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	32,131	36,285	41,891	43,094	43,642	41,369	39,675
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	32,131	36,285	41,891	43,094	43,642	41,369	39,675
Social sciences, total	12,218	13,794	14,537	13,575	15,250	16,230	18,324
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	12,218	13,794	14,537	13,575	15,250	16,230	18,324
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.	64,270	72,453	102,096	121,121	115,991	127,480	140,010

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

**Table 1H. Federal obligations for total research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

Page 3 of 5

Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	3,910,417	4,428,117	4,587,600	5,314,657	5,680,698	6,061,763	6,335,800
Life sciences, total	3,536,341	4,008,142	4,133,061	4,844,025	5,079,273	5,435,085	5,707,870
Biol & agricultural, total	1,896,446	2,165,760	2,257,472	2,668,854	2,770,716	2,943,925	3,061,895
Biol (excl environmental)	1,896,208	2,165,598	2,257,255	2,668,619	2,770,596	2,943,790	3,061,762
Environmental biology	238	162	217	235	120	135	133
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	1,524,386	1,689,547	1,731,049	1,972,034	2,216,726	2,367,934	2,525,688
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	115,509	152,835	144,540	203,137	91,831	123,226	120,287
Psychology, total	52,597	66,273	72,753	93,428	94,326	94,600	96,844
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	52,597	66,273	72,753	93,428	94,326	94,600	96,844
Physical sciences, total	94,458	108,631	109,211	119,728	126,013	111,676	119,267
Astronomy	0	0	0	0	0	0	0
Chemistry	84,003	100,888	99,485	108,109	114,368	98,574	102,244
Physics	10,455	7,743	9,659	11,550	11,573	12,897	16,874
Physical sciences, n.e.c.	0	0	67	69	72	205	149
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	14,271	12,620	11,298	12,169	15,854	14,056	16,768
Mathematics	14,271	12,285	11,158	12,041	15,606	13,934	16,582
Computer sciences	0	335	140	128	248	122	186
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	50,690	42,780	56,307	65,982	77,826	69,470	68,112
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	50,690	42,780	56,307	65,982	77,826	69,470	68,112
Social sciences, total	25,245	25,156	23,548	29,423	29,070	23,283	22,785
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	25,245	25,156	23,548	29,423	29,070	23,283	22,785
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.	136,815	164,515	181,422	149,902	258,336	313,593	304,154

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

**Table 1H. Federal obligations for total research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	6,783,011	7,398,728	8,638,503	9,079,728	9,333,602	9,876,913	10,519,675
Life sciences, total	5,992,286	6,705,700	7,410,073	7,763,428	8,018,689	8,597,240	9,133,344
Biol & agricultural, total	3,197,311	3,440,293	3,819,820	3,731,067	3,854,109	4,253,791	4,271,101
Biol (excl environmental)	3,196,973	3,440,157	3,810,214	3,730,949	3,854,046	4,253,721	4,271,020
Environmental biology	338	136	9,606	118	63	70	81
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	2,543,717	3,018,570	3,472,904	3,889,970	3,977,633	4,057,356	4,555,369
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	251,258	246,837	117,349	142,391	186,947	286,093	306,874
Psychology, total	107,590	125,390	361,942	383,037	409,543	368,152	391,466
Biological aspects	0	0	0	16,678	21,874	14,226	11,989
Social aspects	0	0	0	3,577	7,268	5,964	5,907
Psychological sciences, n.e.c.	107,590	125,390	361,942	362,782	380,401	347,962	373,570
Physical sciences, total	130,656	154,361	163,216	156,351	155,685	154,401	166,615
Astronomy	0	0	0	0	0	0	0
Chemistry	108,300	136,682	142,818	137,420	137,447	137,197	147,911
Physics	22,356	17,679	20,398	18,931	18,238	17,204	18,704
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	23,853	29,986	32,165
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	23,853	29,986	32,165
Math & computer sciences, total	16,141	18,769	39,900	49,235	58,181	84,470	94,680
Mathematics	6,441	17,203	21,922	48,374	33,974	40,621	44,103
Computer sciences	0	1,566	17,978	861	24,207	43,849	50,577
Math & computer sciences, n.e.c.	9,700	0	0	0	0	0	0
Engineering, total	75,656	83,683	98,274	107,022	135,683	141,948	152,259
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	75,656	83,683	98,274	107,022	135,683	141,948	152,259
Social sciences, total	31,746	35,397	95,563	91,888	105,730	90,891	97,526
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	2,557	0	0	194	241
Social sciences, n.e.c.	31,746	35,397	93,006	91,888	105,730	90,697	97,285
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.	428,936	275,428	469,535	528,767	426,238	409,825	451,620

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

Table 1H. Federal obligations for total research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	11,289,180	12,875,503	16,918,319	19,480,672	22,168,256	25,734,237
Life sciences, total	9,801,441	11,178,707	13,317,138	17,539,027	19,958,481	23,157,012
Biol & agricultural, total	4,583,529	5,227,573	9,398,666	10,910,571	NA	NA
Biol (excl environmental)	4,583,442	5,227,474	9,398,666	10,910,571	NA	NA
Environmental biology	87	99	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	4,888,590	5,575,535	3,128,659	4,772,335	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	329,322	375,599	789,813	1,856,121	NA	NA
Psychology, total	420,101	479,134	1,463,698	564,879	643,097	759,846
Biological aspects	12,866	14,674	0	0	NA	NA
Social aspects	6,339	7,230	0	0	NA	NA
Psychological sciences, n.e.c.	400,896	457,230	1,463,698	564,879	NA	NA
Physical sciences, total	178,803	203,928	610,772	336,225	382,370	432,672
Astronomy	0	0	0	0	NA	NA
Chemistry	158,732	181,037	594,330	301,295	NA	NA
Physics	20,071	22,891	0	0	NA	NA
Physical sciences, n.e.c.	0	0	16,442	34,930	NA	NA
Environmental sciences, total	34,518	39,369	361,869	305,794	348,147	411,811
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	34,518	39,369	361,869	305,794	NA	NA
Math & computer sciences, total	101,606	115,884	125,810	45,114	51,377	61,405
Mathematics	47,330	53,981	125,810	45,114	NA	NA
Computer sciences	54,276	61,903	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	163,397	186,357	385,062	173,674	197,542	225,043
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	52,130	62,683	NA	NA
Engineering, n.e.c.	163,397	186,357	332,932	110,991	NA	NA
Social sciences, total	104,659	119,366	232,622	135,720	154,509	182,390
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	258	294	0	0	NA	NA
Social sciences, n.e.c.	104,401	119,072	232,622	135,720	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	484,655	552,758	421,348	380,239	432,733	504,058

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: 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.

Data shown for fiscal years 1970-78 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.

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 11. Federal obligations for total research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	120,590	136,856	147,313	160,161	143,498	234,053	259,458
Life sciences, total	20,716	24,217	21,645	24,565	25,755	48,871	49,924
Biol & agricultural, total	20,682	24,186	21,564	24,485	25,678	48,772	49,848
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	0	0	0	53	52	66	50
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	0	53	52	66	50
Life sciences, n.e.c.	34	31	81	27	25	33	26
Psychology, total	58	66	185	254	244	315	243
Biological aspects	0	0	160	0	0	0	0
Social aspects	58	66	25	254	244	315	243
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	13,391	13,483	17,057	15,954	12,783	9,032	9,857
Astronomy	0	0	0	0	0	0	31
Chemistry	12,081	12,090	13,300	12,399	9,214	7,406	8,510
Physics	1,310	1,393	3,757	3,555	3,569	1,626	1,316
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	43,524	48,131	56,191	66,701	65,993	108,547	111,227
Atmospheric sciences	4,910	6,688	6,898	6,710	4,183	4,375	4,937
Geological sciences	35,783	38,532	45,269	55,098	56,802	89,652	90,219
Oceanography	2,798	2,873	3,437	4,252	4,392	13,338	15,117
Environmental sciences, n.e.c.	33	38	587	641	616	1,182	954
Math & computer sciences, total	1,321	1,639	1,693	1,371	1,395	2,378	2,733
Mathematics	NA	NA	NA	NA	NA	NA	1,760
Computer sciences	NA	NA	NA	NA	NA	NA	908
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	65
Engineering, total	39,892	46,391	45,180	47,496	33,705	57,892	78,319
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	14,315	14,820	15,930	16,882	5,652	8,584	12,382
Civil	5,595	6,185	7,921	7,974	8,115	10,257	13,627
Electrical	2,428	3,537	2,161	2,306	1,669	4,087	5,610
Mechanical	1,577	2,864	2,274	2,273	1,664	4,719	6,775
Metallurgy & materials	14,464	17,208	15,782	15,352	15,861	29,283	39,171
Engineering, n.e.c.	1,513	1,777	1,112	2,709	744	962	754
Social sciences, total	1,494	2,706	3,549	3,139	2,969	5,755	5,930
Anthropology	0	954	1,112	1,013	1,047	3,179	3,680
Economics	951	1,034	1,199	1,061	782	917	720
Political science	186	306	352	587	565	730	566
Sociology	201	227	323	254	363	576	560
Social sciences, n.e.c.	156	185	563	224	212	353	404
History	10	9	52	0	0	64	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	146	176	511	224	212	289	NA
Other sciences, n.e.c.	194	223	1,813	681	654	1,263	1,225

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

Table 11. Federal obligations for total research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	255,942	283,492	339,468	354,446	369,837	351,460	357,708
Life sciences, total	58,678	62,423	80,260	85,789	93,416	94,923	100,991
Biol & agricultural, total	58,569	62,298	80,070	85,602	93,416	94,923	100,516
Biol (excl environmental)	NA	46,275	64,919	43,459	59,305	54,255	62,109
Environmental biology	NA	15,265	14,081	40,756	28,221	33,012	36,521
Agricultural	NA	758	1,070	1,387	5,890	7,656	1,886
Medical sciences, total	58	75	110	105	0	0	475
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	58	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	51	50	80	82	0	0	0
Psychology, total	320	350	414	462	0	0	0
Biological aspects	0	0	414	0	0	0	0
Social aspects	320	350	0	323	0	0	0
Psychological sciences, n.e.c.	0	0	0	139	0	0	0
Physical sciences, total	12,675	15,689	15,684	13,924	17,354	18,320	8,446
Astronomy	27	0	0	0	0	0	0
Chemistry	10,302	12,665	11,804	9,771	12,040	6,193	6,178
Physics	1,546	1,624	1,877	2,553	2,407	1,995	1,864
Physical sciences, n.e.c.	800	1,400	2,003	1,600	2,907	10,132	404
Environmental sciences, total	119,395	136,993	158,529	159,954	178,921	145,720	151,556
Atmospheric sciences	6,652	8,040	9,548	10,998	10,195	6,914	4,371
Geological sciences	96,075	112,245	135,470	129,255	148,880	125,140	126,067
Oceanography	13,519	12,080	8,592	11,261	12,820	12,031	14,155
Environmental sciences, n.e.c.	3,149	4,628	4,919	8,440	7,026	1,635	6,963
Math & computer sciences, total	3,156	5,506	7,593	8,130	7,040	3,182	3,413
Mathematics	1,845	3,125	5,152	5,032	4,200	252	400
Computer sciences	1,204	2,231	2,281	2,941	2,210	2,565	3,013
Math & computer sciences, n.e.c.	107	150	160	157	630	365	0
Engineering, total	56,022	56,829	69,774	79,140	68,505	87,135	91,380
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	161	0	0	0	0
Chemical	6,355	4,946	5,128	4,236	3,445	1,412	400
Civil	8,881	14,315	13,387	20,625	20,599	11,778	8,817
Electrical	1,115	1,313	1,678	961	5,324	1,017	671
Mechanical	7,612	5,564	6,632	6,681	5,146	1,716	909
Metallurgy & materials	30,735	28,315	40,282	45,038	31,405	32,759	31,512
Engineering, n.e.c.	1,324	2,376	2,506	1,599	2,586	38,453	49,071
Social sciences, total	4,926	4,674	6,110	5,808	4,591	2,170	1,879
Anthropology	2,610	2,270	2,283	2,300	1,056	883	950
Economics	912	759	1,675	1,534	713	730	293
Political science	588	840	950	887	0	0	70
Sociology	469	535	847	623	108	86	566
Social sciences, n.e.c.	347	270	355	464	2,714	471	0
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.	770	1,028	1,104	1,239	10	10	43

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

Table 11. Federal obligations for total research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	380,224	369,252	367,912	382,127	392,480	441,938	475,214
Life sciences, total	63,381	55,299	60,392	67,533	74,202	74,217	82,860
Biol & agricultural, total	63,381	55,299	60,392	67,415	74,167	74,215	82,780
Biol (excl environmental)	30,556	24,661	29,986	34,486	42,655	44,520	52,189
Environmental biology	31,169	27,884	28,561	31,018	29,257	27,790	28,586
Agricultural	1,656	2,754	1,845	1,911	2,255	1,905	2,005
Medical sciences, total	0	0	0	0	35	2	0
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	118	0	0	80
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	22,768	23,040	24,166	24,808	25,966	26,681	28,722
Astronomy	0	0	0	0	0	0	0
Chemistry	19,175	19,352	20,307	20,886	21,866	22,010	22,922
Physics	3,503	3,688	3,859	3,922	4,100	4,247	4,458
Physical sciences, n.e.c.	90	0	0	0	0	424	1,342
Environmental sciences, total	172,412	180,150	178,914	190,088	194,341	235,242	260,951
Atmospheric sciences	5,500	5,791	5,800	5,702	1,353	224	210
Geological sciences	145,252	155,300	150,925	156,340	162,787	199,315	225,157
Oceanography	20,998	17,189	21,227	21,692	22,685	26,584	26,450
Environmental sciences, n.e.c.	662	1,870	962	6,354	7,516	9,119	9,134
Math & computer sciences, total	8,543	9,114	9,767	10,309	10,748	11,103	12,032
Mathematics	1,767	1,592	1,661	1,709	1,773	1,777	1,884
Computer sciences	6,776	7,522	8,106	8,600	8,975	9,326	10,148
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	111,384	100,234	93,223	87,763	85,318	92,795	88,419
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,510	4,764	4,728	5,016	5,130	5,820	5,823
Civil	7,524	6,765	5,322	3,364	2,468	3,564	3,255
Electrical	608	650	586	852	591	640	710
Mechanical	791	554	846	341	765	537	744
Metallurgy & materials	42,190	39,841	38,546	28,528	24,782	23,398	25,089
Engineering, n.e.c.	55,761	47,660	43,195	49,662	51,582	58,836	52,798
Social sciences, total	1,691	1,415	1,450	1,626	1,705	1,700	2,131
Anthropology	1,025	1,000	1,000	1,100	960	1,000	1,021
Economics	166	0	0	0	30	0	95
Political science	0	15	0	26	15	0	0
Sociology	500	400	450	500	700	700	1,015
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	45	0	0	0	200	200	99

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

Table 11. Federal obligations for total research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	553,396	570,595	580,080	650,150	532,436	542,074	552,655
Life sciences, total	100,879	105,340	99,850	159,701	145,340	133,002	140,234
Biol & agricultural, total	100,579	105,240	99,650	159,701	145,340	133,002	140,234
Biol (excl environmental)	47,613	48,798	47,303	81,458	76,099	69,993	75,904
Environmental biology	49,683	52,588	47,969	78,058	69,040	62,768	63,741
Agricultural	3,283	3,854	4,378	185	201	241	589
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	300	100	200	0	0	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	35,677	30,786	30,284	38,007	38,643	41,158	41,555
Astronomy	0	0	0	0	0	0	0
Chemistry	28,170	24,897	26,204	31,784	32,291	34,025	34,466
Physics	5,507	3,889	4,080	6,223	6,352	7,133	7,089
Physical sciences, n.e.c.	2,000	2,000	0	0	0	0	0
Environmental sciences, total	300,081	304,072	306,859	311,900	293,845	314,300	316,872
Atmospheric sciences	1,769	1,150	3,875	2,711	3,126	2,464	4,346
Geological sciences	254,947	263,092	261,777	295,226	278,076	296,270	298,577
Oceanography	27,302	35,981	38,421	12,078	12,643	15,078	13,182
Environmental sciences, n.e.c.	16,063	3,849	2,786	1,885	0	488	767
Math & computer sciences, total	15,031	13,640	14,497	18,296	18,139	18,319	18,613
Mathematics	2,796	3,318	3,665	2,996	3,049	3,146	3,247
Computer sciences	12,235	10,322	10,832	13,881	13,771	14,088	15,366
Math & computer sciences, n.e.c.	0	0	0	1,419	1,319	1,085	0
Engineering, total	97,462	112,459	117,840	108,553	21,475	21,409	21,177
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	7,123	8,963	8,776	12,591	12,318	12,422	13,175
Civil	3,867	4,937	9,809	7,528	7,864	8,389	7,593
Electrical	967	770	195	125	126	123	101
Mechanical	1,272	771	200	824	836	151	163
Metallurgy & materials	25,129	27,826	24,490	87,022	135	282	145
Engineering, n.e.c.	59,104	69,192	74,370	463	196	42	0
Social sciences, total	4,211	4,298	5,885	12,589	14,327	13,855	14,204
Anthropology	1,400	1,535	2,485	4,672	4,782	4,730	5,290
Economics	150	0	0	71	76	139	753
Political science	0	0	0	0	0	31	0
Sociology	1,260	1,400	2,000	1,124	1,852	564	77
Social sciences, n.e.c.	1,401	1,363	1,400	6,722	7,617	8,391	8,084
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.	55	0	4,865	1,104	667	31	0

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

Table 11. Federal obligations for total research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	502,852	610,046	548,464	572,816	601,808	554,102
Life sciences, total	116,412	158,124	133,495	159,218	168,746	163,000
Biol & agricultural, total	116,412	158,124	133,290	158,849	NA	NA
Biol (excl environmental)	61,893	82,032	72,477	80,472	NA	NA
Environmental biology	54,023	75,793	60,668	77,987	NA	NA
Agricultural	496	299	145	390	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	205	369	NA	NA
Psychology, total	0	0	18	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	18	0	NA	NA
Physical sciences, total	1,553	542	18	0	20	20
Astronomy	0	0	0	0	NA	NA
Chemistry	917	500	0	0	NA	NA
Physics	90	0	0	0	NA	NA
Physical sciences, n.e.c.	546	42	18	0	NA	NA
Environmental sciences, total	348,475	415,412	378,591	387,080	403,772	364,408
Atmospheric sciences	3,445	2,054	7,475	1,926	NA	NA
Geological sciences	200,987	242,101	214,133	230,505	NA	NA
Oceanography	17,491	18,028	19,499	12,878	NA	NA
Environmental sciences, n.e.c.	126,552	153,229	137,484	141,771	NA	NA
Math & computer sciences, total	6,874	6,813	4,809	9,269	8,939	9,227
Mathematics	904	1,052	684	1,756	NA	NA
Computer sciences	5,970	4,454	4,065	7,443	NA	NA
Math & computer sciences, n.e.c.	0	1,307	60	70	NA	NA
Engineering, total	8,653	11,972	11,114	12,009	14,797	12,300
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	3,094	4,938	3,404	2,682	NA	NA
Civil	4,468	5,545	6,177	7,374	NA	NA
Electrical	187	636	584	850	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	904	633	640	506	NA	NA
Engineering, n.e.c.	0	220	309	597	NA	NA
Social sciences, total	20,885	17,183	20,341	5,240	5,534	5,147
Anthropology	3,761	4,487	53	4	NA	NA
Economics	2,593	195	745	428	NA	NA
Political science	0	1,877	0	0	NA	NA
Sociology	1,543	3,028	1,643	3,421	NA	NA
Social sciences, n.e.c.	12,988	7,596	17,900	1,387	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	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 1J. Federal obligations for total research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	52,984	53,818	51,068	74,287	96,294	141,711	155,395
Life sciences, total	19,311	17,222	15,148	21,200	28,611	38,300	51,280
Biol & agricultural, total	12,484	13,778	11,555	17,797	25,091	33,500	45,639
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	6,827	3,444	3,593	3,403	3,520	4,800	5,641
Clinical medical	660	344	350	0	0	0	0
Other medical	6,167	3,100	3,243	3,403	3,520	4,800	5,641
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	8	45	60	0	0	0	0
Biological aspects	8	45	35	0	0	0	0
Social aspects	0	0	25	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	8,430	8,610	6,580	25,257	27,658	32,600	49,726
Astronomy	0	0	0	0	0	0	0
Chemistry	5,421	6,027	5,620	20,057	24,058	25,200	45,747
Physics	2,073	2,583	960	5,200	3,600	7,400	3,979
Physical sciences, n.e.c.	936	0	0	0	0	0	0
Environmental sciences, total	4,801	5,350	4,770	3,775	5,090	7,000	4,662
Atmospheric sciences	1,201	3,470	2,985	2,080	3,095	3,900	793
Geological sciences	36	80	185	670	825	1,700	2,191
Oceanography	1,716	1,800	1,600	1,025	1,170	1,400	1,678
Environmental sciences, n.e.c.	1,848	0	0	0	0	0	0
Math & computer sciences, total	193	460	270	1,485	1,575	2,300	2,330
Mathematics	NA	NA	NA	NA	NA	NA	466
Computer sciences	NA	NA	NA	NA	NA	NA	1,864
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	19,718	21,329	23,210	19,600	32,460	55,871	45,497
Aeronautical	0	0	0	0	0	0	0
Astronautical	219	175	150	0	0	0	0
Chemical	6,747	7,500	7,185	5,880	9,460	14,600	17,288
Civil	7,870	7,234	9,455	6,860	12,800	19,800	17,750
Electrical	197	220	145	1,960	3,100	4,471	5,232
Mechanical	4,685	6,200	6,275	4,900	7,100	17,000	5,227
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	0	0	0	0	0	0
Social sciences, total	523	802	1,030	2,970	900	5,640	1,900
Anthropology	0	0	0	0	0	0	0
Economics	379	615	772	1,782	700	4,400	1,520
Political science	0	0	0	0	0	0	0
Sociology	63	187	258	1,188	200	1,240	380
Social sciences, n.e.c.	81	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	81	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

**Table 1J. Federal obligations for total research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	205,252	252,670	259,000	245,100	218,300	243,379	174,597
Life sciences, total	76,762	78,020	87,051	78,024	65,596	82,038	65,508
Biol & agricultural, total	72,250	73,580	78,672	67,726	62,557	65,918	52,481
Biol (excl environmental)	NA	0	0	0	0	42,701	31,939
Environmental biology	NA	73,580	60,772	51,843	62,557	21,698	18,764
Agricultural	NA	0	17,900	15,883	0	1,519	1,778
Medical sciences, total	4,512	4,440	8,379	10,298	3,039	16,120	13,027
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	4,512	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	575	639
Biological aspects	0	0	0	0	0	514	581
Social aspects	0	0	0	0	0	61	58
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	50,155	70,748	73,230	71,542	69,328	20,390	16,111
Astronomy	0	0	0	0	0	0	0
Chemistry	46,035	67,771	72,455	70,667	69,328	18,873	14,763
Physics	4,120	2,977	775	875	0	1,517	1,348
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	6,205	4,769	3,376	7,504	6,147	48,933	36,712
Atmospheric sciences	940	1,616	1,632	1,887	1,362	34,992	28,128
Geological sciences	3,590	2,051	1,586	5,265	3,874	5,780	6,138
Oceanography	1,675	1,102	158	352	911	4,061	2,446
Environmental sciences, n.e.c.	0	0	0	0	0	4,100	0
Math & computer sciences, total	3,100	3,699	1,024	1,038	0	3,700	4,023
Mathematics	2,370	1,797	0	0	0	617	320
Computer sciences	730	1,902	1,024	1,038	0	3,083	3,703
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	65,715	92,950	92,733	85,253	77,229	76,428	47,771
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	25,212	39,828	42,205	31,966	55,788	25,952	16,684
Civil	24,890	33,673	34,558	37,081	21,441	34,634	21,739
Electrical	7,814	7,780	4,325	4,426	0	2,786	934
Mechanical	7,799	11,669	11,645	11,780	0	6,596	4,195
Metallurgy & materials	0	0	0	0	0	5,212	3,461
Engineering, n.e.c.	0	0	0	0	0	1,248	758
Social sciences, total	3,315	2,484	1,586	1,739	0	2,795	2,202
Anthropology	0	0	0	0	0	0	0
Economics	2,395	2,279	1,586	1,239	0	2,439	1,912
Political science	0	0	0	0	0	178	142
Sociology	920	205	0	500	0	178	148
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	8,520	1,631

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

**Table 1J. Federal obligations for total research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	171,961	214,628	217,781	277,201	267,919	273,346	315,242
Life sciences, total	68,877	83,502	86,891	99,436	102,224	122,108	137,202
Biol & agricultural, total	61,813	68,757	73,243	83,068	89,270	106,887	118,318
Biol (excl environmental)	34,365	40,318	46,119	56,187	58,609	66,311	73,746
Environmental biology	24,367	25,730	24,679	21,574	22,676	32,394	32,330
Agricultural	3,081	2,709	2,445	5,307	7,985	8,182	12,242
Medical sciences, total	7,064	14,745	13,648	16,368	12,954	15,221	18,884
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	0	0
Psychology, total	650	827	821	1,254	933	1,042	1,176
Biological aspects	650	827	821	1,254	933	1,042	1,176
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	16,761	19,264	23,130	37,917	33,427	35,670	41,017
Astronomy	0	0	0	0	0	0	0
Chemistry	15,886	17,454	20,146	34,590	30,632	32,516	37,070
Physics	875	1,810	2,984	3,327	2,795	3,154	3,947
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	42,878	43,150	50,350	74,195	78,858	54,501	65,591
Atmospheric sciences	27,115	34,748	41,307	69,035	72,900	48,789	56,754
Geological sciences	14,131	4,951	6,766	3,308	3,563	3,800	5,770
Oceanography	1,632	3,451	2,277	1,852	2,395	1,912	3,067
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,086	4,868	5,063	3,611	791	3,078	4,268
Mathematics	0	525	404	22	0	39	35
Computer sciences	1,086	4,343	4,659	3,589	791	3,039	4,233
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	37,838	44,848	48,567	55,368	50,689	52,749	61,489
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	17,803	18,026	23,938	25,570	24,175	19,194	24,450
Civil	20,035	19,160	19,353	22,435	20,535	17,678	20,868
Electrical	0	713	376	408	3	412	450
Mechanical	0	3,843	3,549	4,569	3,599	3,600	3,947
Metallurgy & materials	0	2,609	453	526	343	758	741
Engineering, n.e.c.	0	497	898	1,860	2,034	11,107	11,033
Social sciences, total	3,871	15,721	479	500	560	0	219
Anthropology	0	0	0	0	0	0	0
Economics	3,871	15,023	0	0	0	0	0
Political science	0	349	240	250	280	0	219
Sociology	0	349	239	250	280	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	2,448	2,480	4,920	437	4,198	4,280

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

**Table 1J. Federal obligations for total research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	353,139	404,300	361,534	402,322	401,627	380,800	409,109
Life sciences, total	156,122	164,435	94,836	101,761	111,029	105,272	113,098
Biol & agricultural, total	144,852	151,048	77,705	83,380	89,971	85,305	91,647
Biol (excl environmental)	93,555	104,885	0	0	0	0	0
Environmental biology	47,850	42,704	77,705	83,380	89,971	85,305	91,647
Agricultural	3,447	3,459	0	0	0	0	0
Medical sciences, total	11,270	13,387	17,131	18,381	21,058	19,967	21,451
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	0	0
Psychology, total	1,235	1,438	0	0	0	0	0
Biological aspects	658	0	0	0	0	0	0
Social aspects	577	658	0	0	0	0	0
Psychological sciences, n.e.c.	0	780	0	0	0	0	0
Physical sciences, total	52,119	79,903	0	0	0	0	0
Astronomy	0	0	0	0	0	0	0
Chemistry	49,582	74,740	0	0	0	0	0
Physics	2,537	5,163	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	76,420	73,662	227,478	244,589	171,874	162,961	175,075
Atmospheric sciences	68,368	66,699	101,446	108,968	80,149	75,992	81,641
Geological sciences	7,305	5,081	14,021	15,046	11,183	10,603	11,391
Oceanography	747	1,882	463	497	0	0	0
Environmental sciences, n.e.c.	0	0	111,548	120,078	80,542	76,366	82,043
Math & computer sciences, total	4,480	5,782	0	0	0	0	0
Mathematics	0	0	0	0	0	0	0
Computer sciences	4,480	5,782	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	60,922	79,080	39,213	55,972	118,724	112,567	120,936
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	31,405	44,783	2,458	2,638	2,617	2,481	2,665
Civil	23,711	26,870	0	0	0	0	0
Electrical	886	845	0	0	0	0	0
Mechanical	2,286	3,765	0	0	0	0	0
Metallurgy & materials	178	376	0	0	0	0	0
Engineering, n.e.c.	2,456	2,441	36,755	53,334	116,107	110,086	118,271
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	1,841	0	7	0	0	0	0

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

**Table 1J. Federal obligations for total research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	477,200	456,982	410,658	350,747	486,500	531,006
Life sciences, total	131,921	192,818	176,346	145,690	211,025	234,990
Biol & agricultural, total	106,900	192,406	171,824	120,679	NA	NA
Biol (excl environmental)	0	52,230	68,844	58,920	NA	NA
Environmental biology	106,900	140,051	102,894	61,517	NA	NA
Agricultural	0	125	86	242	NA	NA
Medical sciences, total	25,021	250	259	325	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	162	4,263	24,686	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	0	13,150	12,211	10,803	12,708	16,115
Astronomy	0	0	0	0	NA	NA
Chemistry	0	11,498	11,636	10,803	NA	NA
Physics	0	0	575	0	NA	NA
Physical sciences, n.e.c.	0	1,652	0	0	NA	NA
Environmental sciences, total	204,215	131,753	123,148	119,278	157,614	175,129
Atmospheric sciences	95,230	56,481	34,083	38,869	NA	NA
Geological sciences	13,287	12,277	9,789	10,420	NA	NA
Oceanography	0	20,126	20,351	19,348	NA	NA
Environmental sciences, n.e.c.	95,698	42,869	58,925	50,641	NA	NA
Math & computer sciences, total	0	16,626	10,518	10,259	12,832	16,193
Mathematics	0	9,903	5,372	5,284	NA	NA
Computer sciences	0	6,449	4,769	2,825	NA	NA
Math & computer sciences, n.e.c.	0	274	377	2,150	NA	NA
Engineering, total	141,064	61,396	47,596	32,993	41,758	45,257
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	3,109	10,047	11,177	7,348	NA	NA
Civil	0	21,446	16,039	13,359	NA	NA
Electrical	0	294	469	326	NA	NA
Mechanical	0	505	469	802	NA	NA
Metallurgy & materials	0	1,032	729	687	NA	NA
Engineering, n.e.c.	137,955	28,072	18,713	10,471	NA	NA
Social sciences, total	0	2,938	3,612	4,923	7,462	8,968
Anthropology	0	0	0	0	NA	NA
Economics	0	261	1,828	2,932	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	10	NA	NA
Social sciences, n.e.c.	0	2,677	1,784	1,981	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	38,301	37,227	26,801	43,101	34,354

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 1K. Federal obligations for total research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	1,030,217	922,688	764,592	793,920	845,667	935,139	1,222,841
Life sciences, total	52,480	53,396	53,004	54,581	25,537	18,000	25,227
Biol & agricultural, total	38,446	29,436	27,313	31,665	15,970	7,693	8,676
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	3,787	1,665	8,383	10,627	8,183	8,746	15,285
Clinical medical	3,787	0	0	1,286	959	1,150	1,147
Other medical	0	1,665	8,383	9,341	7,224	7,596	14,138
Life sciences, n.e.c.	10,247	22,295	17,308	12,289	1,384	1,561	1,266
Psychology, total	2,307	1,188	6,013	5,913	7,749	21,216	10,662
Biological aspects	2,307	1,188	3,341	2,982	1,602	2,549	0
Social aspects	0	0	0	328	5,670	8,979	519
Psychological sciences, n.e.c.	0	0	2,672	2,603	477	9,688	10,143
Physical sciences, total	171,386	166,001	185,763	168,837	170,711	211,751	197,054
Astronomy	100,875	90,688	89,859	82,020	91,564	122,002	116,575
Chemistry	11,618	8,274	18,436	19,322	9,890	7,951	5,252
Physics	58,893	67,039	77,468	64,558	66,119	71,754	66,932
Physical sciences, n.e.c.	0	0	0	2,937	3,138	10,044	8,295
Environmental sciences, total	198,720	202,913	173,443	205,828	231,559	251,311	219,039
Atmospheric sciences	126,163	132,715	92,943	97,360	124,724	120,715	102,725
Geological sciences	66,138	61,722	59,356	62,426	39,215	35,936	37,507
Oceanography	6,419	8,476	9,086	14,507	16,222	24,405	20,843
Environmental sciences, n.e.c.	0	0	12,058	31,535	51,398	70,255	57,964
Math & computer sciences, total	1,318	723	0	1,254	1,129	1,718	4,078
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	4,078
Engineering, total	603,316	493,427	344,271	312,231	407,075	422,708	755,490
Aeronautical	243,188	198,798	119,885	135,376	226,215	225,138	411,980
Astronautical	154,414	134,600	47,481	29,198	80,853	83,169	163,618
Chemical	36,405	31,279	12,324	12,319	281	2,883	9,136
Civil	126	0	0	100	854	313	1,241
Electrical	60,097	48,118	58,103	43,104	22,928	21,811	48,815
Mechanical	31,756	30,106	48,157	46,234	5,454	10,256	28,971
Metallurgy & materials	15,345	15,150	46,446	38,509	49,614	46,154	74,293
Engineering, n.e.c.	61,985	35,376	11,875	7,391	20,876	32,984	17,436
Social sciences, total	690	0	884	1,911	540	961	1,783
Anthropology	0	0	0	0	0	0	0
Economics	34	0	0	65	504	598	1,648
Political science	0	0	0	50	30	235	95
Sociology	0	0	0	20	0	0	0
Social sciences, n.e.c.	656	0	884	1,776	6	128	40
History	0	0	0	0	6	72	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	656	0	884	1,776	0	56	NA
Other sciences, n.e.c.	0	5,040	1,214	43,365	1,367	7,474	9,508

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

Table 1K. Federal obligations for total research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,206,076	1,345,167	1,451,236	1,609,644	1,407,158	1,407,140	1,544,820
Life sciences, total	29,056	46,698	53,816	67,447	56,389	55,165	65,140
Biol & agricultural, total	15,268	22,222	19,826	29,510	29,742	29,627	33,360
Biol (excl environmental)	NA	22,222	17,230	16,305	12,831	17,055	19,994
Environmental biology	NA	0	2,592	1,760	1,697	851	1,315
Agricultural	NA	0	4	11,445	15,214	11,721	12,051
Medical sciences, total	12,218	24,476	31,209	34,865	23,943	22,433	26,205
Clinical medical	1,250	NA	NA	NA	NA	NA	NA
Other medical	10,968	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,570	0	2,781	3,072	2,704	3,105	5,575
Psychology, total	11,651	10,103	1,634	1,972	1,998	2,115	2,977
Biological aspects	10,443	855	86	97	128	226	250
Social aspects	567	441	1,082	1,270	1,044	1,122	1,394
Psychological sciences, n.e.c.	641	8,807	466	605	826	767	1,333
Physical sciences, total	264,156	264,813	304,789	321,272	280,145	289,544	369,912
Astronomy	140,702	148,603	213,272	229,724	198,674	184,630	265,687
Chemistry	11,750	9,275	6,415	6,734	7,696	6,253	9,394
Physics	99,046	94,324	73,285	77,211	67,078	91,273	82,922
Physical sciences, n.e.c.	12,658	12,611	11,817	7,603	6,697	7,388	11,909
Environmental sciences, total	305,592	361,571	368,137	413,444	280,624	260,616	256,714
Atmospheric sciences	145,989	135,895	144,010	178,102	118,435	125,128	126,409
Geological sciences	54,034	72,435	88,988	99,225	87,023	68,407	34,417
Oceanography	31,973	40,152	27,400	28,826	23,030	2,759	26,919
Environmental sciences, n.e.c.	73,596	113,089	107,739	107,291	52,136	64,322	68,969
Math & computer sciences, total	25,917	18,156	2,716	3,755	3,959	25,965	48,795
Mathematics	22,780	2,016	2,284	2,342	1,818	3,268	3,954
Computer sciences	3,137	16,140	432	1,214	1,283	21,929	42,349
Math & computer sciences, n.e.c.	0	0	0	199	858	768	2,492
Engineering, total	566,123	641,362	717,299	799,628	780,708	771,703	799,646
Aeronautical	272,141	336,676	433,764	491,398	475,787	486,944	503,310
Astronautical	130,985	134,967	212,499	233,793	233,863	207,842	228,262
Chemical	11,744	18,200	75	206	265	393	1,026
Civil	1,716	1,574	55	55	112	320	542
Electrical	40,486	26,370	3,100	4,103	4,256	20,100	21,773
Mechanical	22,873	37,002	1,875	3,062	4,034	5,183	5,200
Metallurgy & materials	64,458	58,916	8,300	8,856	9,734	16,240	19,092
Engineering, n.e.c.	21,720	27,657	57,631	58,155	52,657	34,681	20,441
Social sciences, total	615	54	149	217	199	63	296
Anthropology	0	0	0	0	0	50	0
Economics	539	0	0	22	0	0	0
Political science	30	29	15	0	0	0	0
Sociology	0	0	0	25	0	0	0
Social sciences, n.e.c.	46	25	134	170	199	13	296
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.	2,966	2,410	2,696	1,909	3,136	1,969	1,340

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

**Table 1K. Federal obligations for total research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,709,200	1,783,600	2,069,000	2,269,247	2,331,575	2,878,810	3,060,691
Life sciences, total	57,492	68,633	84,960	96,428	100,324	123,077	140,333
Biol & agricultural, total	23,178	21,758	27,951	29,348	37,191	49,648	56,664
Biol (excl environmental)	20,598	18,878	24,697	26,104	35,297	46,939	48,127
Environmental biology	1,629	1,948	2,617	2,450	1,137	2,318	7,953
Agricultural	951	932	637	794	757	391	584
Medical sciences, total	28,955	31,921	33,937	33,862	36,512	45,338	52,075
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	5,359	14,954	23,072	33,218	26,621	28,091	31,594
Psychology, total	1,589	3,351	3,477	3,328	3,450	8,210	10,808
Biological aspects	262	227	243	289	300	84	85
Social aspects	297	1,553	1,773	1,257	1,327	5,879	7,915
Psychological sciences, n.e.c.	1,030	1,571	1,461	1,782	1,823	2,247	2,808
Physical sciences, total	364,316	454,229	554,587	623,462	643,855	807,748	890,205
Astronomy	277,013	310,668	362,547	410,651	364,730	428,963	462,320
Chemistry	7,337	16,314	11,789	13,363	27,490	47,363	35,908
Physics	64,907	102,981	154,427	169,412	224,801	289,825	308,311
Physical sciences, n.e.c.	15,059	24,266	25,824	30,036	26,834	41,597	83,666
Environmental sciences, total	253,891	256,977	297,197	290,524	370,729	398,620	607,642
Atmospheric sciences	110,301	121,217	146,048	150,218	192,490	205,635	359,563
Geological sciences	36,985	55,079	65,848	57,620	52,054	47,047	102,906
Oceanography	31,346	25,022	26,347	25,737	42,535	47,834	66,116
Environmental sciences, n.e.c.	75,259	55,659	58,954	56,949	83,650	98,104	79,057
Math & computer sciences, total	62,003	63,830	55,610	68,370	65,017	77,669	70,845
Mathematics	4,728	7,114	11,457	17,133	19,990	27,548	23,573
Computer sciences	52,994	51,692	39,745	45,867	40,488	48,148	45,216
Math & computer sciences, n.e.c.	4,281	5,024	4,408	5,370	4,539	1,973	2,056
Engineering, total	967,801	931,641	1,066,905	1,170,496	1,138,163	1,446,415	1,324,603
Aeronautical	596,679	528,135	560,150	548,603	565,483	737,390	684,654
Astronautical	316,402	355,840	459,643	556,201	489,536	594,342	499,156
Chemical	254	674	995	1,487	1,984	6,015	14,259
Civil	0	374	309	113	239	91	151
Electrical	18,416	7,980	6,239	6,617	6,490	8,989	11,544
Mechanical	6,006	6,473	5,282	9,711	12,810	14,877	15,775
Metallurgy & materials	14,204	15,772	16,193	19,868	18,823	35,544	59,848
Engineering, n.e.c.	15,840	16,393	18,094	27,896	42,798	49,167	39,216
Social sciences, total	286	2,718	3,419	12,532	3,212	2,665	84
Anthropology	6	0	0	0	0	0	0
Economics	0	3	3	0	0	27	0
Political science	0	0	0	0	25	25	0
Sociology	0	0	0	0	0	0	74
Social sciences, n.e.c.	280	2,715	3,416	12,532	3,187	2,613	10
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.	1,822	2,221	2,845	4,107	6,825	14,406	16,171

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

**Table 1K. Federal obligations for total research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	3,371,162	3,229,305	3,548,728	3,840,559	4,046,089	3,878,032	4,184,887
Life sciences, total	174,544	145,692	229,962	248,867	262,196	250,060	268,165
Biol & agricultural, total	76,377	66,665	111,293	120,439	126,894	119,802	123,939
Biol (excl environmental)	61,891	55,520	102,055	110,436	116,383	108,410	113,140
Environmental biology	13,994	10,379	8,718	9,435	9,940	9,964	10,164
Agricultural	492	766	520	568	571	1,428	635
Medical sciences, total	71,079	63,218	104,010	112,563	118,588	107,777	121,297
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	27,088	15,809	14,659	15,865	16,714	22,481	22,929
Psychology, total	11,366	12,334	16,699	18,073	19,041	18,137	19,451
Biological aspects	71	40	62	68	68	71	72
Social aspects	9,426	8,751	12,862	13,920	14,668	13,473	14,563
Psychological sciences, n.e.c.	1,869	3,543	3,775	4,085	4,305	4,593	4,816
Physical sciences, total	939,726	978,154	878,121	950,335	1,001,190	970,054	1,034,197
Astronomy	501,766	584,504	520,184	562,962	593,089	570,450	621,324
Chemistry	39,161	47,457	43,390	46,958	49,471	49,588	50,579
Physics	316,183	287,984	280,966	304,072	320,343	311,640	323,151
Physical sciences, n.e.c.	82,616	58,209	33,581	36,343	38,287	38,376	39,143
Environmental sciences, total	667,739	631,709	852,885	923,022	972,418	936,223	1,061,120
Atmospheric sciences	374,372	313,763	514,374	556,674	586,464	546,390	663,492
Geological sciences	132,706	164,959	172,459	186,641	196,629	197,145	201,087
Oceanography	102,646	108,157	107,471	116,309	122,533	122,850	125,307
Environmental sciences, n.e.c.	58,015	44,830	58,581	63,398	66,792	69,838	71,234
Math & computer sciences, total	79,932	71,686	69,215	74,908	78,916	75,242	80,702
Mathematics	23,908	20,677	3,978	4,305	4,536	4,550	4,641
Computer sciences	51,080	43,799	23,874	25,838	27,220	26,318	27,633
Math & computer sciences, n.e.c.	4,944	7,210	41,363	44,765	47,160	44,374	48,428
Engineering, total	1,477,950	1,367,787	1,476,795	1,598,241	1,683,770	1,600,299	1,692,628
Aeronautical	788,208	708,858	971,502	1,051,393	1,107,667	1,022,148	1,132,349
Astronautical	534,710	522,057	388,949	420,935	443,461	444,866	453,763
Chemical	12,893	13,312	2,646	2,863	3,017	3,039	3,100
Civil	340	162	180	196	198	209	209
Electrical	16,634	14,807	20,951	22,674	23,887	24,350	25,013
Mechanical	19,055	13,680	15,649	16,936	17,842	17,896	18,254
Metallurgy & materials	74,253	67,409	41,705	45,135	47,550	47,610	18,956
Engineering, n.e.c.	31,857	27,502	35,213	38,109	40,148	40,181	40,984
Social sciences, total	126	39	331	361	364	406	386
Anthropology	0	0	0	0	0	0	0
Economics	36	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	90	0	212	231	233	260	247
Social sciences, n.e.c.	0	39	119	130	131	146	139
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.	19,779	21,904	24,720	26,752	28,194	27,611	28,238

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

Table 1K. Federal obligations for total research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	4,413,651	4,357,929	3,963,975	4,471,840	5,213,270	5,769,460
Life sciences, total	285,857	280,807	240,261	299,157	346,472	379,960
Biol & agricultural, total	138,286	136,787	127,636	138,324	NA	NA
Biol (excl environmental)	126,817	125,451	116,586	126,267	NA	NA
Environmental biology	10,854	10,716	9,742	11,001	NA	NA
Agricultural	615	620	1,308	1,056	NA	NA
Medical sciences, total	121,624	118,222	87,889	135,737	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	25,947	25,798	24,736	25,096	NA	NA
Psychology, total	20,720	20,236	4,370	22,477	25,834	28,055
Biological aspects	65	66	955	690	NA	NA
Social aspects	15,763	15,299	1,292	18,770	NA	NA
Psychological sciences, n.e.c.	4,892	4,871	2,123	3,017	NA	NA
Physical sciences, total	979,466	983,616	1,134,654	834,877	1,025,755	1,179,469
Astronomy	575,093	578,973	710,006	559,539	NA	NA
Chemistry	48,325	48,403	51,279	43,369	NA	NA
Physics	317,333	317,643	334,368	202,540	NA	NA
Physical sciences, n.e.c.	38,715	38,597	39,001	29,429	NA	NA
Environmental sciences, total	1,032,414	1,025,831	1,001,416	979,356	1,149,975	1,292,650
Atmospheric sciences	662,846	657,889	620,176	608,076	NA	NA
Geological sciences	185,533	186,064	199,484	168,767	NA	NA
Oceanography	110,437	108,544	93,474	115,233	NA	NA
Environmental sciences, n.e.c.	73,598	73,334	88,282	87,280	NA	NA
Math & computer sciences, total	80,142	78,569	65,557	84,953	98,102	107,213
Mathematics	3,823	3,751	3,158	4,034	NA	NA
Computer sciences	25,287	25,164	24,948	29,497	NA	NA
Math & computer sciences, n.e.c.	51,032	49,654	37,451	51,422	NA	NA
Engineering, total	1,984,062	1,937,932	1,443,851	2,127,679	2,442,662	2,656,812
Aeronautical	1,287,804	1,258,826	900,791	1,371,044	NA	NA
Astronautical	594,468	578,808	440,650	633,311	NA	NA
Chemical	2,783	2,790	3,210	2,680	NA	NA
Civil	118	118	0	192	NA	NA
Electrical	20,076	19,695	16,568	22,623	NA	NA
Mechanical	18,372	18,159	16,716	18,489	NA	NA
Metallurgy & materials	18,038	18,062	24,811	16,593	NA	NA
Engineering, n.e.c.	42,403	41,474	41,105	62,747	NA	NA
Social sciences, total	387	390	977	657	507	571
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	220	NA	NA
Sociology	250	252	0	218	NA	NA
Social sciences, n.e.c.	137	138	977	219	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	30,603	30,548	72,889	122,684	123,963	124,730

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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 1L. Federal obligations for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	274,789	318,286	427,270	463,953	520,256	570,015	595,776
Life sciences, total	60,119	63,322	78,143	80,253	90,727	97,799	104,352
Biol & agricultural, total	54,423	60,403	66,647	70,782	90,499	97,799	104,205
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	5,330	0	7	25	228	0	0
Clinical medical	4,120	0	7	25	200	0	0
Other medical	1,210	0	0	0	28	0	0
Life sciences, n.e.c.	366	2,919	11,489	9,446	0	0	147
Psychology, total	7,720	5,429	7,051	6,441	6,535	9,112	8,249
Biological aspects	4,300	3,123	4,221	4,007	4,348	6,612	5,697
Social aspects	1,460	2,306	2,656	2,434	2,187	2,500	2,552
Psychological sciences, n.e.c.	1,960	0	174	0	0	0	0
Physical sciences, total	76,276	79,796	119,086	117,893	124,172	148,947	148,044
Astronomy	19,922	23,236	25,608	27,080	30,283	29,093	31,754
Chemistry	22,241	23,131	30,951	31,140	36,790	49,792	43,080
Physics	33,785	33,429	50,065	53,889	57,099	70,062	73,210
Physical sciences, n.e.c.	328	0	12,462	5,784	0	0	0
Environmental sciences, total	59,270	77,883	102,347	101,296	124,919	135,736	130,078
Atmospheric sciences	25,398	32,979	37,951	43,669	50,769	51,734	50,955
Geological sciences	11,770	10,128	12,107	19,836	35,738	40,433	37,576
Oceanography	21,055	32,776	45,441	24,564	38,412	43,557	41,233
Environmental sciences, n.e.c.	1,047	2,000	6,848	13,227	0	12	314
Math & computer sciences, total	17,161	26,467	26,953	22,439	23,689	28,825	34,691
Mathematics	NA	NA	NA	NA	NA	NA	18,487
Computer sciences	NA	NA	NA	NA	NA	NA	16,029
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	175
Engineering, total	25,927	35,528	50,518	47,189	65,180	87,873	77,418
Aeronautical	520	1,164	1,981	209	684	22	0
Astronautical	0	0	24	0	56	0	0
Chemical	4,640	6,931	5,090	5,494	6,627	11,292	11,494
Civil	3,116	5,108	3,716	6,964	5,841	4,669	4,989
Electrical	5,983	6,980	9,484	11,226	10,432	11,703	15,503
Mechanical	5,299	5,563	5,136	8,455	7,886	7,355	7,674
Metallurgy & materials	3,070	7,636	9,246	10,296	16,394	18,816	17,467
Engineering, n.e.c.	3,299	2,146	15,841	4,545	17,260	34,016	20,291
Social sciences, total	19,582	26,453	36,464	36,876	35,531	40,319	56,321
Anthropology	3,227	3,999	4,118	3,886	3,913	3,659	3,489
Economics	5,133	5,981	6,672	7,066	6,270	7,796	7,884
Political science	2,505	1,176	1,751	1,640	1,500	1,547	2,326
Sociology	1,711	2,861	3,319	2,883	2,367	2,777	2,967
Social sciences, n.e.c.	7,006	12,436	20,604	21,401	21,481	24,540	39,655
History	924	733	876	898	920	929	NA
Linguistics	1,296	137	94	1,253	1,300	1,500	NA
Other social sciences	4,786	11,566	19,634	19,250	19,261	22,111	NA
Other sciences, n.e.c.	8,734	3,408	6,708	51,566	49,503	21,404	36,623

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

Table 1L. Federal obligations for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	688,300	743,502	800,025	873,687	955,464	973,165	1,061,990
Life sciences, total	113,322	124,885	137,927	156,851	165,992	173,259	194,363
Biol & agricultural, total	112,120	120,016	131,426	156,514	165,685	173,097	194,363
Biol (excl environmental)	NA	82,132	84,093	111,339	119,162	122,692	137,188
Environmental biology	NA	37,884	47,333	45,125	46,516	49,752	56,778
Agricultural	NA	0	0	50	7	653	397
Medical sciences, total	1,122	0	0	0	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	1,122	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	80	4,869	6,501	337	307	162	0
Psychology, total	11,381	9,209	12,453	13,496	11,332	8,271	8,513
Biological aspects	8,368	5,838	8,592	8,506	7,517	5,792	5,863
Social aspects	3,013	3,371	3,821	4,990	3,755	2,282	2,639
Psychological sciences, n.e.c.	0	0	40	0	60	197	11
Physical sciences, total	184,160	195,672	205,781	203,256	257,038	272,607	292,902
Astronomy	41,585	46,614	51,064	34,512	59,146	65,411	64,638
Chemistry	57,656	60,257	65,601	70,724	82,388	86,127	92,403
Physics	84,886	88,782	88,941	97,370	114,453	120,907	135,053
Physical sciences, n.e.c.	33	19	175	650	1,051	162	808
Environmental sciences, total	182,360	202,303	220,206	256,244	261,102	269,814	294,670
Atmospheric sciences	64,200	71,228	79,208	76,893	86,688	85,376	96,198
Geological sciences	54,476	62,104	66,619	92,231	69,651	72,522	66,860
Oceanography	63,662	68,673	73,731	86,125	96,325	98,709	131,527
Environmental sciences, n.e.c.	22	298	648	995	8,438	13,207	85
Math & computer sciences, total	42,264	44,510	45,149	52,678	61,605	66,237	72,204
Mathematics	21,873	23,256	24,500	27,372	31,554	33,763	37,834
Computer sciences	20,391	21,254	20,649	25,237	27,736	32,474	34,370
Math & computer sciences, n.e.c.	0	0	0	69	2,315	0	0
Engineering, total	86,135	89,270	96,539	106,796	121,024	129,867	142,546
Aeronautical	708	707	927	1,048	0	497	110
Astronautical	0	0	0	0	153	184	124
Chemical	10,059	9,847	14,307	15,014	19,148	18,791	21,490
Civil	8,248	8,026	22,063	27,381	28,143	28,620	30,339
Electrical	20,144	20,494	18,928	21,692	27,986	30,347	34,420
Mechanical	7,390	7,391	11,746	13,743	14,276	15,966	19,099
Metallurgy & materials	19,264	16,102	18,753	22,617	24,216	26,353	27,253
Engineering, n.e.c.	20,322	26,703	9,815	5,301	7,102	9,109	9,711
Social sciences, total	54,016	55,124	51,605	47,491	40,341	31,636	33,937
Anthropology	3,924	5,948	6,659	6,874	6,313	5,897	6,282
Economics	10,204	11,865	12,448	15,513	12,534	9,807	10,114
Political science	2,468	3,384	3,565	3,869	3,385	2,775	2,841
Sociology	3,810	3,958	3,661	5,130	4,028	3,369	3,151
Social sciences, n.e.c.	33,610	29,969	25,272	16,105	14,081	9,788	11,549
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.	14,662	22,529	30,365	36,875	37,030	21,474	22,855

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

Table 1L. Federal obligations for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,202,820	1,345,583	1,353,335	1,470,505	1,532,773	1,670,396	1,689,535
Life sciences, total	227,756	241,114	239,674	264,248	262,175	277,434	262,470
Biol & agricultural, total	227,512	235,520	236,334	259,957	261,826	277,039	261,636
Biol (excl environmental)	162,214	173,009	173,492	187,540	187,660	198,912	185,907
Environmental biology	64,431	62,511	62,842	72,417	74,166	78,127	75,729
Agricultural	867	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	244	5,594	3,340	4,291	349	395	834
Psychology, total	10,364	12,771	10,719	9,718	12,051	12,742	10,927
Biological aspects	7,135	8,772	7,064	6,605	7,789	8,231	4,448
Social aspects	3,228	3,969	3,490	2,987	3,606	3,822	6,465
Psychological sciences, n.e.c.	1	30	165	126	656	689	14
Physical sciences, total	341,151	359,628	355,845	390,479	397,106	433,808	468,670
Astronomy	77,534	76,554	77,808	76,789	77,638	83,373	104,613
Chemistry	109,962	115,614	112,574	115,259	120,594	127,354	133,218
Physics	152,866	164,684	163,420	144,928	147,657	167,183	190,074
Physical sciences, n.e.c.	789	2,776	2,043	53,503	51,217	55,898	40,765
Environmental sciences, total	320,106	360,798	359,985	380,816	396,246	423,234	438,442
Atmospheric sciences	108,308	121,402	122,671	126,038	130,449	136,981	128,349
Geological sciences	72,169	79,860	80,562	85,099	89,436	93,962	108,487
Oceanography	139,046	156,382	156,416	168,936	171,642	187,177	188,292
Environmental sciences, n.e.c.	583	3,154	336	743	4,719	5,114	13,314
Math & computer sciences, total	79,938	101,905	109,701	126,874	125,786	145,244	186,924
Mathematics	46,506	57,451	63,463	66,475	70,485	73,911	77,832
Computer sciences	33,006	44,432	45,188	60,084	55,301	71,333	109,092
Math & computer sciences, n.e.c.	426	22	1,050	315	0	0	0
Engineering, total	164,850	193,339	199,085	191,656	206,815	232,042	171,579
Aeronautical	100	695	161	227	359	391	649
Astronautical	0	0	0	0	0	0	0
Chemical	27,655	32,606	33,372	37,293	38,875	42,454	35,936
Civil	37,509	37,985	32,328	34,390	33,502	36,595	30,871
Electrical	40,674	40,423	44,647	50,132	57,604	69,152	49,427
Mechanical	21,425	24,413	26,105	28,785	32,914	35,809	29,582
Metallurgy & materials	27,326	42,692	43,465	22,925	25,641	28,099	7,841
Engineering, n.e.c.	10,161	14,525	19,007	17,904	17,920	19,542	17,273
Social sciences, total	37,416	43,158	38,213	39,305	40,802	43,265	49,225
Anthropology	7,499	7,656	8,023	8,362	8,230	8,529	8,197
Economics	10,845	13,902	11,233	11,977	12,892	13,843	13,700
Political science	3,096	3,767	2,290	3,413	3,455	3,668	3,915
Sociology	4,258	4,948	4,701	3,755	3,688	3,899	4,653
Social sciences, n.e.c.	11,718	12,885	11,966	11,798	12,537	13,326	18,760
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.	21,239	32,870	40,113	67,409	91,792	102,627	101,298

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

Table 1L. Federal obligations for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,785,223	1,868,397	1,881,889	2,040,358	2,149,277	2,188,313	2,248,520
Life sciences, total	269,308	297,630	299,739	314,211	341,040	316,740	330,477
Biol & agricultural, total	268,009	297,376	291,163	311,962	331,123	316,703	330,477
Biol (excl environmental)	185,319	218,500	214,383	231,418	241,535	232,987	240,374
Environmental biology	82,690	78,876	76,780	80,544	89,588	83,716	90,103
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,299	254	8,576	2,249	9,917	37	0
Psychology, total	1,913	12,343	14,285	15,758	15,315	14,812	5,234
Biological aspects	672	5,465	5,231	3,719	3,226	222	0
Social aspects	397	4,247	4,390	5,392	7,961	3,800	5,234
Psychological sciences, n.e.c.	844	2,631	4,664	6,647	4,128	10,790	0
Physical sciences, total	467,150	444,682	469,074	466,325	485,798	426,013	477,926
Astronomy	101,712	116,126	109,711	122,065	126,225	119,946	115,212
Chemistry	151,683	135,410	121,502	149,108	149,797	148,188	128,827
Physics	201,708	187,136	162,242	167,698	172,094	138,457	128,336
Physical sciences, n.e.c.	12,047	6,010	75,619	27,454	37,682	19,422	105,551
Environmental sciences, total	393,317	414,835	403,539	435,260	437,742	457,887	445,719
Atmospheric sciences	121,505	127,604	128,820	139,290	150,019	144,174	130,323
Geological sciences	133,561	140,324	136,987	151,711	149,571	93,913	99,843
Oceanography	75,535	79,711	77,932	79,147	78,974	199,689	199,755
Environmental sciences, n.e.c.	62,716	67,196	59,800	65,112	59,178	20,111	15,798
Math & computer sciences, total	186,281	213,392	215,675	238,584	216,856	341,567	333,291
Mathematics	79,755	89,560	82,965	81,712	87,065	84,014	91,813
Computer sciences	106,226	123,165	127,008	145,512	124,089	253,273	241,478
Math & computer sciences, n.e.c.	300	667	5,702	11,360	5,702	4,280	0
Engineering, total	262,669	217,062	242,796	345,353	432,432	442,559	442,504
Aeronautical	822	2,991	3,315	3,333	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	49,178	45,540	38,728	33,611	46,142	37,465	38,846
Civil	30,814	30,685	28,750	30,635	41,353	37,501	37,733
Electrical	57,867	53,291	59,977	66,500	57,014	39,062	42,232
Mechanical	40,212	33,882	34,745	36,338	56,887	6,046	7,363
Metallurgy & materials	28,896	21,942	21,342	118,519	149,843	124,828	106,838
Engineering, n.e.c.	54,880	28,731	55,939	56,417	81,193	197,657	209,492
Social sciences, total	40,366	54,145	56,791	65,714	79,478	84,489	87,997
Anthropology	7,522	7,947	7,069	6,885	12,737	9,821	11,708
Economics	13,317	18,175	17,628	11,567	15,306	11,667	19,803
Political science	4,247	4,601	4,591	5,117	7,479	5,036	5,481
Sociology	4,385	7,024	6,117	6,773	8,881	3,131	5,723
Social sciences, n.e.c.	10,895	16,398	21,386	35,372	35,075	54,834	45,282
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.	164,219	214,308	179,990	159,153	140,616	104,246	125,372

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

Table 1L. Federal obligations for total research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,289,337	2,506,031	2,725,512	3,043,484	3,249,691	3,403,614
Life sciences, total	366,845	410,672	452,800	459,120	489,696	513,071
Biol & agricultural, total	366,845	410,672	452,800	459,120	NA	NA
Biol (excl environmental)	281,965	302,181	336,263	345,659	NA	NA
Environmental biology	84,880	108,491	116,537	113,461	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	5,895	4,253	5,256	4,130	4,406	4,617
Biological aspects	0	0	0	0	NA	NA
Social aspects	5,895	4,253	5,256	4,130	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	467,920	527,453	536,586	576,249	614,593	643,877
Astronomy	113,248	124,395	130,702	153,919	NA	NA
Chemistry	124,019	143,515	142,409	153,541	NA	NA
Physics	129,376	172,533	168,221	165,561	NA	NA
Physical sciences, n.e.c.	101,277	87,010	95,254	103,228	NA	NA
Environmental sciences, total	436,868	494,640	467,427	525,898	561,003	587,916
Atmospheric sciences	134,858	158,494	150,762	162,674	NA	NA
Geological sciences	97,402	109,500	115,286	127,980	NA	NA
Oceanography	187,916	213,379	184,586	216,057	NA	NA
Environmental sciences, n.e.c.	16,692	13,267	16,793	19,187	NA	NA
Math & computer sciences, total	363,084	387,223	466,148	569,371	607,298	636,302
Mathematics	96,255	90,163	110,136	118,994	NA	NA
Computer sciences	266,829	297,060	356,012	450,377	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	443,631	450,316	492,091	535,873	570,858	596,974
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	40,138	41,467	43,973	48,855	NA	NA
Civil	38,266	39,453	41,232	45,319	NA	NA
Electrical	40,247	46,832	49,284	57,106	NA	NA
Mechanical	8,183	7,100	6,897	6,089	NA	NA
Metallurgy & materials	106,453	111,884	119,844	121,943	NA	NA
Engineering, n.e.c.	210,344	203,580	230,861	256,561	NA	NA
Social sciences, total	85,028	109,337	116,857	120,293	128,226	134,224
Anthropology	11,476	11,574	12,317	12,611	NA	NA
Economics	19,429	19,190	21,255	22,770	NA	NA
Political science	5,174	5,325	5,592	6,420	NA	NA
Sociology	5,385	4,863	5,660	6,019	NA	NA
Social sciences, n.e.c.	43,564	68,385	72,033	72,473	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	120,066	122,137	188,347	252,550	273,611	286,633

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 1M. Federal obligations for total research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	285,301	378,297	359,234	322,551	345,405	363,042	396,475
Life sciences, total	81,467	79,478	85,056	104,204	109,395	112,724	101,601
Biol & agricultural, total	35,595	37,424	38,937	44,495	39,043	44,713	42,673
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	44,221	41,474	45,476	59,709	69,254	67,054	58,058
Clinical medical	40,855	30,822	34,001	42,458	51,866	47,535	38,097
Other medical	3,366	10,652	11,475	17,251	17,388	19,519	19,961
Life sciences, n.e.c.	1,651	580	643	0	1,098	957	870
Psychology, total	21,798	17,397	13,323	6,691	7,030	7,585	13,670
Biological aspects	4,065	3,816	4,200	3,620	4,179	4,265	8,560
Social aspects	17,432	13,516	9,123	3,071	2,807	3,259	5,110
Psychological sciences, n.e.c.	301	65	0	0	44	61	0
Physical sciences, total	7,477	6,715	6,861	5,932	9,085	6,397	7,680
Astronomy	3,215	2,723	3,757	3,897	3,966	4,248	4,408
Chemistry	2,186	2,343	1,360	1,477	2,390	1,841	2,175
Physics	1,916	1,429	1,458	289	951	61	170
Physical sciences, n.e.c.	160	220	286	269	1,778	247	927
Environmental sciences, total	4,848	6,523	11,800	7,569	9,362	9,482	5,296
Atmospheric sciences	597	807	3,098	1,742	3,285	3,145	129
Geological sciences	2,472	4,537	2,817	2,237	2,302	1,732	4,245
Oceanography	294	395	273	552	437	406	756
Environmental sciences, n.e.c.	1,485	784	5,612	3,038	3,338	4,199	166
Math & computer sciences, total	2,507	909	7,546	4,855	667	337	1,207
Mathematics	NA	NA	NA	NA	NA	NA	582
Computer sciences	NA	NA	NA	NA	NA	NA	387
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	238
Engineering, total	81,322	100,586	94,727	78,582	111,864	130,805	136,677
Aeronautical	8,027	12,252	1,046	2,650	3,981	3,838	1,767
Astronautical	243	677	781	592	463	430	382
Chemical	2,417	3,294	2,701	1,977	1,504	1,988	1,695
Civil	32,273	29,698	67,802	51,312	40,625	37,187	21,957
Electrical	9,343	13,064	7,418	10,435	9,260	6,825	3,382
Mechanical	21,034	28,197	3,294	5,125	5,788	2,751	2,710
Metallurgy & materials	2,641	3,201	2,455	548	898	562	472
Engineering, n.e.c.	5,344	10,203	9,230	5,943	49,345	77,224	104,312
Social sciences, total	78,821	158,389	125,213	108,542	93,587	85,963	126,408
Anthropology	3,171	2,634	2,892	4,292	2,978	2,713	2,575
Economics	23,179	19,963	22,614	27,617	36,544	32,893	43,198
Political science	2,068	1,355	578	2,489	5,329	6,466	2,810
Sociology	13,729	71,132	63,212	38,487	14,805	18,195	15,546
Social sciences, n.e.c.	36,674	63,305	35,917	35,657	33,931	25,696	62,279
History	3,548	3,235	3,323	3,688	4,786	4,956	NA
Linguistics	305	325	295	449	52	0	NA
Other social sciences	32,821	59,745	32,299	31,520	29,093	20,740	NA
Other sciences, n.e.c.	7,061	8,300	14,708	6,176	4,415	9,749	3,936

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

**Table 1M. Federal obligations for total research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	477,054	576,893	672,285	730,761	764,916	750,030	807,389
Life sciences, total	120,675	127,418	191,048	210,675	219,434	272,151	320,591
Biol & agricultural, total	44,050	45,067	77,101	80,186	91,175	115,605	146,686
Biol (excl environmental)	NA	34,715	29,777	27,801	31,607	39,310	42,002
Environmental biology	NA	8,670	11,547	11,824	12,905	13,262	12,938
Agricultural	NA	1,682	35,777	40,561	46,663	63,033	91,746
Medical sciences, total	74,362	77,925	106,446	127,017	128,259	152,562	168,768
Clinical medical	50,945	NA	NA	NA	NA	NA	NA
Other medical	23,417	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,263	4,426	7,501	3,472	0	3,984	5,137
Psychology, total	12,153	17,222	17,075	17,632	13,791	11,791	14,082
Biological aspects	9,534	10,363	11,047	9,829	7,600	6,400	9,327
Social aspects	2,619	5,859	3,312	4,392	6,191	2,370	1,502
Psychological sciences, n.e.c.	0	1,000	2,716	3,411	0	3,021	3,253
Physical sciences, total	10,946	16,055	17,354	16,876	16,072	17,833	18,011
Astronomy	5,007	6,417	6,670	7,596	8,144	7,914	9,360
Chemistry	4,729	7,047	7,997	5,799	4,668	5,417	6,068
Physics	470	1,781	2,307	2,564	2,680	2,263	1,221
Physical sciences, n.e.c.	740	810	380	917	580	2,239	1,362
Environmental sciences, total	11,011	3,780	5,095	5,210	4,164	6,482	5,562
Atmospheric sciences	995	163	506	325	221	1,420	288
Geological sciences	1,973	2,029	2,132	2,546	2,465	3,516	3,985
Oceanography	1,045	1,406	2,069	1,837	1,075	1,262	1,159
Environmental sciences, n.e.c.	6,998	182	388	502	403	284	130
Math & computer sciences, total	1,533	14,203	12,893	5,140	4,082	6,051	9,538
Mathematics	378	11,258	1,775	1,045	641	2,485	3,060
Computer sciences	433	648	6,158	2,920	3,254	3,366	4,066
Math & computer sciences, n.e.c.	722	2,297	4,960	1,175	187	200	2,412
Engineering, total	186,701	215,943	213,788	270,590	301,658	302,802	289,716
Aeronautical	2,435	2,711	1,125	1,382	1,230	1,085	2,142
Astronautical	381	442	525	719	704	665	750
Chemical	174	1,601	1,302	1,275	955	715	1,078
Civil	34,751	44,494	13,596	24,058	24,898	33,121	33,276
Electrical	5,130	9,064	11,668	15,460	16,751	9,345	6,547
Mechanical	8,443	9,175	13,679	19,394	21,647	14,345	15,605
Metallurgy & materials	796	813	232	1,224	1,184	1,040	1,416
Engineering, n.e.c.	134,591	147,643	171,661	207,078	234,289	242,486	228,902
Social sciences, total	133,237	176,892	194,826	189,265	184,193	121,331	148,250
Anthropology	3,805	7,884	5,541	7,006	6,444	6,797	5,017
Economics	44,851	45,775	61,003	71,122	92,233	45,359	41,082
Political science	3,726	2,240	5,829	4,965	4,102	1,858	2,929
Sociology	16,786	15,782	18,629	16,593	14,052	9,462	12,052
Social sciences, n.e.c.	64,069	105,211	103,824	89,579	67,362	57,855	87,170
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.	798	5,380	20,206	15,373	21,522	11,589	1,639

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

**Table 1M. Federal obligations for total research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	843,537	847,585	801,164	816,604	826,409	971,602	1,076,597
Life sciences, total	354,504	392,048	358,080	344,789	331,119	443,154	461,058
Biol & agricultural, total	149,788	151,441	166,955	142,210	123,691	210,012	210,338
Biol (excl environmental)	42,375	43,948	32,992	38,040	44,642	63,766	49,390
Environmental biology	14,817	14,018	16,945	19,268	18,099	19,770	22,569
Agricultural	92,596	93,475	117,018	84,902	60,950	126,476	138,379
Medical sciences, total	198,626	236,393	180,607	189,599	187,645	207,293	214,270
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	6,090	4,214	10,518	12,980	19,783	25,849	36,450
Psychology, total	17,014	19,927	22,399	25,289	25,458	24,073	21,066
Biological aspects	9,976	13,264	10,599	12,737	13,278	15,129	14,234
Social aspects	3,161	3,347	9,872	9,884	8,028	4,476	4,114
Psychological sciences, n.e.c.	3,877	3,316	1,928	2,668	4,152	4,468	2,718
Physical sciences, total	19,883	20,642	19,566	23,570	24,128	32,176	38,427
Astronomy	10,241	12,577	11,747	18,791	15,620	16,448	18,066
Chemistry	3,119	1,804	6,345	2,354	6,404	13,321	17,440
Physics	1,279	738	573	614	919	1,410	1,334
Physical sciences, n.e.c.	5,244	5,523	901	1,811	1,185	997	1,587
Environmental sciences, total	7,388	5,579	6,112	5,937	8,260	12,247	12,575
Atmospheric sciences	368	196	95	55	43	793	781
Geological sciences	3,156	3,752	3,403	4,053	5,480	8,843	9,475
Oceanography	1,910	1,631	1,694	1,436	1,585	1,699	1,900
Environmental sciences, n.e.c.	1,954	0	920	393	1,152	912	419
Math & computer sciences, total	7,203	12,487	13,682	18,324	18,301	18,107	21,725
Mathematics	3,225	5,262	7,111	7,187	7,693	7,993	9,500
Computer sciences	1,821	5,990	5,402	7,186	8,979	7,225	7,792
Math & computer sciences, n.e.c.	2,157	1,235	1,169	3,951	1,629	2,889	4,433
Engineering, total	271,904	222,897	202,137	187,548	200,622	218,504	218,021
Aeronautical	2,310	2,730	2,115	1,665	2,229	3,737	4,180
Astronautical	1,075	1,211	980	777	1,129	1,699	1,676
Chemical	1,594	1,081	2,274	1,348	1,040	6,927	6,976
Civil	39,458	29,892	28,127	29,370	48,351	55,726	60,045
Electrical	5,885	6,864	6,701	3,339	3,748	7,146	8,963
Mechanical	14,435	12,407	13,503	11,953	13,996	14,701	12,138
Metallurgy & materials	1,920	2,032	2,271	902	3,638	179	169
Engineering, n.e.c.	205,227	166,680	146,166	138,194	126,491	128,389	123,874
Social sciences, total	155,554	163,996	157,708	185,573	183,302	204,834	257,004
Anthropology	9,414	8,627	3,159	3,338	3,114	3,393	3,629
Economics	41,919	41,460	34,661	44,177	49,769	49,124	76,053
Political science	3,251	3,005	3,656	4,155	4,757	5,739	5,187
Sociology	10,907	7,720	11,791	12,985	10,897	12,806	9,732
Social sciences, n.e.c.	90,063	103,184	104,441	120,918	114,765	133,772	162,403
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.	10,087	10,009	21,480	25,574	35,219	18,507	46,721

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

**Table 1M. Federal obligations for total research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,126,261	1,129,636	1,268,155	1,177,531	1,379,507	1,296,401	1,266,352
Life sciences, total	542,557	470,831	542,798	441,833	542,266	481,418	447,577
Biol & agricultural, total	167,880	139,717	195,598	160,474	295,426	237,770	92,079
Biol (excl environmental)	54,852	48,135	52,509	57,367	57,184	60,919	61,133
Environmental biology	26,396	30,053	33,570	29,153	213,440	153,338	30,129
Agricultural	86,632	61,529	109,519	73,954	24,802	23,513	817
Medical sciences, total	188,470	255,971	300,506	251,657	178,838	200,935	184,703
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	186,207	75,143	46,694	29,702	68,002	42,713	170,795
Psychology, total	25,292	33,273	57,256	48,212	57,559	45,621	50,722
Biological aspects	16,541	16,808	15,915	14,023	17,003	14,418	13,317
Social aspects	6,707	8,715	39,007	32,570	35,233	26,418	33,209
Psychological sciences, n.e.c.	2,044	7,750	2,334	1,619	5,323	4,785	4,196
Physical sciences, total	36,468	40,228	42,171	46,546	48,433	73,561	91,698
Astronomy	22,786	28,544	28,352	32,665	36,509	35,416	35,962
Chemistry	10,608	8,638	6,871	7,230	7,264	2,882	2,122
Physics	2,094	1,808	3,948	5,283	2,868	33,373	47,543
Physical sciences, n.e.c.	980	1,238	3,000	1,368	1,792	1,890	6,071
Environmental sciences, total	10,546	14,795	11,965	13,104	13,301	13,617	19,445
Atmospheric sciences	1,011	4,768	4,031	3,569	5,239	6,501	8,990
Geological sciences	6,219	6,407	4,148	6,577	5,173	5,225	5,932
Oceanography	2,796	2,525	1,278	1,081	942	1,002	1,044
Environmental sciences, n.e.c.	520	1,095	2,508	1,877	1,947	889	3,479
Math & computer sciences, total	34,815	38,301	46,456	35,630	109,200	33,306	26,111
Mathematics	10,783	11,000	2,497	1,908	149	207	604
Computer sciences	19,248	21,078	41,175	32,869	35,413	28,459	19,494
Math & computer sciences, n.e.c.	4,784	6,223	2,784	853	73,638	4,640	6,013
Engineering, total	198,427	223,161	250,575	289,121	296,329	325,531	294,965
Aeronautical	2,879	751	250	245	275	0	0
Astronautical	200	300	0	0	0	0	0
Chemical	7,114	3,179	6,477	4,789	2,395	945	0
Civil	41,401	48,522	70,404	106,747	135,236	139,810	112,893
Electrical	10,342	14,078	9,223	6,244	4,789	8,747	5,538
Mechanical	18,039	20,609	15,892	13,369	20,867	18,321	20,805
Metallurgy & materials	1,312	906	7,720	9,325	10,573	4,993	8,206
Engineering, n.e.c.	117,140	134,816	140,609	148,402	122,194	152,715	147,523
Social sciences, total	241,091	252,036	267,078	247,787	275,207	286,495	291,350
Anthropology	4,439	3,936	3,487	3,678	3,415	3,525	3,687
Economics	60,476	68,548	66,856	48,886	62,306	54,958	43,372
Political science	5,472	11,317	18,264	10,854	4,661	3,749	1,479
Sociology	10,806	11,730	19,953	26,301	20,605	21,084	2,729
Social sciences, n.e.c.	159,898	156,505	158,518	158,068	184,220	203,179	240,083
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.	37,065	57,011	49,856	55,298	37,212	36,852	44,484

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

Table 1M. Federal obligations for total research, by detailed field of science & engineering: All other departments and agencies, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	1,322,455	1,483,751	1,380,367	1,594,780	1,811,159	1,664,512
Life sciences, total	379,891	428,824	442,545	477,230	494,218	508,636
Biol & agricultural, total	117,194	98,883	113,657	103,278	NA	NA
Biol (excl environmental)	18,737	16,648	19,342	20,225	NA	NA
Environmental biology	21,752	18,394	18,612	19,066	NA	NA
Agricultural	76,705	63,841	75,703	63,987	NA	NA
Medical sciences, total	220,887	281,004	282,438	287,581	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41,810	48,937	46,450	86,371	NA	NA
Psychology, total	67,074	80,206	86,750	78,724	82,265	81,306
Biological aspects	0	14	75	0	NA	NA
Social aspects	30,301	28,684	30,034	22,319	NA	NA
Psychological sciences, n.e.c.	36,773	51,508	56,641	56,405	NA	NA
Physical sciences, total	81,232	93,563	84,616	97,893	139,091	56,347
Astronomy	37,168	36,967	39,404	39,142	NA	NA
Chemistry	2,138	1,226	1,080	1,859	NA	NA
Physics	37,521	49,823	40,565	51,392	NA	NA
Physical sciences, n.e.c.	4,405	5,547	3,567	5,500	NA	NA
Environmental sciences, total	33,004	42,170	30,970	41,924	47,887	51,039
Atmospheric sciences	21,522	26,979	21,160	29,589	NA	NA
Geological sciences	4,451	6,783	3,379	3,492	NA	NA
Oceanography	838	766	841	887	NA	NA
Environmental sciences, n.e.c.	6,193	7,642	5,590	7,956	NA	NA
Math & computer sciences, total	26,296	14,053	13,697	15,616	14,865	14,694
Mathematics	212	96	0	0	NA	NA
Computer sciences	19,258	4,942	5,233	5,904	NA	NA
Math & computer sciences, n.e.c.	6,826	9,015	8,464	9,712	NA	NA
Engineering, total	335,376	371,712	270,039	297,939	359,126	289,076
Aeronautical	0	24	3,820	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	18	1,034	0	110	NA	NA
Civil	82,550	149,699	30,335	85,812	NA	NA
Electrical	4,170	2,742	1,727	1,952	NA	NA
Mechanical	19,299	21,409	37,948	18,708	NA	NA
Metallurgy & materials	25,071	4,190	37,360	694	NA	NA
Engineering, n.e.c.	204,268	192,614	158,849	190,663	NA	NA
Social sciences, total	368,794	404,375	402,753	462,154	445,470	452,669
Anthropology	2,674	1,996	3,201	2,343	NA	NA
Economics	51,443	68,017	57,626	36,169	NA	NA
Political science	6,822	4,951	5,784	11,334	NA	NA
Sociology	76,168	57,990	58,500	70,089	NA	NA
Social sciences, n.e.c.	231,687	271,421	277,642	342,219	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	30,788	48,848	48,997	123,300	228,237	210,745

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal 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 2A. Federal obligations for basic research, by detailed field of science
& engineering: All agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	1,925,908	1,980,141	2,186,937	2,232,006	2,387,681	2,588,427	2,767,454
Life sciences, total	696,862	747,468	867,704	888,396	1,032,164	1,115,929	1,222,015
Biol & agricultural, total	485,035	519,032	596,786	608,640	691,875	747,014	818,412
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	198,747	211,107	245,820	253,231	317,584	342,355	374,381
Clinical medical	40,568	29,048	37,298	35,229	32,932	38,826	41,562
Other medical	158,179	182,059	208,522	218,002	284,652	303,529	332,819
Life sciences, n.e.c.	13,080	17,329	25,098	26,525	22,705	26,560	29,222
Psychology, total	48,088	46,026	51,432	45,364	46,124	58,642	45,529
Biological aspects	19,508	18,614	21,999	18,591	18,602	18,231	18,474
Social aspects	21,698	22,108	21,505	18,612	18,018	22,181	16,086
Psychological sciences, n.e.c.	6,882	5,304	7,928	8,161	9,504	18,230	10,969
Physical sciences, total	601,029	592,894	636,731	628,210	649,605	708,959	721,435
Astronomy	130,731	124,052	128,865	121,477	133,341	163,028	159,960
Chemistry	126,758	109,865	140,511	146,417	149,275	158,648	168,265
Physics	338,926	350,733	361,746	350,773	360,300	378,973	388,440
Physical sciences, n.e.c.	4,614	8,244	5,609	9,543	6,689	8,310	4,770
Environmental sciences, total	243,216	261,213	262,659	273,411	291,642	280,763	294,325
Atmospheric sciences	114,419	121,776	114,849	133,917	138,462	111,039	114,007
Geological sciences	78,174	76,784	66,990	79,904	80,909	88,593	95,705
Oceanography	47,457	57,567	71,179	46,195	62,870	73,211	76,580
Environmental sciences, n.e.c.	3,166	5,086	9,641	13,395	9,401	7,920	8,033
Math & computer sciences, total	59,379	55,313	66,588	60,082	52,739	62,007	81,805
Mathematics	NA	NA	NA	NA	NA	NA	43,176
Computer sciences	NA	NA	NA	NA	NA	NA	26,594
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	12,035
Engineering, total	202,377	191,250	206,154	220,760	214,872	262,847	272,799
Aeronautical	34,778	29,076	27,263	34,285	32,209	30,163	31,988
Astronautical	12,614	11,644	7,745	7,240	11,066	11,292	11,850
Chemical	12,131	11,560	10,805	12,409	11,309	16,350	18,425
Civil	5,537	6,259	8,867	10,428	10,080	7,722	7,786
Electrical	33,622	34,938	41,558	43,982	38,448	47,766	53,079
Mechanical	35,252	25,972	26,788	27,804	17,285	17,631	20,116
Metallurgy & materials	49,617	58,248	62,522	67,701	74,646	99,720	103,273
Engineering, n.e.c.	18,826	13,553	20,606	16,911	19,829	32,203	26,282
Social sciences, total	63,906	70,246	80,091	80,197	74,831	73,757	86,426
Anthropology	7,929	8,755	9,867	10,665	8,800	6,984	6,429
Economics	24,438	23,683	23,563	21,712	25,122	22,066	25,634
Political science	3,883	2,262	2,838	2,986	2,221	1,607	2,999
Sociology	12,643	16,378	20,722	12,479	14,430	15,069	16,602
Social sciences, n.e.c.	15,013	19,168	23,101	32,355	24,258	28,031	34,762
History	4,424	3,662	4,300	4,645	5,855	5,999	NA
Linguistics	1,662	1,931	2,533	3,059	2,143	2,108	NA
Other social sciences	8,927	13,575	16,268	24,651	16,260	19,924	NA
Other sciences, n.e.c.	11,051	15,731	15,578	35,586	25,704	25,523	43,120

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

**Table 2A. Federal obligations for basic research, by detailed field of science
& engineering: All agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	3,258,640	3,698,604	4,192,665	4,674,156	5,041,295	5,481,605	6,260,131
Life sciences, total	1,383,365	1,588,390	1,891,777	2,054,425	2,223,848	2,526,017	2,891,336
Biol & agricultural, total	933,574	1,078,679	1,279,290	1,339,434	1,462,372	1,674,752	1,928,774
Biol (excl environmental)	NA	874,485	1,055,525	1,099,856	1,201,686	1,401,192	1,621,857
Environmental biology	NA	64,345	90,802	86,118	83,299	83,164	92,672
Agricultural	NA	139,849	132,963	153,460	177,387	190,396	214,245
Medical sciences, total	414,789	467,672	560,110	656,963	706,205	793,419	878,922
Clinical medical	39,575	NA	NA	NA	NA	NA	NA
Other medical	375,214	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	35,002	42,039	52,377	58,028	55,271	57,846	83,640
Psychology, total	55,717	67,473	75,069	84,206	90,992	89,875	92,927
Biological aspects	22,526	23,487	26,360	30,160	30,545	32,897	31,396
Social aspects	20,043	25,259	33,989	31,259	30,211	33,655	32,822
Psychological sciences, n.e.c.	13,148	18,727	14,720	22,787	30,236	23,323	28,709
Physical sciences, total	889,994	941,421	1,050,002	1,220,588	1,324,940	1,393,844	1,587,183
Astronomy	193,321	209,832	280,643	279,420	274,227	271,114	354,466
Chemistry	208,695	203,260	224,798	256,922	298,188	312,002	362,188
Physics	467,414	518,798	535,624	668,155	735,417	790,741	855,104
Physical sciences, n.e.c.	20,564	9,531	8,937	16,091	17,108	19,987	15,425
Environmental sciences, total	387,454	451,278	457,284	522,360	532,833	520,049	580,050
Atmospheric sciences	143,464	163,275	169,172	179,048	173,829	163,195	172,633
Geological sciences	128,720	145,114	157,603	198,335	194,205	177,487	178,292
Oceanography	104,593	120,720	119,110	130,678	143,294	154,465	195,615
Environmental sciences, n.e.c.	10,677	22,169	11,399	14,299	21,505	24,902	33,510
Math & computer sciences, total	83,408	97,737	104,164	116,258	140,360	165,064	208,129
Mathematics	52,135	55,871	59,964	66,825	79,174	90,862	100,906
Computer sciences	31,018	40,294	42,956	46,215	52,205	67,448	90,441
Math & computer sciences, n.e.c.	255	1,572	1,244	3,218	8,981	6,754	16,782
Engineering, total	337,683	392,561	434,658	465,228	526,018	610,467	689,503
Aeronautical	49,520	82,815	88,437	104,157	113,284	126,465	140,713
Astronautical	10,180	14,941	25,167	27,184	33,179	44,845	50,352
Chemical	24,034	24,104	24,611	26,148	31,330	35,184	50,402
Civil	10,356	10,842	14,164	21,963	23,362	31,977	32,426
Electrical	55,139	57,405	62,025	70,586	78,508	93,625	95,820
Mechanical	29,628	29,488	35,891	42,227	47,378	53,120	60,722
Metallurgy & materials	124,888	134,539	151,117	121,337	138,480	155,888	182,892
Engineering, n.e.c.	33,938	38,427	33,246	51,626	60,497	69,363	76,176
Social sciences, total	95,513	124,347	129,718	147,180	136,951	120,198	137,723
Anthropology	8,040	11,957	12,488	14,234	13,078	13,063	11,175
Economics	29,085	33,564	32,676	40,010	34,112	38,950	40,982
Political science	2,544	3,245	4,135	7,403	6,286	4,361	4,596
Sociology	15,936	18,588	18,406	25,377	22,593	18,739	32,772
Social sciences, n.e.c.	39,908	56,993	62,013	60,156	60,882	45,085	48,198
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.	25,506	35,397	49,993	63,911	65,353	56,091	73,280

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

**Table 2A. Federal obligations for basic research, by detailed field of science
& engineering: All agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	7,067,359	7,818,682	8,153,076	8,942,425	9,473,618	10,602,011	11,285,593
Life sciences, total	3,287,634	3,786,595	3,858,783	4,361,947	4,501,756	4,915,721	5,177,543
Biol & agricultural, total	2,174,668	2,515,484	2,542,950	2,870,370	2,855,327	3,102,884	3,219,006
Biol (excl environmental)	1,835,765	2,106,327	2,151,462	2,461,499	2,414,895	2,647,192	2,742,154
Environmental biology	120,769	125,672	125,741	141,002	146,763	157,342	168,325
Agricultural	218,134	283,485	265,747	267,869	293,669	298,350	308,527
Medical sciences, total	1,015,300	1,145,437	1,196,592	1,340,986	1,573,227	1,708,392	1,849,627
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	97,666	125,674	119,241	150,591	73,202	104,445	108,910
Psychology, total	107,861	132,840	132,955	147,149	177,839	187,135	215,057
Biological aspects	43,674	48,032	47,007	49,283	52,385	61,043	65,334
Social aspects	33,434	46,854	45,282	45,548	40,941	38,088	60,948
Psychological sciences, n.e.c.	30,753	37,954	40,666	52,318	84,513	88,004	88,775
Physical sciences, total	1,727,982	1,815,239	1,914,426	2,096,007	2,199,620	2,506,466	2,661,508
Astronomy	379,553	400,676	453,050	504,500	458,524	524,643	579,940
Chemistry	403,367	425,019	433,359	445,056	470,752	504,631	502,080
Physics	921,430	959,884	1,003,363	1,072,285	1,205,504	1,395,314	1,474,342
Physical sciences, n.e.c.	23,632	29,660	24,654	74,166	64,840	81,878	105,146
Environmental sciences, total	656,731	699,675	749,093	781,010	872,666	1,016,909	1,274,810
Atmospheric sciences	192,172	209,215	240,417	243,805	280,712	316,396	443,719
Geological sciences	198,010	249,988	265,478	266,173	267,329	334,926	439,725
Oceanography	220,131	219,258	224,304	249,834	269,422	293,533	299,732
Environmental sciences, n.e.c.	46,418	21,214	18,894	21,198	55,203	72,054	91,634
Math & computer sciences, total	240,806	259,998	293,389	306,378	313,243	345,782	406,883
Mathematics	113,865	130,293	142,422	158,371	165,371	167,789	176,341
Computer sciences	104,789	116,071	131,401	128,547	125,496	159,544	225,209
Math & computer sciences, n.e.c.	22,152	13,634	19,566	19,460	22,376	18,449	5,333
Engineering, total	844,991	884,236	968,508	989,479	1,006,228	1,183,717	1,101,528
Aeronautical	225,509	191,480	226,257	237,386	230,979	327,892	269,647
Astronautical	52,378	41,575	52,457	48,769	48,433	58,867	62,292
Chemical	55,534	74,448	73,026	77,450	88,622	50,081	75,849
Civil	41,861	43,601	45,165	45,679	46,127	51,656	47,264
Electrical	130,365	144,890	156,323	175,440	153,957	173,838	146,938
Mechanical	64,129	88,204	83,585	87,229	83,549	100,832	91,424
Metallurgy & materials	187,340	211,852	228,479	209,769	230,116	254,840	260,165
Engineering, n.e.c.	87,875	88,186	103,216	107,757	124,445	165,711	147,949
Social sciences, total	132,581	140,684	113,464	129,519	146,781	154,620	145,998
Anthropology	16,839	15,822	11,196	12,325	12,064	12,084	12,535
Economics	29,671	34,274	26,262	28,954	34,706	37,695	37,110
Political science	4,086	5,761	4,143	5,533	5,101	5,426	6,354
Sociology	33,920	32,438	29,996	34,332	36,800	38,196	24,170
Social sciences, n.e.c.	48,065	52,389	41,867	48,375	58,110	61,219	65,829
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.	68,773	99,415	122,458	130,936	255,485	291,661	302,266

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

**Table 2A. Federal obligations for basic research, by detailed field of science
& engineering: All agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	12,170,794	12,489,864	13,399,121	13,523,476	13,877,031	14,464,035	14,941,892
Life sciences, total	5,433,552	5,841,708	6,288,812	6,472,123	6,601,267	6,878,992	7,203,755
Biol & agricultural, total	3,374,854	3,517,612	3,787,794	3,751,880	3,836,503	3,922,369	3,945,148
Biol (excl environmental)	2,868,497	2,981,840	3,222,473	3,139,188	3,248,329	3,387,156	3,391,000
Environmental biology	186,938	201,597	223,156	242,120	220,642	205,690	206,074
Agricultural	319,419	334,175	342,165	370,572	367,532	329,523	348,074
Medical sciences, total	1,857,739	2,131,031	2,380,887	2,610,297	2,615,880	2,740,761	3,035,174
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	200,959	193,065	120,131	109,946	148,884	215,862	223,433
Psychology, total	225,520	122,551	246,785	246,106	278,011	291,520	293,854
Biological aspects	68,228	14,332	18,085	24,804	31,397	33,488	30,202
Social aspects	69,227	16,856	16,016	16,273	22,230	10,056	12,950
Psychological sciences, n.e.c.	88,065	91,363	212,684	205,029	224,384	247,976	250,702
Physical sciences, total	2,881,462	2,951,429	2,907,135	2,826,949	2,864,792	2,862,556	2,976,361
Astronomy	612,311	729,687	663,436	724,818	731,557	708,798	754,176
Chemistry	538,731	556,614	543,688	540,259	559,408	550,740	517,846
Physics	1,644,949	1,607,500	1,600,628	1,502,263	1,507,412	1,545,634	1,561,715
Physical sciences, n.e.c.	85,471	57,628	99,383	59,609	66,415	57,384	142,624
Environmental sciences, total	1,263,526	1,303,634	1,533,470	1,516,482	1,467,468	1,554,037	1,543,481
Atmospheric sciences	448,972	435,242	635,122	698,310	688,220	671,166	679,540
Geological sciences	499,000	526,465	555,302	487,827	451,706	389,991	388,277
Oceanography	197,536	209,981	207,154	190,166	188,238	309,130	303,525
Environmental sciences, n.e.c.	118,018	131,946	135,892	140,179	139,304	183,750	172,139
Math & computer sciences, total	426,107	481,425	511,278	521,735	602,968	639,574	661,382
Mathematics	164,387	228,180	221,841	247,658	163,969	162,617	238,247
Computer sciences	223,516	247,731	284,334	262,291	317,096	376,773	389,530
Math & computer sciences, n.e.c.	38,204	5,514	5,103	11,786	121,903	100,184	33,605
Engineering, total	1,233,711	1,249,819	1,207,405	1,290,426	1,448,932	1,612,060	1,582,999
Aeronautical	256,223	245,072	246,181	275,869	271,041	261,721	269,052
Astronautical	69,651	94,408	53,585	59,812	66,343	71,811	69,796
Chemical	101,672	104,955	72,784	70,907	66,749	59,775	68,050
Civil	59,251	53,376	38,671	38,140	70,132	52,870	45,413
Electrical	142,457	165,379	203,086	205,702	204,613	201,452	172,866
Mechanical	115,561	113,857	142,614	141,575	164,701	113,205	104,852
Metallurgy & materials	294,558	273,582	241,347	330,158	368,462	501,814	462,577
Engineering, n.e.c.	194,338	199,190	209,137	168,263	236,891	349,412	390,393
Social sciences, total	161,276	139,861	194,101	184,040	206,669	212,496	221,031
Anthropology	12,701	11,044	10,025	9,659	15,107	12,736	14,812
Economics	37,324	39,299	45,993	38,359	44,707	39,397	46,141
Political science	7,064	6,434	6,391	4,750	7,100	5,748	4,894
Sociology	28,241	10,202	11,080	13,146	14,300	13,277	8,156
Social sciences, n.e.c.	75,946	72,882	120,612	118,126	125,455	141,338	147,028
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.	545,640	399,437	510,135	465,615	406,924	412,800	459,029

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

Table 2A. Federal obligations for basic research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	15,613,012	17,443,653	19,569,849	21,958,136	24,173,530	25,976,554
Life sciences, total	7,853,424	9,197,114	10,048,971	12,835,472	14,355,435	15,391,745
Biol & agricultural, total	4,222,344	4,941,601	7,610,435	8,773,772	NA	NA
Biol (excl environmental)	3,652,992	4,236,900	6,851,114	7,952,287	NA	NA
Environmental biology	196,843	280,219	313,614	309,811	NA	NA
Agricultural	372,509	424,482	445,707	511,674	NA	NA
Medical sciences, total	3,392,433	3,956,451	1,923,803	2,808,590	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	238,647	299,062	514,733	1,253,110	NA	NA
Psychology, total	312,016	347,303	817,786	292,942	335,607	364,086
Biological aspects	27,321	12,234	5,680	10,419	NA	NA
Social aspects	12,862	9,929	14,312	5,516	NA	NA
Psychological sciences, n.e.c.	271,833	325,140	797,794	277,007	NA	NA
Physical sciences, total	2,941,381	3,089,798	3,470,616	3,327,128	3,664,069	3,868,855
Astronomy	706,921	718,412	793,988	650,155	NA	NA
Chemistry	517,523	554,614	765,809	736,787	NA	NA
Physics	1,579,807	1,693,823	1,764,387	1,762,281	NA	NA
Physical sciences, n.e.c.	137,130	122,949	146,432	177,905	NA	NA
Environmental sciences, total	1,528,734	1,615,729	1,838,422	1,663,039	1,852,504	2,018,258
Atmospheric sciences	655,184	671,040	717,028	597,181	NA	NA
Geological sciences	391,170	412,072	429,565	400,614	NA	NA
Oceanography	285,997	383,886	364,890	402,370	NA	NA
Environmental sciences, n.e.c.	196,383	148,731	326,939	262,874	NA	NA
Math & computer sciences, total	705,486	734,928	798,258	957,826	1,002,402	1,054,504
Mathematics	250,725	254,035	308,616	288,354	NA	NA
Computer sciences	419,128	438,302	462,999	585,585	NA	NA
Math & computer sciences, n.e.c.	35,633	42,591	26,643	83,887	NA	NA
Engineering, total	1,594,442	1,639,691	1,764,175	1,911,549	1,909,149	2,174,250
Aeronautical	285,233	331,713	322,771	369,707	NA	NA
Astronautical	67,952	66,176	88,702	33,862	NA	NA
Chemical	52,266	55,178	52,573	60,159	NA	NA
Civil	35,854	68,846	59,706	47,893	NA	NA
Electrical	213,922	185,642	177,045	246,943	NA	NA
Mechanical	106,670	99,578	93,369	128,805	NA	NA
Metallurgy & materials	478,243	481,169	517,837	591,085	NA	NA
Engineering, n.e.c.	354,302	351,389	452,172	433,095	NA	NA
Social sciences, total	224,799	246,547	308,009	278,442	294,945	304,825
Anthropology	13,522	13,404	14,029	14,058	NA	NA
Economics	41,510	45,334	51,775	42,530	NA	NA
Political science	4,624	4,769	5,061	5,941	NA	NA
Sociology	23,463	9,157	11,775	17,909	NA	NA
Social sciences, n.e.c.	141,680	173,883	225,369	198,004	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	452,730	572,543	523,612	691,738	759,419	800,031

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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 for basic research, by detailed field of science
& engineering: Department of Agriculture,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	115,709	118,414	137,311	142,726	145,611	154,184	171,371
Life sciences, total	75,667	78,749	94,502	98,286	99,854	108,885	121,665
Biol & agricultural, total	74,553	77,449	93,082	96,749	98,316	107,146	119,715
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	1,114	1,300	1,420	1,537	1,538	1,739	1,950
Clinical medical	1,050	1,165	1,420	1,537	1,538	1,739	1,950
Other medical	64	135	0	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	5	5	26	14	8	0	23
Biological aspects	0	0	0	0	0	0	0
Social aspects	5	5	26	14	8	0	23
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	17,796	16,634	19,703	20,314	20,664	19,955	21,546
Astronomy	0	0	0	0	0	0	0
Chemistry	15,306	14,021	16,660	17,204	17,484	17,235	18,506
Physics	2,490	2,535	3,043	3,110	3,180	2,720	3,040
Physical sciences, n.e.c.	0	78	0	0	0	0	0
Environmental sciences, total	1,573	1,713	2,086	2,188	2,284	2,864	3,301
Atmospheric sciences	637	705	849	895	929	1,252	1,474
Geological sciences	936	1,008	289	298	307	233	1,135
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	948	995	1,048	1,379	692
Math & computer sciences, total	307	322	575	545	575	1,042	1,350
Mathematics	NA	NA	NA	NA	NA	NA	1,350
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	10,292	9,536	8,377	8,610	8,795	8,954	9,489
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	2,434	1,793	667	696	721	506	449
Civil	1,087	1,171	1,439	1,474	1,519	1,451	1,540
Electrical	33	19	15	16	15	27	54
Mechanical	466	474	420	428	444	388	435
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	6,272	6,079	5,836	5,996	6,096	6,582	7,011
Social sciences, total	10,069	11,455	12,042	12,769	13,431	12,484	13,997
Anthropology	0	0	0	3	3	0	0
Economics	9,389	10,705	11,207	11,986	12,715	11,574	13,005
Political science	43	29	18	18	11	0	0
Sociology	497	545	668	701	572	814	885
Social sciences, n.e.c.	140	176	149	61	130	96	107
History	43	91	93	59	78	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	97	85	56	2	52	96	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

**Table 2B. Federal obligations for basic research, by detailed field of science
& engineering: Department of Agriculture,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	204,450	242,704	256,420	275,650	314,128	330,755	362,019
Life sciences, total	144,389	182,504	193,643	207,817	235,268	245,426	269,207
Biol & agricultural, total	142,201	178,925	191,014	204,988	230,672	240,565	263,864
Biol (excl environmental)	NA	28,122	35,146	32,671	38,424	36,638	37,363
Environmental biology	NA	10,954	22,905	20,729	16,327	17,015	18,004
Agricultural	NA	139,849	132,963	151,588	175,921	186,912	208,497
Medical sciences, total	2,188	2,288	2,629	2,829	4,596	4,861	5,343
Clinical medical	2,188	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	1,291	0	0	0	0	0
Psychology, total	26	31	31	34	0	116	39
Biological aspects	0	0	0	0	0	0	0
Social aspects	26	31	31	34	0	116	39
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	27,458	25,400	23,775	25,767	33,692	36,169	39,992
Astronomy	0	0	0	0	0	0	0
Chemistry	23,941	23,583	22,254	24,032	31,821	34,463	38,235
Physics	3,517	1,817	1,521	1,735	1,871	1,706	1,757
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	4,384	4,287	4,219	4,377	4,776	4,527	4,914
Atmospheric sciences	1,871	2,231	2,061	2,231	2,193	2,197	2,394
Geological sciences	1,672	2,056	2,158	2,146	2,583	2,330	2,520
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	841	0	0	0	0	0	0
Math & computer sciences, total	917	1,165	1,137	857	2,623	3,929	4,156
Mathematics	917	1,165	1,137	857	2,623	3,929	4,156
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	11,512	12,458	13,280	14,465	16,548	18,238	19,899
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	651	689	1,450	1,395	2,441	2,948	3,252
Civil	2,105	2,228	1,234	1,261	1,087	1,003	1,027
Electrical	101	87	179	158	61	136	152
Mechanical	500	485	956	1,125	1,157	1,483	1,676
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	8,155	8,969	9,461	10,526	11,802	12,668	13,792
Social sciences, total	15,764	16,859	20,335	22,333	21,221	22,350	23,812
Anthropology	0	2	0	4	60	0	0
Economics	14,413	15,076	18,241	19,886	18,696	20,167	22,052
Political science	0	0	0	0	489	38	62
Sociology	1,238	1,557	1,830	2,343	1,911	2,126	1,646
Social sciences, n.e.c.	113	224	264	100	65	19	52
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	0	0	0	0

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

**Table 2B. Federal obligations for basic research, by detailed field of science
& engineering: Department of Agriculture,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	392,649	445,388	432,857	445,464	480,588	484,928	519,190
Life sciences, total	303,171	376,678	367,048	371,948	409,468	411,517	436,906
Biol & agricultural, total	293,830	364,736	355,541	359,465	397,636	399,096	423,105
Biol (excl environmental)	48,045	46,945	57,116	53,578	59,010	55,548	66,619
Environmental biology	31,207	39,101	37,704	45,529	51,535	50,572	55,287
Agricultural	214,578	278,690	260,721	260,358	287,091	292,976	301,199
Medical sciences, total	9,341	11,942	11,507	12,483	11,832	12,421	13,801
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	0	0
Psychology, total	42	44	42	99	103	95	115
Biological aspects	0	0	0	0	103	0	0
Social aspects	42	44	42	99	0	95	115
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	45,422	35,645	33,641	34,803	32,471	33,686	37,297
Astronomy	0	0	0	0	0	0	0
Chemistry	43,530	33,560	31,939	32,913	30,642	31,893	35,372
Physics	1,892	2,085	1,702	1,890	1,829	1,793	1,925
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	5,428	4,859	4,711	5,017	4,884	4,795	5,337
Atmospheric sciences	2,321	2,217	2,090	2,058	1,821	1,910	1,925
Geological sciences	3,107	2,642	2,621	2,959	3,063	2,885	3,412
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	4,863	4,783	4,165	4,038	4,126	3,956	4,559
Mathematics	4,863	3,994	3,812	3,676	3,850	3,508	4,000
Computer sciences	0	789	353	362	276	448	559
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	20,984	10,381	10,568	12,576	10,185	11,726	13,457
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	3,613	3,106	2,367	2,413	2,532	2,441	2,428
Civil	1,331	1,665	2,222	2,234	2,147	2,029	2,430
Electrical	170	28	47	2,024	268	172	155
Mechanical	1,265	1,228	561	1,348	1,326	1,530	1,513
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	14,605	4,354	5,371	4,557	3,912	5,554	6,931
Social sciences, total	12,739	12,998	12,682	16,983	19,351	19,153	21,519
Anthropology	0	0	0	0	0	0	0
Economics	9,923	10,064	9,796	13,826	15,913	15,959	18,427
Political science	13	47	29	124	116	131	157
Sociology	2,745	2,841	2,779	2,977	3,241	2,944	2,804
Social sciences, n.e.c.	58	46	78	56	81	119	131
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	0	0	0	0

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

**Table 2B. Federal obligations for basic research, by detailed field of science
& engineering: Department of Agriculture,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	557,578	595,153	615,941	606,328	595,034	549,980	590,097
Life sciences, total	468,810	497,830	515,157	515,317	510,160	467,755	505,694
Biol & agricultural, total	455,157	479,963	496,969	498,364	494,765	454,549	492,626
Biol (excl environmental)	75,233	83,906	94,811	78,848	76,034	67,937	84,882
Environmental biology	67,501	69,835	71,683	59,203	60,318	58,777	60,305
Agricultural	312,423	326,222	330,475	360,313	358,413	327,835	347,439
Medical sciences, total	13,653	17,867	18,188	16,953	15,389	13,200	13,068
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	6	6	0
Psychology, total	127	99	132	45	45	42	36
Biological aspects	0	0	0	0	0	0	0
Social aspects	127	99	132	45	45	42	36
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	38,778	42,551	44,549	44,563	40,782	41,638	43,459
Astronomy	0	0	23	0	0	0	0
Chemistry	36,988	41,065	43,073	43,113	39,369	40,116	42,035
Physics	1,790	1,486	1,453	1,450	1,413	1,522	1,424
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	6,507	4,565	4,713	3,531	4,128	4,303	4,165
Atmospheric sciences	2,741	4,231	4,391	3,305	3,918	4,077	4,007
Geological sciences	3,766	334	322	226	205	221	158
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	5	5	0
Math & computer sciences, total	5,014	3,349	4,004	3,459	3,504	3,104	1,821
Mathematics	4,465	2,488	2,539	1,877	1,931	1,876	1,821
Computer sciences	549	861	1,465	1,582	1,573	1,228	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	14,922	21,627	18,914	13,216	14,775	12,715	13,753
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	2,676	2,652	2,355	1,910	2,358	2,760	2,510
Civil	2,446	1,337	1,335	1,019	871	662	661
Electrical	292	299	298	201	223	159	372
Mechanical	1,725	1,016	998	464	489	482	410
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	7,783	16,323	13,928	9,622	10,834	8,652	9,800
Social sciences, total	23,420	24,599	27,913	25,944	21,394	20,178	20,949
Anthropology	0	9	8	39	39	34	35
Economics	20,359	21,223	24,790	22,891	18,301	17,663	18,235
Political science	171	0	0	0	0	0	0
Sociology	2,880	3,367	3,115	3,014	3,054	2,481	2,679
Social sciences, n.e.c.	10	0	0	0	0	0	0
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	533	559	253	246	245	220

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

Table 2B. Federal obligations for basic research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	603,763	743,295	807,947	903,100	954,564	954,538
Life sciences, total	528,885	653,063	706,692	791,280	837,211	835,378
Biol & agricultural, total	515,030	637,524	688,809	772,688	NA	NA
Biol (excl environmental)	75,124	93,722	100,741	115,798	NA	NA
Environmental biology	68,012	119,987	143,169	146,400	NA	NA
Agricultural	371,894	423,815	444,899	510,490	NA	NA
Medical sciences, total	13,855	15,539	17,883	18,592	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	40	111	125	133	151	141
Biological aspects	0	0	125	133	NA	NA
Social aspects	40	111	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	40,692	43,701	45,455	51,437	56,288	57,848
Astronomy	0	0	0	0	NA	NA
Chemistry	38,804	41,423	43,005	48,713	NA	NA
Physics	1,888	2,278	2,450	2,724	NA	NA
Physical sciences, n.e.c.	0	0	0	0	NA	NA
Environmental sciences, total	3,051	4,377	4,721	5,307	5,560	5,404
Atmospheric sciences	2,911	4,069	4,371	4,930	NA	NA
Geological sciences	140	308	350	377	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	NA	NA
Math & computer sciences, total	2,217	3,084	3,383	3,672	3,992	3,912
Mathematics	2,217	3,084	3,383	3,672	NA	NA
Computer sciences	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	11,812	19,242	21,718	24,093	25,921	26,003
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	2,682	3,659	3,918	4,340	NA	NA
Civil	972	1,437	1,588	1,742	NA	NA
Electrical	399	377	400	458	NA	NA
Mechanical	485	1,121	1,194	1,308	NA	NA
Metallurgy & materials	0	0	0	0	NA	NA
Engineering, n.e.c.	7,274	12,648	14,618	16,245	NA	NA
Social sciences, total	16,836	19,079	25,131	26,410	24,573	25,039
Anthropology	35	100	114	121	NA	NA
Economics	14,489	16,482	20,861	22,261	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	2,312	2,497	4,156	4,028	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	230	638	722	768	868	813

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 for basic research, by detailed field of science
& engineering: Department of Commerce,
fiscal years 1970-2003**

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	18,163	15,711	7,928	6,644	7,681	8,109	11,001
Life sciences, total	0	0	0	0	0	0	0
Biol & agricultural, total	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	0	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	109	118	123	66	77	80	42
Biological aspects	0	0	0	0	0	0	0
Social aspects	109	118	123	66	77	80	42
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	11,089	11,756	4,046	3,677	4,907	4,379	4,767
Astronomy	823	755	487	347	329	368	346
Chemistry	3,693	3,684	1,696	1,305	1,909	1,123	1,325
Physics	6,246	7,317	1,621	2,025	2,669	2,888	3,096
Physical sciences, n.e.c.	327	0	242	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	420	239	221	105	123	127	140
Mathematics	NA	NA	NA	NA	NA	NA	140
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	2,835	3,008	3,514	2,785	2,563	2,812	2,311
Aeronautical	125	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	97	194	2,779	1,484	754	531	640
Electrical	562	360	0	226	364	232	261
Mechanical	96	373	0	0	0	100	145
Metallurgy & materials	1,537	1,796	682	692	1,049	903	942
Engineering, n.e.c.	418	285	53	383	396	1,046	323
Social sciences, total	3,526	30	24	11	11	11	1,675
Anthropology	0	0	0	0	0	0	0
Economics	3,526	30	24	11	11	11	1,675
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	184	560	0	0	0	700	2,066

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

**Table 2C. Federal obligations for basic research, by detailed field of science
& engineering: Department of Commerce,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	12,302	11,806	11,900	15,910	16,204	16,867	19,221
Life sciences, total	160	0	0	0	0	0	527
Biol & agricultural, total	0	0	0	0	0	0	527
Biol (excl environmental)	NA	0	0	0	0	0	527
Environmental biology	NA	0	0	0	0	0	0
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	160	0	0	0	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	160	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	45	109	128	104	84	59	57
Biological aspects	0	0	0	0	0	0	0
Social aspects	45	109	128	104	84	59	57
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	8,191	5,672	7,895	11,313	12,568	13,685	15,748
Astronomy	357	490	534	531	365	413	522
Chemistry	2,831	901	1,599	2,206	2,883	4,221	4,651
Physics	5,003	4,281	5,762	8,576	9,320	9,051	10,575
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	25	50	0	120	0
Atmospheric sciences	0	0	25	50	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	120	0
Math & computer sciences, total	155	398	772	1,251	1,523	1,232	1,202
Mathematics	155	398	672	751	777	755	975
Computer sciences	0	0	100	500	662	477	227
Math & computer sciences, n.e.c.	0	0	0	0	84	0	0
Engineering, total	2,551	2,937	2,580	2,892	1,829	1,771	1,647
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	48	0	251	0	0	91	0
Civil	360	810	1,020	2,000	0	0	0
Electrical	360	270	230	0	0	0	0
Mechanical	120	433	465	102	366	477	358
Metallurgy & materials	717	0	311	752	1,180	1,131	963
Engineering, n.e.c.	946	1,424	303	38	283	72	326
Social sciences, total	1,200	2,690	500	300	200	0	40
Anthropology	0	0	0	0	0	0	0
Economics	1,200	2,690	500	300	200	0	40
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	0	0

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

**Table 2C. Federal obligations for basic research, by detailed field of science
& engineering: Department of Commerce,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	20,613	23,227	26,523	25,779	30,858	29,099	31,382
Life sciences, total	0	0	0	0	0	0	0
Biol & agricultural, total	0	0	0	0	0	0	0
Biol (excl environmental)	0	0	0	0	0	0	0
Environmental biology	0	0	0	0	0	0	0
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
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	0	0
Psychology, total	77	71	96	138	255	221	533
Biological aspects	0	0	0	0	0	0	0
Social aspects	77	71	96	138	255	221	533
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	16,317	19,668	21,647	20,659	21,034	22,621	22,942
Astronomy	536	643	415	428	455	335	291
Chemistry	4,802	7,221	8,274	7,614	8,294	9,147	9,450
Physics	10,979	11,677	12,958	12,617	12,285	13,139	13,126
Physical sciences, n.e.c.	0	127	0	0	0	0	75
Environmental sciences, total	55	19	0	88	3,381	118	75
Atmospheric sciences	0	0	0	0	3,238	0	0
Geological sciences	0	0	0	88	143	118	75
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	55	19	0	0	0	0	0
Math & computer sciences, total	2,070	1,747	1,027	1,055	1,582	1,285	2,562
Mathematics	1,137	1,019	652	713	1,235	1,285	2,533
Computer sciences	933	728	375	342	347	0	29
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	2,074	1,676	3,753	3,839	4,606	4,854	5,270
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	52	0
Chemical	283	0	497	307	751	653	1,024
Civil	47	0	59	0	0	0	0
Electrical	307	0	939	887	928	1,056	1,055
Mechanical	0	97	0	164	97	0	0
Metallurgy & materials	1,294	1,474	1,197	1,276	1,152	1,032	910
Engineering, n.e.c.	143	105	1,061	1,205	1,678	2,061	2,281
Social sciences, total	20	46	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	20	46	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	0	0

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

**Table 2C. Federal obligations for basic research, by detailed field of science
& engineering: Department of Commerce,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	34,332	34,517	37,201	40,119	39,258	37,536	39,235
Life sciences, total	0	0	0	122	313	258	476
Biol & agricultural, total	0	0	0	122	313	258	476
Biol (excl environmental)	0	0	0	122	313	258	476
Environmental biology	0	0	0	0	0	0	0
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
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	0	0
Psychology, total	464	179	67	59	59	161	201
Biological aspects	0	0	0	0	0	0	0
Social aspects	464	179	67	59	59	161	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	201
Physical sciences, total	24,795	25,669	27,073	29,682	28,275	30,241	31,431
Astronomy	302	367	331	377	860	587	338
Chemistry	10,326	10,781	11,213	12,007	11,616	12,380	11,804
Physics	14,122	14,451	15,443	17,205	15,799	17,274	19,289
Physical sciences, n.e.c.	45	70	86	93	0	0	0
Environmental sciences, total	175	126	611	298	275	262	291
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	175	126	611	298	275	262	291
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	2,350	1,598	1,461	1,401	696	1,716	2,502
Mathematics	2,350	1,230	823	435	253	689	0
Computer sciences	0	368	638	706	443	1,027	1,642
Math & computer sciences, n.e.c.	0	0	0	260	0	0	860
Engineering, total	6,548	6,945	7,989	8,557	9,640	4,898	4,334
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	1,021	752	1,575	891	644	818	1,203
Civil	0	0	0	319	1,548	1,040	541
Electrical	1,001	970	811	897	549	151	235
Mechanical	159	179	5	0	1,090	934	605
Metallurgy & materials	1,237	1,339	1,486	1,917	1,260	1,396	1,248
Engineering, n.e.c.	3,130	3,705	4,112	4,533	4,549	559	502
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	0	0

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

Table 2C. Federal obligations for basic research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	39,593	49,128	46,362	64,917	76,550	97,172
Life sciences, total	4,447	4,265	4,365	2,875	3,127	6,868
Biol & agricultural, total	4,447	4,265	4,365	2,875	NA	NA
Biol (excl environmental)	4,447	4,265	4,365	2,875	NA	NA
Environmental biology	0	0	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	104	672	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	104	672	0	0	NA	NA
Physical sciences, total	29,089	32,025	30,825	45,216	49,183	59,860
Astronomy	371	384	155	281	NA	NA
Chemistry	9,668	11,508	10,414	14,109	NA	NA
Physics	18,918	19,933	19,927	30,606	NA	NA
Physical sciences, n.e.c.	132	200	329	220	NA	NA
Environmental sciences, total	925	5,687	4,852	8,297	17,302	17,319
Atmospheric sciences	0	3,746	3,446	3,517	NA	NA
Geological sciences	518	599	514	147	NA	NA
Oceanography	0	1,342	892	4,633	NA	NA
Environmental sciences, n.e.c.	407	0	0	0	NA	NA
Math & computer sciences, total	1,699	2,696	2,665	4,214	2,245	2,339
Mathematics	0	0	0	0	NA	NA
Computer sciences	1,253	1,331	899	954	NA	NA
Math & computer sciences, n.e.c.	446	1,365	1,766	3,260	NA	NA
Engineering, total	3,329	3,783	3,655	4,315	4,693	10,786
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	1,019	691	680	746	NA	NA
Civil	126	122	70	76	NA	NA
Electrical	233	108	0	0	NA	NA
Mechanical	454	613	426	123	NA	NA
Metallurgy & materials	1,377	1,723	1,546	2,466	NA	NA
Engineering, n.e.c.	120	526	933	904	NA	NA
Social sciences, total	0	0	0	0	0	0
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	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

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 for basic research, by detailed field of science
& engineering: Department of Defense,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	317,013	322,139	328,774	306,711	302,943	300,065	326,885
Life sciences, total	40,448	39,586	44,400	43,345	38,802	36,197	42,374
Biol & agricultural, total	17,770	17,893	18,863	13,212	14,443	8,996	4,682
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	22,678	21,693	25,537	30,133	24,307	27,201	37,692
Clinical medical	22,678	21,108	24,955	24,270	20,416	23,041	32,140
Other medical	0	585	582	5,863	3,891	4,160	5,552
Life sciences, n.e.c.	0	0	0	0	52	0	0
Psychology, total	11,256	10,584	11,032	9,602	11,397	9,493	10,600
Biological aspects	1,627	1,684	1,993	1,199	1,787	1,394	1,713
Social aspects	8,858	8,079	7,226	6,465	7,435	6,480	6,936
Psychological sciences, n.e.c.	771	821	1,813	1,938	2,175	1,619	1,951
Physical sciences, total	91,815	85,713	77,464	73,144	71,174	69,688	63,478
Astronomy	11,173	8,820	10,071	9,083	9,098	9,969	9,164
Chemistry	15,771	17,242	16,682	15,157	12,623	13,080	19,114
Physics	60,678	52,795	49,480	47,531	47,772	44,902	34,016
Physical sciences, n.e.c.	4,193	6,856	1,231	1,373	1,681	1,737	1,184
Environmental sciences, total	58,527	61,422	64,750	55,643	59,874	59,675	65,903
Atmospheric sciences	24,677	27,823	29,509	27,419	28,783	27,588	29,329
Geological sciences	4,987	5,897	6,409	6,040	5,673	5,996	6,386
Oceanography	25,910	24,630	25,440	19,307	22,217	23,069	26,495
Environmental sciences, n.e.c.	2,953	3,072	3,392	2,877	3,201	3,022	3,693
Math & computer sciences, total	32,697	29,426	31,759	30,530	21,242	24,167	35,033
Mathematics	NA	NA	NA	NA	NA	NA	16,463
Computer sciences	NA	NA	NA	NA	NA	NA	9,731
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	8,839
Engineering, total	80,023	87,907	91,703	92,253	96,457	98,864	107,684
Aeronautical	1,850	4,249	3,673	2,903	10,340	10,730	12,401
Astronautical	6,457	8,029	7,150	6,394	5,580	5,684	5,220
Chemical	5,030	4,828	4,506	4,072	4,149	4,518	5,729
Civil	1,230	1,162	977	929	1,753	860	249
Electrical	19,644	24,305	23,125	22,892	24,169	32,288	35,590
Mechanical	18,523	12,856	17,502	15,928	8,236	9,643	10,828
Metallurgy & materials	23,825	32,393	34,368	38,662	41,460	34,385	37,095
Engineering, n.e.c.	3,464	85	402	473	770	756	572
Social sciences, total	2,247	2,896	2,674	2,094	2,814	1,803	1,446
Anthropology	0	252	0	0	525	0	15
Economics	0	170	0	0	0	0	0
Political science	1,625	923	527	740	91	0	0
Sociology	511	1,185	1,730	1,354	1,877	1,175	1,431
Social sciences, n.e.c.	111	366	417	0	321	628	0
History	0	0	0	0	0	0	NA
Linguistics	111	366	417	0	321	388	NA
Other social sciences	0	0	0	0	0	240	NA
Other sciences, n.e.c.	0	4,605	4,992	100	1,183	178	367

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

**Table 2D. Federal obligations for basic research, by detailed field of science
& engineering: Department of Defense,
fiscal years 1970-2003**

[Dollars in thousands]

Page 2 of 5

Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	373,254	410,410	471,527	540,341	604,285	686,684	785,620
Life sciences, total	43,397	50,567	61,743	48,704	55,320	74,264	82,468
Biol & agricultural, total	12,770	15,048	17,314	20,184	22,929	31,108	31,426
Biol (excl environmental)	NA	12,233	14,083	15,936	18,833	24,064	22,472
Environmental biology	NA	2,815	3,231	4,248	4,096	7,044	8,954
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	30,627	34,806	44,429	28,520	32,391	43,156	51,042
Clinical medical	24,613	NA	NA	NA	NA	NA	NA
Other medical	6,014	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	713	0	0	0	0	0
Psychology, total	13,436	18,742	20,505	18,490	18,926	21,133	20,741
Biological aspects	977	766	580	264	280	118	59
Social aspects	8,926	10,848	19,925	16,542	15,610	19,010	18,234
Psychological sciences, n.e.c.	3,533	7,128	0	1,684	3,036	2,005	2,448
Physical sciences, total	97,636	98,135	119,387	167,131	194,888	188,694	198,442
Astronomy	8,265	9,205	11,539	11,696	13,390	15,739	15,943
Chemistry	20,875	24,463	28,611	35,672	43,475	51,546	55,568
Physics	54,702	62,147	79,051	111,168	128,368	111,006	117,723
Physical sciences, n.e.c.	13,794	2,320	186	8,595	9,655	10,403	9,208
Environmental sciences, total	56,171	69,632	74,710	83,170	81,557	95,408	103,574
Atmospheric sciences	14,061	17,880	15,369	18,721	20,805	22,581	24,266
Geological sciences	5,868	8,282	11,462	19,164	12,407	13,345	17,233
Oceanography	30,992	35,351	39,616	37,410	40,026	49,538	49,112
Environmental sciences, n.e.c.	5,250	8,119	8,263	7,875	8,319	9,944	12,963
Math & computer sciences, total	29,675	38,386	44,365	47,345	59,320	74,240	101,554
Mathematics	18,836	21,453	23,205	24,094	28,704	37,142	40,402
Computer sciences	10,595	15,401	20,221	20,393	23,839	31,231	45,318
Math & computer sciences, n.e.c.	244	1,532	939	2,858	6,777	5,867	15,834
Engineering, total	131,299	131,382	147,575	169,737	188,146	228,236	254,185
Aeronautical	15,666	18,185	21,336	27,519	28,459	34,288	35,543
Astronautical	3,028	2,853	0	0	807	4,282	10,917
Chemical	11,830	9,092	7,527	9,510	9,282	10,927	11,281
Civil	329	599	811	1,546	2,664	3,177	4,347
Electrical	33,059	34,469	40,358	46,663	50,885	60,977	59,655
Mechanical	19,417	18,655	21,052	23,738	27,288	29,258	32,098
Metallurgy & materials	43,864	44,760	54,255	57,346	65,883	79,464	96,774
Engineering, n.e.c.	4,106	2,769	2,236	3,415	2,878	5,863	3,570
Social sciences, total	1,501	1,651	1,958	4,434	3,961	3,716	3,201
Anthropology	0	0	0	0	0	0	0
Economics	34	94	0	0	0	0	0
Political science	0	0	0	1,174	788	1,393	1,058
Sociology	1,467	1,557	1,892	1,933	2,518	2,210	2,143
Social sciences, n.e.c.	0	0	66	1,327	655	113	0
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	1,915	1,284	1,330	2,167	993	21,455

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

**Table 2D. Federal obligations for basic research, by detailed field of science
& engineering: Department of Defense,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	847,857	861,407	923,915	907,599	876,922	947,927	947,621
Life sciences, total	90,282	103,791	104,437	95,486	90,128	98,534	99,076
Biol & agricultural, total	33,254	38,212	39,871	42,897	44,600	45,332	41,732
Biol (excl environmental)	24,094	32,508	34,075	36,211	40,508	40,136	32,202
Environmental biology	9,160	5,704	5,796	6,686	4,092	5,196	9,530
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	56,998	65,579	64,566	52,589	44,808	53,202	55,846
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	30	0	0	0	720	0	1,498
Psychology, total	23,404	32,223	31,848	29,859	37,447	31,552	35,603
Biological aspects	6,360	6,913	7,040	7,155	5,878	9,420	9,518
Social aspects	14,517	22,558	22,204	20,301	15,142	5,792	11,058
Psychological sciences, n.e.c.	2,527	2,752	2,604	2,403	16,427	16,340	15,027
Physical sciences, total	212,219	185,510	191,975	177,648	159,057	175,102	170,103
Astronomy	15,737	13,050	14,494	14,090	10,961	11,032	10,352
Chemistry	60,005	70,138	73,304	68,019	62,496	69,150	65,547
Physics	126,607	88,501	90,548	84,877	82,367	88,722	87,118
Physical sciences, n.e.c.	9,870	13,821	13,629	10,662	3,233	6,198	7,086
Environmental sciences, total	110,081	119,746	132,542	135,816	138,773	142,629	140,189
Atmospheric sciences	27,530	32,549	40,954	36,965	35,722	33,979	34,347
Geological sciences	18,158	43,713	44,139	40,809	38,759	38,972	40,742
Oceanography	52,635	42,780	46,593	57,007	64,053	68,863	63,167
Environmental sciences, n.e.c.	11,758	704	856	1,035	239	815	1,933
Math & computer sciences, total	108,904	100,252	109,308	104,012	107,860	119,084	136,521
Mathematics	43,081	48,055	52,168	48,331	44,882	47,069	47,824
Computer sciences	44,223	39,674	39,839	38,293	41,897	54,810	85,197
Math & computer sciences, n.e.c.	21,600	12,523	17,301	17,388	21,081	17,205	3,500
Engineering, total	280,271	305,193	342,870	354,614	340,671	374,077	357,966
Aeronautical	39,020	35,556	43,071	42,019	32,016	34,738	38,415
Astronautical	9,414	3,826	6,513	6,328	4,845	4,893	3,978
Chemical	12,685	18,699	18,574	17,008	14,822	6,716	5,192
Civil	4,936	5,163	10,739	11,363	12,951	17,096	14,700
Electrical	89,439	105,511	114,144	130,132	105,613	113,237	98,933
Mechanical	33,235	46,774	44,309	40,585	34,077	50,074	44,033
Metallurgy & materials	87,472	88,470	104,916	106,907	125,822	132,060	145,824
Engineering, n.e.c.	4,070	1,194	604	272	10,525	15,263	6,891
Social sciences, total	1,823	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	1,823	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	20,873	14,692	10,935	10,164	2,986	6,949	8,163

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

**Table 2D. Federal obligations for basic research, by detailed field of science
& engineering: Department of Defense,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	994,154	1,098,945	1,268,238	1,200,652	1,248,330	1,137,866	1,022,870
Life sciences, total	115,725	140,130	161,063	179,092	132,485	104,299	89,389
Biol & agricultural, total	55,635	74,781	67,930	90,073	67,590	61,519	48,819
Biol (excl environmental)	45,239	45,362	44,799	42,428	43,742	41,320	34,056
Environmental biology	10,396	29,419	22,961	47,645	23,848	20,199	14,763
Agricultural	0	0	170	0	0	0	0
Medical sciences, total	60,090	65,349	85,133	87,900	61,170	38,268	37,131
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	8,000	1,119	3,725	4,512	3,439
Psychology, total	25,310	26,115	28,197	24,156	30,325	33,381	28,604
Biological aspects	7,895	8,372	12,472	10,230	12,997	23,347	21,778
Social aspects	10,841	11,935	10,227	8,638	9,579	2,757	2,848
Psychological sciences, n.e.c.	6,574	5,808	5,498	5,288	7,749	7,277	3,978
Physical sciences, total	180,311	199,600	205,573	203,298	205,896	169,670	157,229
Astronomy	4,951	9,516	15,097	13,635	7,775	2,559	1,904
Chemistry	68,638	78,700	76,135	80,867	90,135	81,302	68,557
Physics	97,605	102,485	110,892	105,769	101,088	71,722	72,887
Physical sciences, n.e.c.	9,117	8,899	3,449	3,027	6,898	14,087	13,881
Environmental sciences, total	152,295	174,697	169,235	194,443	159,110	162,711	135,109
Atmospheric sciences	29,040	36,376	35,196	44,705	39,098	42,015	35,006
Geological sciences	47,854	44,243	54,104	76,233	41,300	23,191	9,330
Oceanography	73,974	71,076	72,229	71,364	69,223	67,234	62,574
Environmental sciences, n.e.c.	1,427	23,002	7,706	2,141	9,489	30,271	28,199
Math & computer sciences, total	132,439	148,986	165,291	156,709	212,885	144,284	139,957
Mathematics	33,059	53,882	52,454	59,623	56,528	48,812	28,486
Computer sciences	69,775	92,376	111,745	93,408	152,903	75,862	89,164
Math & computer sciences, n.e.c.	29,605	2,728	1,092	3,678	3,454	19,610	22,307
Engineering, total	360,671	393,093	455,592	431,163	492,892	499,851	439,879
Aeronautical	26,787	32,909	27,449	38,454	34,203	28,086	19,577
Astronautical	7,110	10,368	2,492	4,069	4,335	13,743	8,967
Chemical	4,606	10,866	12,198	9,460	6,991	8,869	9,084
Civil	22,090	13,607	11,012	9,591	10,473	10,281	7,708
Electrical	88,130	116,654	144,687	149,537	151,505	156,334	123,804
Mechanical	54,196	61,155	89,369	88,759	93,464	79,149	70,658
Metallurgy & materials	151,542	137,913	138,262	119,152	158,929	131,750	100,202
Engineering, n.e.c.	6,210	9,621	30,123	12,141	32,992	71,639	99,879
Social sciences, total	824	3,205	18,434	1,530	0	0	329
Anthropology	0	0	0	70	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	824	3,205	18,434	1,460	0	0	329
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.	26,579	13,119	64,853	10,261	14,737	23,670	32,374

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

Table 2D. Federal obligations for basic research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	1,030,839	1,040,210	1,230,119	2,009,309	1,849,627	1,737,389
Life sciences, total	115,682	146,031	230,060	575,561	501,535	304,605
Biol & agricultural, total	45,028	59,053	61,064	88,475	NA	NA
Biol (excl environmental)	36,728	44,004	44,419	74,471	NA	NA
Environmental biology	8,300	15,049	16,645	13,629	NA	NA
Agricultural	0	0	0	375	NA	NA
Medical sciences, total	67,516	61,105	98,404	422,102	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,138	25,873	70,592	64,984	NA	NA
Psychology, total	25,153	5,709	17,880	13,257	19,021	17,437
Biological aspects	18,874	2,316	5,016	9,869	NA	NA
Social aspects	2,304	0	7,930	0	NA	NA
Psychological sciences, n.e.c.	3,975	3,393	4,934	3,388	NA	NA
Physical sciences, total	159,621	143,727	154,054	223,662	218,627	210,273
Astronomy	6,270	2,140	0	6,314	NA	NA
Chemistry	68,396	63,387	67,492	87,676	NA	NA
Physics	73,778	66,492	70,988	105,146	NA	NA
Physical sciences, n.e.c.	11,177	11,708	15,574	24,526	NA	NA
Environmental sciences, total	137,121	146,334	152,570	161,675	153,160	160,156
Atmospheric sciences	23,840	15,005	18,193	17,479	NA	NA
Geological sciences	8,386	3,193	3,116	8,310	NA	NA
Oceanography	57,045	118,687	119,723	133,756	NA	NA
Environmental sciences, n.e.c.	47,850	9,449	11,538	2,130	NA	NA
Math & computer sciences, total	137,169	121,478	137,506	205,236	208,631	215,555
Mathematics	26,882	20,243	32,121	27,301	NA	NA
Computer sciences	84,957	65,129	85,819	100,405	NA	NA
Math & computer sciences, n.e.c.	25,330	36,106	19,566	77,530	NA	NA
Engineering, total	450,095	421,959	485,676	715,430	612,361	695,964
Aeronautical	21,494	65,738	69,108	158,471	NA	NA
Astronautical	4,843	2,534	16,810	2,343	NA	NA
Chemical	9,786	10,564	8,420	11,505	NA	NA
Civil	8,541	6,635	20,581	4,982	NA	NA
Electrical	167,575	141,002	133,468	194,708	NA	NA
Mechanical	72,885	66,035	62,208	97,896	NA	NA
Metallurgy & materials	110,146	92,836	101,376	143,356	NA	NA
Engineering, n.e.c.	54,825	36,615	73,705	102,169	NA	NA
Social sciences, total	0	0	415	188	7,274	1,195
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	415	0	NA	NA
Social sciences, n.e.c.	0	0	0	188	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	5,998	54,972	51,958	114,300	129,018	132,204

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 2E. Federal obligations for basic research, by detailed field of science
& engineering: Department of Energy,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	286,669	276,897	268,289	275,156	269,504	312,758	345,790
Life sciences, total	37,599	35,927	35,314	37,076	14,152	21,039	24,381
Biol & agricultural, total	37,599	35,927	35,314	37,076	14,152	21,039	24,381
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	0	0	0	0	0	0	0
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	0	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	230,966	223,443	216,505	220,892	237,204	242,892	267,401
Astronomy	0	0	0	0	0	0	0
Chemistry	39,016	36,735	34,652	38,949	47,836	49,194	53,818
Physics	191,950	186,708	181,853	181,943	185,604	191,248	213,583
Physical sciences, n.e.c.	0	0	0	0	3,764	2,450	0
Environmental sciences, total	0	0	0	0	493	2,369	2,874
Atmospheric sciences	0	0	0	0	147	0	0
Geological sciences	0	0	0	0	0	2,369	2,874
Oceanography	0	0	0	0	346	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	5,779	5,309	4,809	4,634	4,018	5,532	5,952
Mathematics	NA	NA	NA	NA	NA	NA	3,862
Computer sciences	NA	NA	NA	NA	NA	NA	2,090
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	12,325	12,218	11,661	12,554	13,637	40,926	45,182
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	239	225	217	1,074	76	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	375	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	12,086	11,993	11,444	11,480	12,909	40,926	45,182
Engineering, n.e.c.	0	0	0	0	277	0	0
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

**Table 2E. Federal obligations for basic research, by detailed field of science
& engineering: Department of Energy,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	389,450	440,534	462,968	523,136	586,340	642,211	767,718
Life sciences, total	25,821	29,744	27,458	29,377	31,642	36,646	29,495
Biol & agricultural, total	25,821	29,744	27,458	29,177	31,442	36,446	29,495
Biol (excl environmental)	NA	29,744	27,458	29,177	31,442	36,446	29,495
Environmental biology	NA	0	0	0	0	0	0
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	200	200	200	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	293,823	325,387	345,607	432,140	480,222	530,849	639,212
Astronomy	0	0	0	0	0	0	0
Chemistry	61,742	47,933	57,711	62,108	69,984	75,528	104,293
Physics	232,081	277,454	287,746	369,232	409,738	454,821	534,919
Physical sciences, n.e.c.	0	0	150	800	500	500	0
Environmental sciences, total	3,540	3,960	6,193	8,226	9,394	9,432	11,587
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	3,540	3,960	6,143	7,726	9,094	9,432	11,587
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	50	500	300	0	0
Math & computer sciences, total	6,839	7,398	8,634	10,196	11,221	11,560	13,811
Mathematics	4,445	4,809	5,612	7,176	8,173	8,209	9,821
Computer sciences	2,394	2,589	3,022	3,020	3,048	3,351	3,990
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	59,427	69,241	75,062	42,567	53,861	53,724	72,696
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	1,073	1,290	1,531	211	2,183	0	13,493
Civil	0	0	0	0	0	0	0
Electrical	0	0	496	377	0	500	512
Mechanical	0	0	384	2,158	3,400	3,901	5,339
Metallurgy & materials	58,354	67,951	72,440	34,816	39,309	40,604	44,375
Engineering, n.e.c.	0	0	211	5,005	8,969	8,719	8,977
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	4,804	14	630	0	0	917

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

**Table 2E. Federal obligations for basic research, by detailed field of science
& engineering: Department of Energy,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	830,432	942,592	959,668	1,068,465	1,184,808	1,410,902	1,504,796
Life sciences, total	33,487	58,666	58,140	71,732	81,096	165,626	169,874
Biol & agricultural, total	28,873	58,438	55,963	68,315	76,488	150,852	154,929
Biol (excl environmental)	28,873	58,221	55,558	68,315	75,923	150,350	154,699
Environmental biology	0	217	405	0	170	502	230
Agricultural	0	0	0	0	395	0	0
Medical sciences, total	0	0	0	0	0	380	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,614	228	2,177	3,417	4,608	14,394	14,945
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	688,379	736,080	737,133	815,062	897,559	1,008,385	1,029,007
Astronomy	0	0	0	0	0	0	0
Chemistry	108,424	102,332	110,612	119,199	125,647	135,109	128,733
Physics	579,890	633,656	626,272	695,863	771,912	873,276	899,362
Physical sciences, n.e.c.	65	92	249	0	0	0	912
Environmental sciences, total	13,235	20,077	21,770	27,394	25,523	81,748	115,779
Atmospheric sciences	0	312	1,243	414	172	28,809	55,802
Geological sciences	13,170	17,171	17,873	23,178	22,425	45,873	53,563
Oceanography	0	1,432	1,940	2,146	2,487	6,559	5,990
Environmental sciences, n.e.c.	65	1,162	714	1,656	439	507	424
Math & computer sciences, total	14,639	20,976	37,841	38,527	42,359	42,127	48,719
Mathematics	9,519	10,231	13,216	28,060	31,216	29,877	30,714
Computer sciences	5,120	10,745	24,544	10,360	11,143	12,250	18,005
Math & computer sciences, n.e.c.	0	0	81	107	0	0	0
Engineering, total	79,736	105,669	103,918	114,823	136,999	111,778	140,160
Aeronautical	0	0	34	0	0	0	0
Astronautical	0	0	0	64	0	0	0
Chemical	11,562	21,826	18,999	23,727	36,168	1,190	28,099
Civil	0	467	703	558	0	0	0
Electrical	469	841	1,137	776	300	300	400
Mechanical	7,581	15,555	13,796	18,115	17,873	15,274	15,606
Metallurgy & materials	49,018	51,044	53,309	56,050	60,237	58,325	61,445
Engineering, n.e.c.	11,106	15,936	15,940	15,533	22,421	36,689	34,610
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	956	1,124	866	927	1,272	1,238	1,257

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

**Table 2E. Federal obligations for basic research, by detailed field of science
& engineering: Department of Energy,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,686,453	1,736,404	1,754,831	1,603,223	1,634,353	1,929,656	1,970,861
Life sciences, total	161,078	169,376	185,555	169,112	175,609	170,799	168,598
Biol & agricultural, total	147,939	156,275	174,168	160,019	170,977	163,521	163,701
Biol (excl environmental)	147,572	155,976	173,293	160,019	170,645	162,521	162,701
Environmental biology	189	0	875	0	332	1,000	1,000
Agricultural	178	299	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	13,139	13,101	11,387	9,093	4,632	7,278	4,897
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	1,167,187	1,172,771	1,209,731	1,067,332	1,080,936	1,184,952	1,192,381
Astronomy	0	0	337	0	0	0	0
Chemistry	126,687	128,981	139,685	114,604	129,766	142,359	130,414
Physics	1,039,085	1,043,578	1,063,809	946,397	951,082	1,042,525	1,059,170
Physical sciences, n.e.c.	1,415	212	5,900	6,331	88	68	2,797
Environmental sciences, total	124,909	132,083	148,111	148,623	148,234	207,119	201,547
Atmospheric sciences	68,302	76,394	83,912	94,617	88,684	88,275	88,941
Geological sciences	50,378	47,040	55,643	46,017	51,600	54,896	57,374
Oceanography	4,808	6,217	7,047	6,783	6,748	8,242	7,095
Environmental sciences, n.e.c.	1,421	2,432	1,509	1,206	1,202	55,706	48,137
Math & computer sciences, total	59,958	88,310	89,018	96,819	113,599	89,545	112,246
Mathematics	37,048	63,547	68,183	80,160	0	0	86,759
Computer sciences	22,910	24,763	20,835	16,659	16,783	13,725	19,612
Math & computer sciences, n.e.c.	0	0	0	0	96,816	75,820	5,875
Engineering, total	172,177	172,481	120,382	119,057	114,843	276,299	294,487
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	5,860	0	1,600
Chemical	37,737	35,985	26,409	30,607	22,506	17,108	23,443
Civil	0	308	0	0	262	199	14
Electrical	400	400	430	500	648	0	0
Mechanical	16,607	16,532	16,302	15,744	15,713	17,088	16,472
Metallurgy & materials	66,737	61,718	63,784	61,798	59,543	230,967	241,837
Engineering, n.e.c.	50,696	57,538	13,457	10,408	10,311	10,937	11,121
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	1,144	1,383	2,034	2,280	1,132	942	1,602

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

Table 2E. Federal obligations for basic research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,028,805	2,131,823	2,175,837	2,295,537	2,429,851	2,542,524
Life sciences, total	192,810	192,741	203,298	206,017	246,170	266,306
Biol & agricultural, total	188,319	187,962	197,992	201,242	NA	NA
Biol (excl environmental)	186,819	186,462	196,492	199,697	NA	NA
Environmental biology	1,500	1,500	1,500	1,545	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,491	4,779	5,306	4,775	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	1,229,268	1,297,186	1,359,927	1,427,957	1,512,547	1,506,205
Astronomy	0	0	0	0	NA	NA
Chemistry	137,786	137,043	146,249	166,212	NA	NA
Physics	1,089,581	1,160,143	1,213,678	1,261,169	NA	NA
Physical sciences, n.e.c.	1,901	0	0	576	NA	NA
Environmental sciences, total	225,585	231,529	232,966	227,363	244,505	255,826
Atmospheric sciences	90,544	94,793	108,190	107,910	NA	NA
Geological sciences	84,298	87,173	84,135	76,033	NA	NA
Oceanography	4,004	4,868	9,300	7,353	NA	NA
Environmental sciences, n.e.c.	46,739	44,695	31,341	36,067	NA	NA
Math & computer sciences, total	120,490	124,884	112,167	146,682	149,071	160,040
Mathematics	93,586	102,332	93,926	119,326	NA	NA
Computer sciences	21,674	22,552	18,241	26,859	NA	NA
Math & computer sciences, n.e.c.	5,230	0	0	497	NA	NA
Engineering, total	259,207	284,508	266,007	286,567	276,558	353,127
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	4,605	3,922	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	16,782	16,692	13,638	16,549	NA	NA
Metallurgy & materials	230,547	261,568	252,369	269,893	NA	NA
Engineering, n.e.c.	7,273	2,326	0	125	NA	NA
Social sciences, total	0	0	0	0	0	0
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	1,445	975	1,472	951	1,000	1,020

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 1970-74 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 2F. Federal obligations for basic research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	505,152	567,708	661,655	655,899	845,099	901,853	981,091
Life sciences, total	438,620	493,064	573,838	578,295	756,639	813,257	890,670
Biol & agricultural, total	261,987	293,465	342,441	344,295	446,773	478,833	533,765
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	163,923	185,193	214,646	217,041	287,692	308,247	328,265
Clinical medical	7,891	4,905	9,011	8,148	8,982	11,900	3,518
Other medical	156,032	180,288	205,635	208,893	278,710	296,347	324,747
Life sciences, n.e.c.	12,710	14,406	16,751	16,959	22,174	26,177	28,640
Psychology, total	24,629	27,288	30,689	27,954	26,737	26,448	24,109
Biological aspects	11,607	13,340	14,997	13,169	12,733	9,002	10,169
Social aspects	9,067	9,465	10,479	9,508	7,104	9,370	5,749
Psychological sciences, n.e.c.	3,955	4,483	5,213	5,277	6,900	8,076	8,191
Physical sciences, total	13,044	14,966	17,473	17,519	21,655	23,273	25,525
Astronomy	0	0	0	0	0	0	0
Chemistry	11,889	1,013	15,950	15,977	19,640	21,119	23,132
Physics	1,155	12,643	1,523	1,542	2,015	2,154	2,393
Physical sciences, n.e.c.	0	1,310	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,244	1,695	1,904	1,868	2,809	2,855	2,912
Mathematics	NA	NA	NA	NA	NA	NA	2,912
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	4,000	4,533	5,271	5,337	6,979	7,457	8,283
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	4,000	4,533	5,271	5,337	6,979	7,457	8,283
Social sciences, total	16,860	18,506	23,578	15,913	18,496	14,830	15,384
Anthropology	1,533	1,168	1,966	1,717	446	933	333
Economics	5,098	4,933	5,700	3,600	5,820	2,847	2,562
Political science	511	525	806	650	645	40	61
Sociology	8,648	9,438	11,616	6,560	8,200	4,006	7,530
Social sciences, n.e.c.	1,070	2,442	3,490	3,386	3,385	7,004	4,898
History	0	0	0	0	71	200	NA
Linguistics	0	1,253	1,990	1,743	521	400	NA
Other social sciences	1,070	1,189	1,500	1,643	2,793	6,404	NA
Other sciences, n.e.c.	6,755	7,656	8,902	9,013	11,784	13,733	14,208

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

**Table 2F. Federal obligations for basic research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,107,615	1,274,063	1,576,011	1,762,668	1,900,384	2,144,694	2,475,400
Life sciences, total	1,003,714	1,154,142	1,424,105	1,562,818	1,685,098	1,947,501	2,255,312
Biol & agricultural, total	597,819	692,367	871,516	893,023	976,162	1,158,706	1,364,402
Biol (excl environmental)	NA	692,367	871,516	892,977	976,095	1,158,545	1,364,175
Environmental biology	NA	0	0	46	67	161	227
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	371,742	423,656	504,166	614,338	656,081	733,410	811,277
Clinical medical	7,725	NA	NA	NA	NA	NA	NA
Other medical	364,017	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	34,153	38,119	48,423	55,457	52,855	55,385	79,633
Psychology, total	27,613	35,272	40,098	49,721	58,985	57,276	60,476
Biological aspects	11,400	15,766	15,938	19,506	21,588	25,050	24,054
Social aspects	7,021	9,056	10,038	10,328	10,863	11,666	11,414
Psychological sciences, n.e.c.	9,192	10,450	14,122	19,887	26,534	20,560	25,008
Physical sciences, total	29,506	32,936	40,733	53,727	53,244	53,172	61,758
Astronomy	0	0	0	0	0	0	0
Chemistry	26,821	29,827	36,676	47,406	47,992	47,996	55,046
Physics	2,685	3,109	4,057	6,321	5,252	5,176	6,712
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	3,465	3,651	3,663	4,874	5,213	5,399	6,158
Mathematics	3,465	3,651	3,398	4,678	5,213	5,399	6,090
Computer sciences	0	0	0	0	0	0	68
Math & computer sciences, n.e.c.	0	0	265	196	0	0	0
Engineering, total	9,295	10,753	13,897	26,009	28,273	24,828	24,231
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	9,295	10,753	13,897	26,009	28,273	24,828	24,231
Social sciences, total	14,834	19,290	28,347	34,237	33,187	20,908	33,585
Anthropology	307	313	288	412	273	409	249
Economics	2,954	3,784	2,189	2,948	1,514	979	1,486
Political science	88	76	343	508	709	349	687
Sociology	6,399	7,864	9,740	13,655	13,094	10,298	24,818
Social sciences, n.e.c.	5,086	7,253	15,787	16,714	17,597	8,873	6,345
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.	19,188	18,019	25,168	31,282	36,384	35,610	33,880

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

**Table 2F. Federal obligations for basic research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	2,814,525	3,232,547	3,338,767	3,827,918	4,081,403	4,388,007	4,649,031
Life sciences, total	2,571,179	2,937,098	3,014,028	3,484,321	3,575,065	3,856,937	4,095,554
Biol & agricultural, total	1,548,458	1,766,035	1,798,187	2,087,411	2,017,131	2,151,912	2,253,807
Biol (excl environmental)	1,547,742	1,765,260	1,797,551	2,086,365	2,016,198	2,151,231	2,253,250
Environmental biology	94	317	139	424	639	365	455
Agricultural	622	458	497	622	294	316	102
Medical sciences, total	934,325	1,053,111	1,103,662	1,254,622	1,495,414	1,620,482	1,755,872
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	88,396	117,952	112,179	142,288	62,520	84,543	85,875
Psychology, total	69,924	82,915	86,961	102,684	124,933	138,128	163,862
Biological aspects	28,686	30,663	32,269	33,924	37,549	41,920	50,900
Social aspects	13,870	18,475	18,243	20,865	21,578	27,270	41,906
Psychological sciences, n.e.c.	27,368	33,777	36,449	47,895	65,806	68,938	71,056
Physical sciences, total	72,043	84,844	85,221	94,217	101,262	90,954	99,899
Astronomy	0	0	0	0	0	0	0
Chemistry	64,961	79,596	78,659	86,742	92,971	81,761	87,079
Physics	7,082	5,248	6,517	7,429	8,253	9,042	12,671
Physical sciences, n.e.c.	0	0	45	46	38	151	149
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	7,192	7,286	6,734	8,413	10,583	9,883	12,399
Mathematics	6,910	6,836	6,554	7,963	9,983	9,345	11,947
Computer sciences	282	450	180	450	600	538	452
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	24,421	25,170	35,245	40,162	53,516	49,524	49,248
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	24,421	25,170	35,245	40,162	53,516	49,524	49,248
Social sciences, total	35,523	35,314	33,552	39,920	55,094	59,518	39,044
Anthropology	306	310	775	1,456	1,200	437	939
Economics	2,837	3,186	3,481	4,186	7,534	10,082	3,198
Political science	1,268	1,672	1,602	776	1,046	1,056	1,138
Sociology	25,019	24,123	21,726	25,670	28,845	31,550	16,977
Social sciences, n.e.c.	6,093	6,023	5,968	7,832	16,469	16,393	16,792
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.	34,243	59,920	77,026	58,201	160,950	183,063	189,025

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

**Table 2F. Federal obligations for basic research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	5,050,114	5,058,703	5,696,697	5,883,983	6,061,057	6,504,626	6,851,762
Life sciences, total	4,278,276	4,606,313	4,970,065	5,121,245	5,277,303	5,662,003	5,948,944
Biol & agricultural, total	2,341,987	2,415,505	2,633,649	2,549,529	2,633,445	2,800,983	2,781,461
Biol (excl environmental)	2,339,903	2,415,432	2,626,995	2,549,470	2,633,397	2,800,937	2,781,408
Environmental biology	808	73	6,654	59	48	46	53
Agricultural	1,276	0	0	0	0	0	0
Medical sciences, total	1,760,866	2,022,205	2,256,427	2,483,259	2,521,452	2,672,637	2,967,638
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	175,423	168,603	79,989	88,457	122,406	188,383	199,845
Psychology, total	195,043	81,024	203,171	207,176	229,670	242,416	254,934
Biological aspects	59,206	0	0	10,416	14,594	9,367	7,808
Social aspects	56,781	0	0	2,225	4,888	3,927	3,847
Psychological sciences, n.e.c.	79,056	81,024	203,171	194,535	210,188	229,122	243,279
Physical sciences, total	109,970	121,061	126,776	122,046	119,539	101,668	108,504
Astronomy	0	0	0	0	0	0	0
Chemistry	94,052	108,221	111,476	108,186	106,105	90,340	96,324
Physics	15,918	12,840	15,300	13,860	13,434	11,328	12,180
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	12,307	19,745	20,947
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	12,307	19,745	20,947
Math & computer sciences, total	11,228	12,099	21,575	25,846	30,982	55,621	61,658
Mathematics	4,660	10,984	14,262	25,155	20,469	26,748	28,721
Computer sciences	432	1,115	7,313	691	10,513	28,873	32,937
Math & computer sciences, n.e.c.	6,136	0	0	0	0	0	0
Engineering, total	53,160	57,938	65,471	70,659	92,277	93,468	99,155
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	53,160	57,938	65,471	70,659	92,277	93,468	99,155
Social sciences, total	52,255	20,782	55,294	51,152	61,816	59,849	63,512
Anthropology	1,873	0	0	0	0	0	0
Economics	2,889	0	0	0	0	0	0
Political science	683	0	0	0	0	0	0
Sociology	20,417	0	1,494	210	0	128	157
Social sciences, n.e.c.	26,393	20,782	53,800	50,942	61,816	59,721	63,355
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.	350,182	159,486	254,345	285,859	237,163	269,856	294,108

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

Table 2F. Federal obligations for basic research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	7,355,363	8,632,526	10,055,392	11,592,333	13,173,349	14,456,334
Life sciences, total	6,386,178	7,495,048	8,139,473	10,504,460	11,937,081	13,099,663
Biol & agricultural, total	2,985,930	3,504,418	6,053,754	7,108,050	NA	NA
Biol (excl environmental)	2,985,873	3,504,351	6,053,754	7,108,050	NA	NA
Environmental biology	57	67	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	3,185,712	3,738,841	1,665,552	2,232,879	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	214,536	251,789	420,167	1,163,531	NA	NA
Psychology, total	273,675	321,197	778,662	261,382	297,037	325,966
Biological aspects	8,382	9,838	0	0	NA	NA
Social aspects	4,130	4,847	0	0	NA	NA
Psychological sciences, n.e.c.	261,163	306,512	778,662	261,382	NA	NA
Physical sciences, total	116,480	136,706	324,920	262,968	298,839	327,943
Astronomy	0	0	0	0	NA	NA
Chemistry	103,405	121,361	316,173	233,835	NA	NA
Physics	13,075	15,345	0	0	NA	NA
Physical sciences, n.e.c.	0	0	8,747	29,133	NA	NA
Environmental sciences, total	22,487	26,392	192,508	138,907	157,855	173,229
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	22,487	26,392	192,508	138,907	NA	NA
Math & computer sciences, total	66,191	77,685	66,929	16,933	19,243	21,117
Mathematics	30,833	36,187	66,929	16,933	NA	NA
Computer sciences	35,358	41,498	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	106,444	124,927	204,846	127,336	144,706	158,799
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	27,732	42,606	NA	NA
Engineering, n.e.c.	106,444	124,927	177,114	84,730	NA	NA
Social sciences, total	68,180	80,019	123,751	63,755	72,451	79,508
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	168	197	0	0	NA	NA
Social sciences, n.e.c.	68,012	79,822	123,751	63,755	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	315,728	370,552	224,303	216,592	246,137	270,109

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: 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.

Data shown for fiscal years 1970-78 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.

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 2G. Federal obligations for basic research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	NA	NA	NA	52,555	53,297	66,245	52,557
Life sciences, total	NA	NA	NA	19,679	26,906	37,456	29,986
Biol & agricultural, total	NA	NA	NA	15,080	16,327	18,839	22,808
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	4,599	10,579	16,136	4,859
Clinical medical	NA	NA	NA	4,599	6,785	10,682	3,233
Other medical	NA	NA	NA	0	3,794	5,454	1,626
Life sciences, n.e.c.	NA	NA	NA	0	0	2,481	2,319
Psychology, total	NA	NA	NA	22,677	19,837	19,074	15,918
Biological aspects	NA	NA	NA	13,169	12,733	9,002	10,169
Social aspects	NA	NA	NA	9,508	7,104	9,370	5,749
Psychological sciences, n.e.c.	NA	NA	NA	0	0	702	0
Physical sciences, total	NA	NA	NA	1,094	180	323	32
Astronomy	NA	NA	NA	0	0	0	0
Chemistry	NA	NA	NA	1,094	180	323	32
Physics	NA	NA	NA	0	0	0	0
Physical sciences, n.e.c.	NA	NA	NA	0	0	0	0
Environmental sciences, total	NA	NA	NA	0	0	0	0
Atmospheric sciences	NA	NA	NA	0	0	0	0
Geological sciences	NA	NA	NA	0	0	0	0
Oceanography	NA	NA	NA	0	0	0	0
Environmental sciences, n.e.c.	NA	NA	NA	0	0	0	0
Math & computer sciences, total	NA	NA	NA	208	638	535	335
Mathematics	NA	NA	NA	NA	NA	NA	335
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	NA	NA	NA	0	0	0	0
Aeronautical	NA	NA	NA	0	0	0	0
Astronautical	NA	NA	NA	0	0	0	0
Chemical	NA	NA	NA	0	0	0	0
Civil	NA	NA	NA	0	0	0	0
Electrical	NA	NA	NA	0	0	0	0
Mechanical	NA	NA	NA	0	0	0	0
Metallurgy & materials	NA	NA	NA	0	0	0	0
Engineering, n.e.c.	NA	NA	NA	0	0	0	0
Social sciences, total	NA	NA	NA	8,897	5,736	7,717	6,067
Anthropology	NA	NA	NA	1,717	446	933	333
Economics	NA	NA	NA	0	0	40	100
Political science	NA	NA	NA	0	0	40	0
Sociology	NA	NA	NA	5,437	4,698	2,745	4,904
Social sciences, n.e.c.	NA	NA	NA	1,743	592	3,959	730
History	NA	NA	NA	0	71	200	NA
Linguistics	NA	NA	NA	1,743	521	400	NA
Other social sciences	NA	NA	NA	0	0	3,359	NA
Other sciences, n.e.c.	NA	NA	NA	0	0	1,140	219

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

**Table 2G. Federal obligations for basic research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	62,670	79,917	94,622	104,736	116,309	117,331	144,950
Life sciences, total	33,963	47,113	56,745	59,731	66,635	63,736	91,696
Biol & agricultural, total	24,422	36,589	44,183	43,442	50,223	44,691	65,651
Biol (excl environmental)	NA	36,589	44,183	43,396	50,156	44,691	65,651
Environmental biology	NA	0	0	46	67	0	0
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	4,925	6,157	6,097	9,159	14,164	16,153	20,853
Clinical medical	3,516	NA	NA	NA	NA	NA	NA
Other medical	1,409	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,616	4,367	6,465	7,130	2,248	2,892	5,192
Psychology, total	18,421	24,822	26,122	30,035	34,652	38,151	37,679
Biological aspects	11,400	15,766	15,938	19,506	21,588	25,050	24,054
Social aspects	7,021	9,056	10,038	10,328	10,863	11,666	11,414
Psychological sciences, n.e.c.	0	0	146	201	2,201	1,435	2,211
Physical sciences, total	898	214	400	771	422	250	882
Astronomy	0	0	0	0	0	0	0
Chemistry	898	214	400	771	422	250	865
Physics	0	0	0	0	0	0	17
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	573	302	265	196	0	171	136
Mathematics	573	302	0	0	0	171	68
Computer sciences	0	0	0	0	0	0	68
Math & computer sciences, n.e.c.	0	0	265	196	0	0	0
Engineering, total	0	73	73	36	35	0	0
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	73	73	36	35	0	0
Social sciences, total	6,441	7,289	9,253	12,175	10,321	11,039	12,125
Anthropology	307	313	288	412	273	409	249
Economics	83	99	147	36	81	145	23
Political science	86	60	147	216	408	349	687
Sociology	5,098	6,116	7,677	10,045	8,041	8,842	9,923
Social sciences, n.e.c.	867	701	994	1,466	1,518	1,294	1,243
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.	2,374	104	1,764	1,792	4,244	3,984	2,432

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

**Table 2G. Federal obligations for basic research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	170,843	196,750	203,360	232,158	265,752	307,980	386,181
Life sciences, total	106,596	123,219	128,307	146,792	165,870	198,831	235,706
Biol & agricultural, total	76,563	85,365	85,205	96,892	108,442	124,979	154,071
Biol (excl environmental)	75,941	84,678	84,695	95,958	107,560	124,347	153,562
Environmental biology	0	229	13	312	588	316	407
Agricultural	622	458	497	622	294	316	102
Medical sciences, total	26,824	34,470	39,043	46,357	52,890	67,470	72,457
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,209	3,384	4,059	3,543	4,538	6,382	9,178
Psychology, total	46,100	53,005	54,799	62,086	66,473	78,791	103,317
Biological aspects	28,686	30,663	32,269	33,924	37,549	41,920	50,900
Social aspects	13,870	18,475	18,243	20,865	21,578	27,270	41,906
Psychological sciences, n.e.c.	3,544	3,867	4,287	7,297	7,346	9,601	10,511
Physical sciences, total	1,213	2,107	2,534	3,866	4,558	3,928	4,502
Astronomy	0	0	0	0	0	0	0
Chemistry	1,208	2,087	2,403	3,784	4,558	3,876	4,502
Physics	5	20	131	82	0	52	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	426	376	223	600	716	723	705
Mathematics	144	116	134	232	257	248	342
Computer sciences	282	260	89	368	459	475	363
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	73	0	75	204	98	616	806
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	73	0	75	204	98	616	806
Social sciences, total	13,275	14,423	14,344	16,016	19,971	21,073	26,307
Anthropology	306	310	775	1,456	1,200	437	939
Economics	66	904	1,223	1,486	1,312	1,514	3,198
Political science	1,268	1,672	1,602	776	1,046	1,056	1,138
Sociology	9,682	9,517	8,197	9,471	15,622	14,618	16,977
Social sciences, n.e.c.	1,953	2,020	2,547	2,827	791	3,448	4,055
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.	3,160	3,620	3,078	2,594	8,066	4,018	14,838

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

**Table 2G. Federal obligations for basic research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	459,093	NA	NA	NA	NA	NA	NA
Life sciences, total	271,640	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	185,348	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	183,434	NA	NA	NA	NA	NA	NA
Environmental biology	638	NA	NA	NA	NA	NA	NA
Agricultural	1,276	NA	NA	NA	NA	NA	NA
Medical sciences, total	72,328	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.	13,964	NA	NA	NA	NA	NA	NA
Psychology, total	126,666	NA	NA	NA	NA	NA	NA
Biological aspects	59,206	NA	NA	NA	NA	NA	NA
Social aspects	56,781	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	10,679	NA	NA	NA	NA	NA	NA
Physical sciences, total	4,542	NA	NA	NA	NA	NA	NA
Astronomy	0	NA	NA	NA	NA	NA	NA
Chemistry	4,518	NA	NA	NA	NA	NA	NA
Physics	24	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Environmental sciences, total	0	NA	NA	NA	NA	NA	NA
Atmospheric sciences	0	NA	NA	NA	NA	NA	NA
Geological sciences	0	NA	NA	NA	NA	NA	NA
Oceanography	0	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	645	NA	NA	NA	NA	NA	NA
Mathematics	213	NA	NA	NA	NA	NA	NA
Computer sciences	432	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Engineering, total	674	NA	NA	NA	NA	NA	NA
Aeronautical	0	NA	NA	NA	NA	NA	NA
Astronautical	0	NA	NA	NA	NA	NA	NA
Chemical	0	NA	NA	NA	NA	NA	NA
Civil	0	NA	NA	NA	NA	NA	NA
Electrical	0	NA	NA	NA	NA	NA	NA
Mechanical	0	NA	NA	NA	NA	NA	NA
Metallurgy & materials	0	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	674	NA	NA	NA	NA	NA	NA
Social sciences, total	34,116	NA	NA	NA	NA	NA	NA
Anthropology	1,873	NA	NA	NA	NA	NA	NA
Economics	2,889	NA	NA	NA	NA	NA	NA
Political science	683	NA	NA	NA	NA	NA	NA
Sociology	20,417	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	8,254	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.	20,810	NA	NA	NA	NA	NA	NA

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

Table 2G. Federal obligations for basic research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1970-2003

[Dollars in thousands]

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

Data shown for fiscal years 1970-78 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.

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 for basic research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	444,409	503,707	585,700	592,966	775,300	828,520	920,312
Life sciences, total	415,478	470,916	547,572	554,364	724,828	774,583	860,399
Biol & agricultural, total	246,736	279,658	325,186	329,215	430,446	459,994	510,957
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	156,032	176,852	205,635	208,190	272,208	290,893	323,121
Clinical medical	0	0	0	0	0	0	0
Other medical	156,032	176,852	205,635	208,190	272,208	290,893	323,121
Life sciences, n.e.c.	12,710	14,406	16,751	16,959	22,174	23,696	26,321
Psychology, total	3,955	4,483	5,213	5,277	6,900	7,374	8,191
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	3,955	4,483	5,213	5,277	6,900	7,374	8,191
Physical sciences, total	12,310	13,953	16,224	16,425	21,475	22,950	25,493
Astronomy	0	0	0	0	0	0	0
Chemistry	11,155	0	14,701	14,883	19,460	20,796	23,100
Physics	1,155	12,643	1,523	1,542	2,015	2,154	2,393
Physical sciences, n.e.c.	0	1,310	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,244	1,410	1,640	1,660	2,171	2,320	2,577
Mathematics	NA	NA	NA	NA	NA	NA	2,577
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	4,000	4,533	5,271	5,337	6,979	7,457	8,283
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	4,000	4,533	5,271	5,337	6,979	7,457	8,283
Social sciences, total	667	756	878	890	1,163	1,243	1,380
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	667	756	878	890	1,163	1,243	1,380
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	667	756	878	890	1,163	1,243	NA
Other sciences, n.e.c.	6,755	7,656	8,902	9,013	11,784	12,593	13,989

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

**Table 2H. Federal obligations for basic research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,032,776	1,181,094	1,463,703	1,642,341	1,766,788	2,020,650	2,313,026
Life sciences, total	965,542	1,104,170	1,365,372	1,501,055	1,614,663	1,883,165	2,162,816
Biol & agricultural, total	573,397	655,778	827,333	849,581	925,939	1,114,015	1,298,751
Biol (excl environmental)	NA	655,778	827,333	849,581	925,939	1,113,854	1,298,524
Environmental biology	NA	0	0	0	0	161	227
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	362,608	414,640	496,081	603,147	638,117	716,657	789,624
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	362,608	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	29,537	33,752	41,958	48,327	50,607	52,493	74,441
Psychology, total	9,192	10,450	13,976	19,686	24,333	19,125	22,797
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	9,192	10,450	13,976	19,686	24,333	19,125	22,797
Physical sciences, total	28,608	32,722	40,333	52,956	52,822	52,922	60,876
Astronomy	0	0	0	0	0	0	0
Chemistry	25,923	29,613	36,276	46,635	47,570	47,746	54,181
Physics	2,685	3,109	4,057	6,321	5,252	5,176	6,695
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	2,892	3,349	3,398	4,678	5,110	5,228	6,022
Mathematics	2,892	3,349	3,398	4,678	5,110	5,228	6,022
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	9,295	10,680	13,824	25,973	28,238	24,828	24,231
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	9,295	10,680	13,824	25,973	28,238	24,828	24,231
Social sciences, total	1,549	1,808	3,396	8,503	9,482	3,756	4,836
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	1,549	1,808	3,396	8,503	9,482	3,756	4,836
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.	15,698	17,915	23,404	29,490	32,140	31,626	31,448

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

**Table 2H. Federal obligations for basic research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	2,624,774	3,018,004	3,118,600	3,575,515	3,795,127	4,053,297	4,261,700
Life sciences, total	2,463,783	2,812,974	2,884,701	3,336,183	3,408,116	3,656,876	3,858,698
Biol & agricultural, total	1,471,895	1,680,670	1,712,982	1,990,519	1,908,689	2,026,933	2,099,736
Biol (excl environmental)	1,471,801	1,680,582	1,712,856	1,990,407	1,908,638	2,026,884	2,099,688
Environmental biology	94	88	126	112	51	49	48
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	906,701	1,017,736	1,063,599	1,206,919	1,441,445	1,551,782	1,682,265
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	85,187	114,568	108,120	138,745	57,982	78,161	76,697
Psychology, total	23,824	29,910	32,162	40,598	58,460	59,337	60,545
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	23,824	29,910	32,162	40,598	58,460	59,337	60,545
Physical sciences, total	70,830	82,737	82,687	90,351	96,704	87,026	95,397
Astronomy	0	0	0	0	0	0	0
Chemistry	63,753	77,509	76,256	82,958	88,413	77,885	82,577
Physics	7,077	5,228	6,386	7,347	8,253	8,990	12,671
Physical sciences, n.e.c.	0	0	45	46	38	151	149
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	6,766	6,910	6,511	7,813	9,867	9,160	11,694
Mathematics	6,766	6,720	6,420	7,731	9,726	9,097	11,605
Computer sciences	0	190	91	82	141	63	89
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	24,348	25,170	35,170	39,958	53,418	48,908	48,442
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	24,348	25,170	35,170	39,958	53,418	48,908	48,442
Social sciences, total	4,140	4,003	3,421	5,005	15,678	12,945	12,737
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	4,140	4,003	3,421	5,005	15,678	12,945	12,737
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.	31,083	56,300	73,948	55,607	152,884	179,045	174,187

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

**Table 2H. Federal obligations for basic research, by detailed field of science
& engineering: HHS, National Institutes of Health,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	4,589,500	5,057,408	5,695,590	5,882,370	6,060,047	6,503,626	6,850,709
Life sciences, total	4,005,115	4,605,018	4,968,958	5,120,443	5,276,293	5,661,003	5,947,891
Biol & agricultural, total	2,156,639	2,415,505	2,633,649	2,549,529	2,633,445	2,800,983	2,781,461
Biol (excl environmental)	2,156,469	2,415,432	2,626,995	2,549,470	2,633,397	2,800,937	2,781,408
Environmental biology	170	73	6,654	59	48	46	53
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	1,687,017	2,020,910	2,255,320	2,482,457	2,520,442	2,671,637	2,966,585
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	161,459	168,603	79,989	88,457	122,406	188,383	199,845
Psychology, total	68,377	81,024	203,171	207,176	229,670	242,416	254,934
Biological aspects	0	0	0	10,416	14,594	9,367	7,808
Social aspects	0	0	0	2,225	4,888	3,927	3,847
Psychological sciences, n.e.c.	68,377	81,024	203,171	194,535	210,188	229,122	243,279
Physical sciences, total	105,428	121,061	126,776	122,046	119,539	101,668	108,504
Astronomy	0	0	0	0	0	0	0
Chemistry	89,534	108,221	111,476	108,186	106,105	90,340	96,324
Physics	15,894	12,840	15,300	13,860	13,434	11,328	12,180
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	12,307	19,745	20,947
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	12,307	19,745	20,947
Math & computer sciences, total	10,583	12,099	21,575	25,846	30,982	55,621	61,658
Mathematics	4,447	10,984	14,262	25,155	20,469	26,748	28,721
Computer sciences	0	1,115	7,313	691	10,513	28,873	32,937
Math & computer sciences, n.e.c.	6,136	0	0	0	0	0	0
Engineering, total	52,486	57,938	65,471	70,659	92,277	93,468	99,155
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	52,486	57,938	65,471	70,659	92,277	93,468	99,155
Social sciences, total	18,139	20,782	55,294	50,942	61,816	59,849	63,512
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	1,494	0	0	128	157
Social sciences, n.e.c.	18,139	20,782	53,800	50,942	61,816	59,721	63,355
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.	329,372	159,486	254,345	285,258	237,163	269,856	294,108

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

Table 2H. Federal obligations for basic research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	7,354,313	8,631,344	10,054,079	11,590,173	13,171,183	14,453,954
Life sciences, total	6,385,128	7,493,866	8,138,313	10,502,300	11,934,915	13,097,283
Biol & agricultural, total	2,985,930	3,504,418	6,053,754	7,108,050	NA	NA
Biol (excl environmental)	2,985,873	3,504,351	6,053,754	7,108,050	NA	NA
Environmental biology	57	67	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	3,184,662	3,737,659	1,664,392	2,230,719	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	214,536	251,789	420,167	1,163,531	NA	NA
Psychology, total	273,675	321,197	778,662	261,382	297,037	325,966
Biological aspects	8,382	9,838	0	0	NA	NA
Social aspects	4,130	4,847	0	0	NA	NA
Psychological sciences, n.e.c.	261,163	306,512	778,662	261,382	NA	NA
Physical sciences, total	116,480	136,706	324,920	262,968	298,839	327,943
Astronomy	0	0	0	0	NA	NA
Chemistry	103,405	121,361	316,173	233,835	NA	NA
Physics	13,075	15,345	0	0	NA	NA
Physical sciences, n.e.c.	0	0	8,747	29,133	NA	NA
Environmental sciences, total	22,487	26,392	192,508	138,907	157,855	173,229
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	22,487	26,392	192,508	138,907	NA	NA
Math & computer sciences, total	66,191	77,685	66,929	16,933	19,243	21,117
Mathematics	30,833	36,187	66,929	16,933	NA	NA
Computer sciences	35,358	41,498	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	106,444	124,927	204,846	127,336	144,706	158,799
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	27,732	42,606	NA	NA
Engineering, n.e.c.	106,444	124,927	177,114	84,730	NA	NA
Social sciences, total	68,180	80,019	123,751	63,755	72,451	79,508
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	168	197	0	0	NA	NA
Social sciences, n.e.c.	68,012	79,822	123,751	63,755	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	315,728	370,552	224,150	216,592	246,137	270,109

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: 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.

Data shown for fiscal years 1970-78 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.

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 2I. Federal obligations for basic research, by detailed field of science
& engineering: Department of the Interior,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	39,485	41,711	43,052	48,741	48,681	54,944	54,330
Life sciences, total	8,886	9,585	8,852	9,805	11,508	10,974	9,709
Biol & agricultural, total	8,882	9,581	8,836	9,789	11,493	10,955	9,693
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	0	0	0	11	10	13	10
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	0	11	10	13	10
Life sciences, n.e.c.	4	4	16	5	5	6	6
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	8,218	8,032	10,601	9,493	7,851	3,893	3,869
Astronomy	0	0	0	0	0	0	0
Chemistry	7,417	7,204	7,613	6,646	4,975	3,012	3,310
Physics	801	828	2,988	2,847	2,876	881	559
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	19,305	19,843	20,430	26,546	25,724	37,703	37,762
Atmospheric sciences	40	46	96	118	113	146	116
Geological sciences	17,562	18,060	18,311	23,861	22,977	31,422	30,899
Oceanography	1,689	1,723	1,789	2,310	2,388	5,801	6,399
Environmental sciences, n.e.c.	14	14	234	257	246	334	348
Math & computer sciences, total	372	284	327	285	322	382	401
Mathematics	NA	NA	NA	NA	NA	NA	58
Computer sciences	NA	NA	NA	NA	NA	NA	329
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	14
Engineering, total	2,313	2,848	1,035	1,249	1,780	1,285	1,810
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	82	93	61	143	225	10	8
Civil	248	283	363	358	351	376	834
Electrical	30	30	48	36	59	46	71
Mechanical	20	21	5	0	0	0	695
Metallurgy & materials	1,783	2,248	500	584	1,071	757	125
Engineering, n.e.c.	150	173	58	128	74	96	77
Social sciences, total	350	1,075	1,444	1,227	1,365	611	532
Anthropology	0	704	892	803	957	54	57
Economics	225	226	248	163	157	203	160
Political science	45	51	88	147	142	182	145
Sociology	45	51	81	64	61	109	120
Social sciences, n.e.c.	35	43	135	50	48	63	50
History	0	0	13	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	35	43	122	50	48	63	NA
Other sciences, n.e.c.	41	44	363	136	131	96	247

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

**Table 2I. Federal obligations for basic research, by detailed field of science
& engineering: Department of the Interior,
fiscal years 1970-2003**

[Dollars in thousands]

Page 2 of 5

Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	63,579	65,876	72,522	71,634	80,663	76,454	103,033
Life sciences, total	13,472	5,100	4,300	4,651	5,868	4,697	6,900
Biol & agricultural, total	13,456	5,070	4,270	4,599	5,868	4,697	6,900
Biol (excl environmental)	NA	5,070	4,270	4,599	3,958	4,122	6,900
Environmental biology	NA	0	0	0	800	190	0
Agricultural	NA	0	0	0	1,110	385	0
Medical sciences, total	8	15	15	26	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	8	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	8	15	15	26	0	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	5,831	7,882	9,131	7,524	10,080	8,080	2,920
Astronomy	0	0	0	0	0	0	0
Chemistry	4,407	5,869	6,496	5,323	6,750	2,490	1,760
Physics	624	613	935	1,001	1,130	1,090	880
Physical sciences, n.e.c.	800	1,400	1,700	1,200	2,200	4,500	280
Environmental sciences, total	38,620	45,113	48,596	48,800	53,666	49,928	68,339
Atmospheric sciences	88	150	150	214	30	0	0
Geological sciences	32,023	38,861	45,837	44,558	49,803	47,151	50,536
Oceanography	5,689	4,814	1,651	2,285	2,640	2,364	10,840
Environmental sciences, n.e.c.	820	1,288	958	1,743	1,193	413	6,963
Math & computer sciences, total	878	1,417	2,115	1,865	2,507	1,249	1,018
Mathematics	470	800	986	686	1,200	93	88
Computer sciences	397	577	1,089	1,120	1,007	946	930
Math & computer sciences, n.e.c.	11	40	40	59	300	210	0
Engineering, total	4,282	5,536	6,965	6,892	7,488	12,162	23,578
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	72	200	100	287	0	120	0
Civil	474	539	500	596	1,365	602	66
Electrical	341	493	500	401	973	58	33
Mechanical	2,493	1,004	400	300	500	160	0
Metallurgy & materials	308	2,405	4,520	4,229	4,150	4,894	9,225
Engineering, n.e.c.	594	895	945	1,079	500	6,328	14,254
Social sciences, total	328	500	1,130	1,417	1,054	338	278
Anthropology	4	0	0	0	0	0	0
Economics	124	200	830	986	424	338	278
Political science	108	200	200	287	0	0	0
Sociology	44	50	50	72	0	0	0
Social sciences, n.e.c.	48	50	50	72	630	0	0
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.	168	328	285	485	0	0	0

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

**Table 2I. Federal obligations for basic research, by detailed field of science
& engineering: Department of the Interior,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	125,921	138,274	132,986	134,874	126,464	188,907	205,431
Life sciences, total	6,113	5,700	3,600	4,300	4,800	4,800	5,600
Biol & agricultural, total	6,113	5,700	3,600	4,300	4,800	4,800	5,600
Biol (excl environmental)	3,741	3,500	2,189	2,900	3,396	3,744	3,900
Environmental biology	2,372	2,200	1,411	1,400	1,404	1,056	1,700
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
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	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	7,059	7,584	7,946	7,648	8,132	9,467	10,239
Astronomy	0	0	0	0	0	0	0
Chemistry	5,611	6,028	6,316	6,079	6,464	7,525	8,139
Physics	1,448	1,556	1,630	1,569	1,668	1,942	2,100
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	70,479	73,074	74,562	77,486	82,227	131,442	151,605
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	53,585	57,973	60,679	62,919	67,019	113,532	132,296
Oceanography	16,803	13,231	12,921	13,054	13,732	15,887	15,870
Environmental sciences, n.e.c.	91	1,870	962	1,513	1,476	2,023	3,439
Math & computer sciences, total	1,629	1,750	1,833	1,765	1,877	2,185	2,363
Mathematics	362	389	407	392	417	485	525
Computer sciences	1,267	1,361	1,426	1,373	1,460	1,700	1,838
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	40,641	50,166	45,045	43,675	29,428	41,013	35,624
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	110	170	100	100	100	0	100
Electrical	35	130	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	18,766	24,113	21,488	17,658	13,249	12,036	13,519
Engineering, n.e.c.	21,730	25,753	23,457	25,917	16,079	28,977	22,005
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	0	0

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

**Table 2I. Federal obligations for basic research, by detailed field of science
& engineering: Department of the Interior,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	229,294	230,920	230,259	83,222	55,179	56,038	56,442
Life sciences, total	6,400	6,600	6,578	13,666	13,000	10,947	10,999
Biol & agricultural, total	6,400	6,600	6,578	13,666	13,000	10,947	10,999
Biol (excl environmental)	4,340	3,968	3,954	7,243	6,890	5,802	5,829
Environmental biology	1,960	2,532	2,524	6,423	6,110	5,145	5,170
Agricultural	100	100	100	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
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	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	12,817	5,453	5,803	670	530	500	500
Astronomy	0	0	0	0	0	0	0
Chemistry	10,187	5,453	5,803	670	530	500	500
Physics	2,630	0	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	169,182	176,800	174,754	45,498	41,649	44,591	44,943
Atmospheric sciences	1,029	700	700	0	0	0	0
Geological sciences	145,530	149,285	153,641	45,396	41,649	44,591	44,943
Oceanography	16,381	24,956	19,600	0	0	0	0
Environmental sciences, n.e.c.	6,242	1,859	813	102	0	0	0
Math & computer sciences, total	3,857	1,862	1,738	0	0	0	0
Mathematics	957	1,262	1,213	0	0	0	0
Computer sciences	2,900	600	525	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	36,738	39,905	41,086	23,388	0	0	0
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	100	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	10,022	13,105	6,549	23,388	0	0	0
Engineering, n.e.c.	26,616	26,800	34,537	0	0	0	0
Social sciences, total	300	300	300	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	300	300	300	0	0	0	0
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	0	0	0	0

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

Table 21. Federal obligations for basic research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	48,733	59,136	51,822	61,808	63,894	57,761
Life sciences, total	9,415	13,021	10,952	14,089	14,559	10,406
Biol & agricultural, total	9,415	13,021	10,952	14,074	NA	NA
Biol (excl environmental)	4,990	6,901	5,804	7,613	NA	NA
Environmental biology	4,425	6,120	5,148	6,375	NA	NA
Agricultural	0	0	0	86	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	15	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	546	500	0	0	0	0
Astronomy	0	0	0	0	NA	NA
Chemistry	0	500	0	0	NA	NA
Physics	0	0	0	0	NA	NA
Physical sciences, n.e.c.	546	0	0	0	NA	NA
Environmental sciences, total	38,772	45,615	40,870	44,395	45,895	43,915
Atmospheric sciences	0	0	500	0	NA	NA
Geological sciences	38,772	45,615	40,370	44,162	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	233	NA	NA
Math & computer sciences, total	0	0	0	1,885	1,958	1,958
Mathematics	0	0	0	385	NA	NA
Computer sciences	0	0	0	1,500	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	0	0	0	510	533	533
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	424	NA	NA
Electrical	0	0	0	86	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	0	NA	NA
Engineering, n.e.c.	0	0	0	0	NA	NA
Social sciences, total	0	0	0	929	949	949
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	80	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	310	NA	NA
Social sciences, n.e.c.	0	0	0	539	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	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

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

**Table 2J. Federal obligations for basic research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	5,450	6,100	6,118	9,030	9,500	17,400	13,700
Life sciences, total	2,254	3,520	3,458	4,605	4,992	10,600	8,220
Biol & agricultural, total	1,471	2,870	2,905	3,855	4,872	9,900	8,220
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	783	650	553	750	120	700	0
Clinical medical	0	0	0	0	0	0	0
Other medical	783	650	553	750	120	700	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	2,501	2,075	2,140	3,800	3,858	5,100	4,084
Astronomy	0	0	0	0	0	0	0
Chemistry	1,572	1,400	1,540	3,200	3,458	4,200	3,757
Physics	929	675	600	600	400	900	327
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	561	350	370	325	390	1,300	1,096
Atmospheric sciences	452	350	270	275	320	600	110
Geological sciences	0	0	0	0	0	700	986
Oceanography	0	0	100	50	70	0	0
Environmental sciences, n.e.c.	109	0	0	0	0	0	0
Math & computer sciences, total	0	0	0	0	0	0	0
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	132	155	150	300	260	400	300
Aeronautical	0	0	0	0	0	0	0
Astronautical	82	75	60	0	0	0	0
Chemical	0	0	35	300	260	400	300
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	50	80	55	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	0	0	0	0	0	0
Social sciences, total	2	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	2	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

**Table 2J. Federal obligations for basic research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	8,296	6,010	10,100	13,600	10,500	32,687	22,217
Life sciences, total	6,074	4,022	7,144	9,025	5,063	10,042	7,780
Biol & agricultural, total	6,074	4,022	7,144	9,025	5,063	9,291	7,290
Biol (excl environmental)	NA	0	0	0	0	5,686	4,417
Environmental biology	NA	4,022	7,144	7,283	5,063	3,367	2,648
Agricultural	NA	0	0	1,742	0	238	225
Medical sciences, total	0	0	0	0	0	751	490
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	61	58
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	61	58
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	1,461	1,683	1,784	2,259	2,908	3,778	2,255
Astronomy	0	0	0	0	0	0	0
Chemistry	1,051	1,346	1,784	2,259	2,908	3,535	1,938
Physics	410	337	0	0	0	243	317
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	761	305	1,172	2,316	2,529	5,189	4,092
Atmospheric sciences	350	305	1,172	1,077	1,362	3,922	3,291
Geological sciences	411	0	0	1,039	894	626	309
Oceanography	0	0	0	200	273	641	492
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	0	0	0	0	0	361	257
Mathematics	0	0	0	0	0	194	126
Computer sciences	0	0	0	0	0	167	131
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	0	0	0	0	0	10,320	5,912
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	4,366	2,631
Civil	0	0	0	0	0	5,035	2,655
Electrical	0	0	0	0	0	141	1
Mechanical	0	0	0	0	0	292	220
Metallurgy & materials	0	0	0	0	0	260	263
Engineering, n.e.c.	0	0	0	0	0	226	142
Social sciences, total	0	0	0	0	0	2,319	1,850
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	1,963	1,560
Political science	0	0	0	0	0	178	142
Sociology	0	0	0	0	0	178	148
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	617	13

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

**Table 2J. Federal obligations for basic research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	29,625	38,634	38,489	31,075	27,196	50,711	73,632
Life sciences, total	9,346	14,944	15,487	12,058	10,605	21,200	30,132
Biol & agricultural, total	8,897	13,922	14,230	7,628	7,522	17,772	25,260
Biol (excl environmental)	4,387	6,937	7,315	1,108	2,091	7,514	11,967
Environmental biology	4,116	6,519	6,725	4,262	3,820	8,480	9,880
Agricultural	394	466	190	2,258	1,611	1,778	3,413
Medical sciences, total	449	1,022	1,257	4,430	3,083	3,428	4,872
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	0	0
Psychology, total	0	24	0	0	0	0	0
Biological aspects	0	24	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	2,979	3,534	4,668	5,381	3,687	6,453	11,199
Astronomy	0	0	0	0	0	0	0
Chemistry	2,979	2,973	4,312	4,273	2,916	5,596	9,633
Physics	0	561	356	1,108	771	857	1,566
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	10,889	6,444	9,739	3,527	5,977	8,956	15,745
Atmospheric sciences	5,689	4,993	7,090	3,398	5,848	8,736	13,122
Geological sciences	5,200	327	2,540	129	129	220	1,690
Oceanography	0	1,124	109	0	0	0	933
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	0	794	0	0	0	0	156
Mathematics	0	374	0	0	0	0	0
Computer sciences	0	420	0	0	0	0	156
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	6,411	8,325	8,595	9,409	6,927	14,102	16,181
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	2,859	3,882	4,274	4,610	3,064	2,301	3,628
Civil	3,552	3,656	3,757	4,585	3,092	2,242	3,053
Electrical	0	2	0	0	0	0	0
Mechanical	0	332	0	0	0	0	213
Metallurgy & materials	0	104	0	0	0	0	156
Engineering, n.e.c.	0	349	564	214	771	9,559	9,131
Social sciences, total	0	4,541	0	0	0	0	219
Anthropology	0	0	0	0	0	0	0
Economics	0	3,843	0	0	0	0	0
Political science	0	349	0	0	0	0	219
Sociology	0	349	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	28	0	700	0	0	0

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

**Table 2J. Federal obligations for basic research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	91,224	110,400	89,149	101,360	70,297	51,700	51,133
Life sciences, total	38,741	43,600	23,384	25,646	19,434	14,293	14,136
Biol & agricultural, total	33,621	36,800	19,160	21,014	15,748	11,582	11,455
Biol (excl environmental)	26,783	28,000	0	0	0	0	0
Environmental biology	4,278	6,000	19,160	21,014	15,748	11,582	11,455
Agricultural	2,560	2,800	0	0	0	0	0
Medical sciences, total	5,120	6,800	4,224	4,632	3,686	2,711	2,681
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	0	0
Psychology, total	144	215	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	144	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	215	0	0	0	0	0
Physical sciences, total	14,815	19,958	0	0	0	0	0
Astronomy	0	0	0	0	0	0	0
Chemistry	13,531	18,560	0	0	0	0	0
Physics	1,284	1,398	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	14,094	16,632	56,090	61,608	30,083	22,124	21,881
Atmospheric sciences	14,094	16,632	25,014	27,437	14,029	10,317	10,204
Geological sciences	0	0	3,457	3,792	1,958	1,440	1,424
Oceanography	0	0	114	126	0	0	0
Environmental sciences, n.e.c.	0	0	27,505	30,253	14,096	10,367	10,253
Math & computer sciences, total	3,707	4,935	0	0	0	0	0
Mathematics	0	0	0	0	0	0	0
Computer sciences	3,707	4,935	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	19,723	25,060	9,668	14,106	20,780	15,283	15,116
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	9,771	12,500	606	665	458	337	333
Civil	8,668	11,060	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	1,284	1,500	9,062	13,441	20,322	14,946	14,783
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	7	0	0	0	0

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

Table 2J. Federal obligations for basic research, by detailed field of science & engineering: Environmental Protection Agency, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	57,400	56,988	58,590	74,525	106,800	116,255
Life sciences, total	15,869	38,547	36,996	46,883	69,871	75,193
Biol & agricultural, total	12,859	38,453	36,900	41,333	NA	NA
Biol (excl environmental)	0	19,151	19,257	25,667	NA	NA
Environmental biology	12,859	19,255	17,643	15,666	NA	NA
Agricultural	0	47	0	0	NA	NA
Medical sciences, total	3,010	94	96	121	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	5,429	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	0	2,645	2,351	3,211	3,723	3,793
Astronomy	0	0	0	0	NA	NA
Chemistry	0	2,645	2,351	3,211	NA	NA
Physics	0	0	0	0	NA	NA
Physical sciences, n.e.c.	0	0	0	0	NA	NA
Environmental sciences, total	24,564	12,710	12,458	16,620	24,187	25,562
Atmospheric sciences	11,455	0	0	0	NA	NA
Geological sciences	1,599	1,659	1,755	1,930	NA	NA
Oceanography	0	7,370	7,563	8,697	NA	NA
Environmental sciences, n.e.c.	11,510	3,681	3,140	5,993	NA	NA
Math & computer sciences, total	0	993	1,019	2,281	1,167	1,377
Mathematics	0	890	913	836	NA	NA
Computer sciences	0	0	0	1,331	NA	NA
Math & computer sciences, n.e.c.	0	103	106	114	NA	NA
Engineering, total	16,967	2,093	2,450	2,679	2,869	4,622
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	374	572	1,422	1,678	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	0	0	NA	NA
Engineering, n.e.c.	16,593	1,521	1,028	1,001	NA	NA
Social sciences, total	0	0	0	653	0	0
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	653	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	0	3,316	2,198	4,983	5,708

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 2K. Federal obligations for basic research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	357,530	327,301	331,611	350,279	305,857	309,335	293,209
Life sciences, total	28,348	24,090	27,095	30,009	15,731	7,005	8,902
Biol & agricultural, total	26,764	23,854	25,028	27,816	13,961	4,833	7,598
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	1,584	236	1,582	1,720	1,296	1,840	952
Clinical medical	1,584	0	0	0	239	401	272
Other medical	0	236	1,582	1,720	1,057	1,439	680
Life sciences, n.e.c.	0	0	485	473	474	332	352
Psychology, total	1,602	285	1,854	1,801	1,876	13,283	960
Biological aspects	1,602	285	1,126	755	265	1,491	0
Social aspects	0	0	0	100	1,182	3,260	133
Psychological sciences, n.e.c.	0	0	728	946	429	8,532	827
Physical sciences, total	147,535	149,892	176,055	160,235	159,726	197,950	182,856
Astronomy	95,612	88,537	88,952	81,070	89,740	119,710	114,288
Chemistry	10,263	6,868	15,514	18,013	7,980	6,246	4,733
Physics	41,660	54,487	71,589	58,515	60,762	67,871	60,249
Physical sciences, n.e.c.	0	0	0	2,637	1,244	4,123	3,586
Environmental sciences, total	109,564	104,820	82,512	100,654	88,708	52,011	60,393
Atmospheric sciences	65,630	63,743	50,910	67,045	64,614	36,536	37,484
Geological sciences	43,799	40,951	29,233	29,093	17,856	10,197	17,433
Oceanography	135	126	175	631	1,332	2,105	2,337
Environmental sciences, n.e.c.	0	0	2,194	3,885	4,906	3,173	3,139
Math & computer sciences, total	1,318	723	0	0	411	561	3,172
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	3,172
Engineering, total	68,473	46,667	44,095	56,984	39,405	37,154	35,759
Aeronautical	32,267	23,645	21,591	31,173	21,185	19,411	19,587
Astronautical	6,059	3,522	493	846	5,430	5,583	6,630
Chemical	520	412	971	1,420	61	70	977
Civil	25	0	0	0	112	57	96
Electrical	8,370	5,285	9,629	10,484	3,844	3,615	2,112
Mechanical	12,254	8,490	4,386	6,282	1,529	591	890
Metallurgy & materials	7,630	5,106	7,025	6,779	6,491	6,661	4,454
Engineering, n.e.c.	1,348	207	0	0	753	1,166	1,013
Social sciences, total	690	0	0	0	0	65	39
Anthropology	0	0	0	0	0	0	0
Economics	34	0	0	0	0	3	1
Political science	0	0	0	0	0	24	38
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	656	0	0	0	0	38	0
History	0	0	0	0	0	25	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	656	0	0	0	0	13	NA
Other sciences, n.e.c.	0	824	0	596	0	1,306	1,128

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

**Table 2K. Federal obligations for basic research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	413,774	479,729	512,847	559,113	531,122	535,733	617,033
Life sciences, total	16,195	17,678	15,029	13,742	10,409	14,675	18,396
Biol & agricultural, total	13,569	17,678	11,815	10,243	7,034	11,027	12,831
Biol (excl environmental)	NA	17,678	11,471	9,823	6,191	9,309	10,691
Environmental biology	NA	0	344	340	494	831	1,315
Agricultural	NA	0	0	80	349	887	825
Medical sciences, total	1,785	0	1,244	1,317	1,238	1,402	1,558
Clinical medical	268	NA	NA	NA	NA	NA	NA
Other medical	1,517	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	841	0	1,970	2,182	2,137	2,246	4,007
Psychology, total	1,319	439	484	649	864	1,051	1,814
Biological aspects	806	108	86	97	128	226	231
Social aspects	90	82	90	105	99	210	333
Psychological sciences, n.e.c.	423	249	308	447	637	615	1,250
Physical sciences, total	239,592	243,099	292,495	309,019	268,874	280,617	329,511
Astronomy	138,107	147,106	210,836	225,110	193,249	181,649	264,042
Chemistry	10,331	8,936	5,281	5,243	6,615	5,233	7,710
Physics	85,217	81,265	69,584	73,309	64,916	89,233	52,534
Physical sciences, n.e.c.	5,937	5,792	6,794	5,357	4,094	4,502	5,225
Environmental sciences, total	103,968	126,690	103,068	119,070	118,196	87,107	92,984
Atmospheric sciences	65,721	71,623	71,207	79,856	62,672	50,066	47,564
Geological sciences	30,880	31,224	26,533	31,391	48,480	31,390	28,511
Oceanography	3,612	11,138	3,333	3,851	3,602	2,519	3,368
Environmental sciences, n.e.c.	3,755	12,705	1,995	3,972	3,442	3,132	13,541
Math & computer sciences, total	2,494	1,973	1,062	1,847	1,934	2,496	9,055
Mathematics	2,223	675	914	1,163	776	813	757
Computer sciences	271	1,298	148	579	423	1,006	7,350
Math & computer sciences, n.e.c.	0	0	0	105	735	677	948
Engineering, total	48,803	88,777	98,902	113,294	128,682	148,880	164,332
Aeronautical	33,266	64,048	66,174	75,590	84,825	91,736	105,063
Astronautical	7,152	12,088	25,167	27,184	32,249	40,380	39,311
Chemical	885	2,302	62	173	253	348	935
Civil	402	10	55	55	112	320	542
Electrical	1,783	2,272	1,694	1,900	2,281	5,464	5,788
Mechanical	365	2,189	934	1,448	1,794	2,496	3,180
Metallurgy & materials	3,843	4,601	3,186	5,080	5,255	5,853	7,208
Engineering, n.e.c.	1,107	1,267	1,630	1,864	1,913	2,283	2,305
Social sciences, total	82	5	134	187	199	50	296
Anthropology	0	0	0	0	0	50	0
Economics	82	0	0	22	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	25	0	0	0
Social sciences, n.e.c.	0	5	134	140	199	0	296
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.	1,321	1,068	1,673	1,305	1,964	857	645

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

**Table 2K. Federal obligations for basic research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	754,500	750,900	916,700	1,013,717	1,112,713	1,417,410	1,636,926
Life sciences, total	17,931	18,486	22,839	25,354	27,871	38,982	35,996
Biol & agricultural, total	11,935	11,570	17,689	19,998	20,930	30,249	26,048
Biol (excl environmental)	9,526	9,053	14,776	16,988	19,108	27,839	22,960
Environmental biology	1,582	1,701	2,337	2,266	1,130	2,057	2,504
Agricultural	827	816	576	744	692	353	584
Medical sciences, total	1,664	2,509	2,134	2,509	3,345	5,058	5,870
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,332	4,407	3,016	2,847	3,596	3,675	4,078
Psychology, total	1,397	1,975	1,863	2,167	2,270	3,054	3,673
Biological aspects	242	227	243	264	273	84	85
Social aspects	297	353	236	270	297	806	910
Psychological sciences, n.e.c.	858	1,395	1,384	1,633	1,700	2,164	2,678
Physical sciences, total	338,671	377,936	471,903	549,138	573,538	719,127	806,121
Astronomy	275,593	297,852	348,849	398,195	353,947	413,713	447,008
Chemistry	5,429	10,173	5,538	7,947	24,181	40,383	27,664
Physics	48,422	60,767	108,484	130,380	184,313	244,652	272,843
Physical sciences, n.e.c.	9,227	9,144	9,032	12,616	11,097	20,379	58,606
Environmental sciences, total	125,482	117,039	147,471	150,658	215,142	223,245	405,863
Atmospheric sciences	49,296	49,040	67,895	77,025	105,439	107,360	210,949
Geological sciences	32,325	47,510	56,556	48,936	44,280	36,697	95,570
Oceanography	11,263	5,243	6,881	8,207	16,703	15,217	25,916
Environmental sciences, n.e.c.	32,598	15,246	16,139	16,490	48,720	63,971	73,428
Math & computer sciences, total	21,791	20,603	21,859	21,590	19,416	24,351	24,679
Mathematics	383	737	721	888	965	886	944
Computer sciences	20,856	18,755	20,004	19,052	17,156	22,221	21,902
Math & computer sciences, n.e.c.	552	1,111	1,134	1,650	1,295	1,244	1,833
Engineering, total	247,748	213,362	248,263	261,223	267,950	399,675	349,976
Aeronautical	186,438	155,285	183,031	195,216	198,693	292,861	230,690
Astronautical	42,964	37,749	45,944	42,377	43,588	53,922	58,314
Chemical	254	553	901	1,330	1,408	4,015	8,510
Civil	0	332	309	113	232	91	151
Electrical	5,230	5,102	4,213	4,839	4,464	6,675	6,397
Mechanical	4,106	4,374	3,120	4,922	5,858	7,404	7,216
Metallurgy & materials	6,085	7,260	6,893	7,071	8,603	27,998	33,054
Engineering, n.e.c.	2,671	2,707	3,852	5,355	5,104	6,709	5,644
Social sciences, total	286	81	83	107	186	215	84
Anthropology	6	0	0	0	0	0	0
Economics	0	0	0	0	0	27	0
Political science	0	0	0	0	25	25	0
Sociology	0	0	0	0	0	0	74
Social sciences, n.e.c.	280	81	83	107	161	163	10
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.	1,194	1,418	2,419	3,480	6,340	8,761	10,534

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

**Table 2K. Federal obligations for basic research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,705,575	1,738,171	1,800,087	1,963,909	1,978,193	1,980,935	2,094,767
Life sciences, total	45,117	37,176	70,526	76,945	77,504	77,669	81,771
Biol & agricultural, total	33,782	23,712	56,333	61,460	61,906	55,804	59,470
Biol (excl environmental)	29,607	20,763	52,131	56,875	57,289	50,989	54,571
Environmental biology	3,723	2,183	3,682	4,017	4,046	4,180	4,264
Agricultural	452	766	520	568	571	635	635
Medical sciences, total	5,181	5,778	6,615	7,217	7,270	7,521	7,671
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	6,154	7,686	7,578	8,268	8,328	14,344	14,630
Psychology, total	2,323	3,904	3,270	3,568	3,594	3,553	3,754
Biological aspects	71	40	62	68	68	71	72
Social aspects	563	478	383	418	421	430	438
Psychological sciences, n.e.c.	1,689	3,386	2,825	3,082	3,105	3,052	3,244
Physical sciences, total	853,527	908,332	802,569	875,610	881,977	883,127	940,254
Astronomy	482,649	576,786	509,778	556,172	560,217	550,302	600,773
Chemistry	30,868	37,065	37,314	40,710	41,006	42,409	43,257
Physics	276,513	251,360	232,482	253,640	255,484	264,211	269,495
Physical sciences, n.e.c.	63,497	43,121	22,995	25,088	25,270	26,205	26,729
Environmental sciences, total	400,397	382,707	576,789	629,281	633,858	634,623	668,335
Atmospheric sciences	212,784	174,268	357,288	389,804	392,639	382,351	411,018
Geological sciences	114,928	142,941	148,744	162,281	163,461	169,008	172,388
Oceanography	25,746	26,858	31,141	33,975	34,222	35,388	36,096
Environmental sciences, n.e.c.	46,939	38,640	39,616	43,221	43,536	47,876	48,833
Math & computer sciences, total	27,574	26,415	21,117	23,039	23,207	23,157	24,408
Mathematics	1,221	4,993	684	746	752	775	791
Computer sciences	24,190	18,636	16,732	18,255	18,388	17,990	19,138
Math & computer sciences, n.e.c.	2,163	2,786	3,701	4,038	4,067	4,392	4,479
Engineering, total	363,401	364,213	305,800	333,629	336,056	336,556	354,450
Aeronautical	228,777	209,302	215,514	235,127	236,838	233,635	249,475
Astronautical	62,541	84,040	51,093	55,743	56,148	58,068	59,229
Chemical	8,620	8,427	2,192	2,391	2,409	2,502	2,552
Civil	340	162	180	196	198	169	169
Electrical	6,754	4,856	5,541	6,045	6,089	6,666	6,799
Mechanical	9,261	8,504	8,996	9,815	9,886	10,217	10,421
Metallurgy & materials	40,137	40,981	13,527	14,758	14,865	15,360	15,667
Engineering, n.e.c.	6,971	7,941	8,757	9,554	9,623	9,939	10,138
Social sciences, total	90	39	331	361	364	406	386
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	90	0	212	231	233	260	247
Social sciences, n.e.c.	0	39	119	130	131	146	139
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.	13,146	15,385	19,685	21,476	21,633	21,844	21,409

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

Table 2K. Federal obligations for basic research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,023,793	2,040,901	2,305,437	1,765,200	2,129,022	2,459,114
Life sciences, total	94,073	94,868	107,165	82,053	98,964	114,308
Biol & agricultural, total	69,767	70,357	79,584	60,298	NA	NA
Biol (excl environmental)	64,190	64,733	73,123	55,339	NA	NA
Environmental biology	4,962	5,004	5,653	4,328	NA	NA
Agricultural	615	620	808	631	NA	NA
Medical sciences, total	7,824	7,890	8,913	7,379	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	16,482	16,621	18,668	14,376	NA	NA
Psychology, total	3,801	3,833	2,522	3,315	3,999	4,619
Biological aspects	65	66	539	417	NA	NA
Social aspects	447	450	1,147	1,424	NA	NA
Psychological sciences, n.e.c.	3,289	3,317	836	1,474	NA	NA
Physical sciences, total	873,384	880,767	994,929	714,734	888,850	1,032,528
Astronomy	549,878	554,526	626,402	453,910	NA	NA
Chemistry	39,854	40,191	45,400	34,762	NA	NA
Physics	256,396	258,563	292,078	200,109	NA	NA
Physical sciences, n.e.c.	27,256	27,487	31,049	25,953	NA	NA
Environmental sciences, total	639,119	644,522	728,063	533,929	642,405	747,872
Atmospheric sciences	391,555	394,865	431,698	300,825	NA	NA
Geological sciences	158,872	160,215	180,982	138,572	NA	NA
Oceanography	37,810	38,130	43,072	32,979	NA	NA
Environmental sciences, n.e.c.	50,882	51,312	72,311	61,553	NA	NA
Math & computer sciences, total	22,326	22,515	25,433	19,473	23,487	27,128
Mathematics	1,135	1,145	1,293	990	NA	NA
Computer sciences	16,622	16,763	18,935	15,997	NA	NA
Math & computer sciences, n.e.c.	4,569	4,607	5,205	2,486	NA	NA
Engineering, total	368,194	371,307	380,172	297,621	357,392	418,670
Aeronautical	263,739	265,969	253,663	211,236	NA	NA
Astronautical	63,109	63,642	71,892	31,519	NA	NA
Chemical	2,341	2,361	2,770	2,179	NA	NA
Civil	90	91	0	160	NA	NA
Electrical	5,918	5,968	6,742	6,588	NA	NA
Mechanical	8,907	8,982	10,147	7,769	NA	NA
Metallurgy & materials	14,737	14,862	16,788	12,854	NA	NA
Engineering, n.e.c.	9,353	9,432	18,170	25,316	NA	NA
Social sciences, total	387	390	977	557	407	471
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	220	NA	NA
Sociology	250	252	0	218	NA	NA
Social sciences, n.e.c.	137	138	977	119	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 2L. Federal obligations for basic research, by detailed field of science
& engineering: National Science Foundation,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	244,977	272,566	367,691	392,442	415,217	485,989	523,634
Life sciences, total	52,662	54,795	67,600	72,610	76,011	91,576	97,593
Biol & agricultural, total	47,176	51,876	59,747	63,497	75,796	91,576	97,460
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	5,120	0	7	25	215	0	0
Clinical medical	4,120	0	7	25	187	0	0
Other medical	1,000	0	0	0	28	0	0
Life sciences, n.e.c.	366	2,919	7,846	9,088	0	0	133
Psychology, total	7,600	5,249	6,171	5,531	5,595	8,474	8,249
Biological aspects	4,210	2,973	3,541	3,307	3,628	6,149	5,697
Social aspects	1,430	2,276	2,456	2,224	1,967	2,325	2,552
Psychological sciences, n.e.c.	1,960	0	174	0	0	0	0
Physical sciences, total	74,649	77,550	108,900	115,239	118,600	137,581	143,471
Astronomy	19,922	23,236	25,608	27,080	30,208	28,733	31,754
Chemistry	21,741	21,665	30,171	29,966	33,370	43,439	40,570
Physics	32,892	32,649	48,985	52,660	55,022	65,409	71,147
Physical sciences, n.e.c.	94	0	4,136	5,533	0	0	0
Environmental sciences, total	53,031	71,502	91,026	86,344	112,280	123,218	120,789
Atmospheric sciences	22,973	29,000	33,118	38,090	43,480	44,832	45,410
Geological sciences	10,288	9,516	11,422	19,174	32,524	36,286	34,463
Oceanography	19,680	30,986	43,613	23,699	36,276	42,088	40,755
Environmental sciences, n.e.c.	90	2,000	2,873	5,381	0	12	161
Math & computer sciences, total	17,061	17,236	26,813	22,115	23,239	27,341	32,845
Mathematics	NA	NA	NA	NA	NA	NA	18,391
Computer sciences	NA	NA	NA	NA	NA	NA	14,444
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	10
Engineering, total	21,669	24,037	39,818	40,485	44,436	64,445	61,912
Aeronautical	520	1,164	1,981	209	684	22	0
Astronautical	0	0	24	0	56	0	0
Chemical	3,810	4,191	4,330	4,704	5,817	10,846	10,962
Civil	2,736	3,392	2,956	6,107	5,031	4,223	4,427
Electrical	4,953	4,795	8,724	10,328	9,622	11,257	14,972
Mechanical	3,811	3,654	4,376	5,166	7,076	6,909	7,123
Metallurgy & materials	2,740	4,695	8,486	9,504	11,666	16,088	15,475
Engineering, n.e.c.	3,099	2,146	8,941	4,467	4,484	15,100	8,953
Social sciences, total	14,234	20,225	26,117	24,689	22,629	27,127	34,217
Anthropology	3,227	3,999	4,118	3,886	3,913	3,309	3,449
Economics	4,111	4,443	4,685	4,622	5,220	6,661	6,998
Political science	1,554	706	1,395	1,431	1,290	1,361	2,249
Sociology	1,311	2,581	2,969	2,383	1,857	2,444	2,733
Social sciences, n.e.c.	4,031	8,496	12,950	12,367	10,349	13,352	18,788
History	924	733	876	898	920	818	NA
Linguistics	1,296	137	94	1,253	1,300	1,320	NA
Other social sciences	1,811	7,626	11,980	10,216	8,129	11,214	NA
Other sciences, n.e.c.	4,071	1,972	1,246	25,429	12,427	6,227	24,558

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

**Table 2L. Federal obligations for basic research, by detailed field of science
& engineering: National Science Foundation,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	624,900	678,040	733,255	815,246	896,569	916,078	999,136
Life sciences, total	108,237	121,801	133,184	148,780	161,787	159,488	181,490
Biol & agricultural, total	107,115	119,900	131,215	148,617	161,708	159,473	181,490
Biol (excl environmental)	NA	82,016	83,882	105,365	116,285	116,970	131,689
Environmental biology	NA	37,884	47,333	43,202	45,416	42,129	49,672
Agricultural	NA	0	0	50	7	374	129
Medical sciences, total	1,122	0	0	0	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	1,122	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	1,901	1,969	163	79	15	0
Psychology, total	11,381	9,209	11,882	11,875	10,066	7,912	8,334
Biological aspects	8,368	8,538	8,587	8,136	7,249	5,710	5,745
Social aspects	3,013	3,371	3,255	3,739	2,788	2,059	2,586
Psychological sciences, n.e.c.	0	0	40	0	29	143	3
Physical sciences, total	179,180	189,750	197,064	198,604	254,815	266,577	283,492
Astronomy	41,585	46,614	51,064	34,487	59,079	65,399	64,606
Chemistry	54,387	56,686	60,317	68,385	81,475	83,343	88,487
Physics	83,175	86,431	85,576	95,593	113,602	117,753	129,687
Physical sciences, n.e.c.	33	19	107	139	659	82	712
Environmental sciences, total	177,627	198,594	216,403	253,223	259,308	264,493	290,544
Atmospheric sciences	61,270	70,928	79,082	76,784	86,667	84,288	95,030
Geological sciences	52,684	58,939	63,532	90,195	68,810	70,548	64,814
Oceanography	63,662	68,670	73,656	86,110	95,840	98,364	130,657
Environmental sciences, n.e.c.	11	57	133	134	7,991	11,293	43
Math & computer sciences, total	38,985	43,349	42,416	47,769	55,761	63,544	69,671
Mathematics	21,624	22,920	24,040	27,166	31,450	33,274	37,294
Computer sciences	17,361	20,429	18,376	20,603	23,226	30,270	32,377
Math & computer sciences, n.e.c.	0	0	0	0	1,085	0	0
Engineering, total	70,424	69,791	76,397	89,372	100,241	111,308	122,503
Aeronautical	588	582	927	1,048	0	441	107
Astronautical	0	0	0	0	123	183	124
Chemical	9,475	9,231	13,690	14,572	17,171	16,384	18,810
Civil	6,596	6,589	10,544	16,505	18,134	21,840	23,769
Electrical	19,495	19,814	18,568	21,087	24,208	26,349	29,679
Mechanical	6,733	6,715	11,700	13,356	12,123	14,553	17,551
Metallurgy & materials	17,802	14,822	16,405	19,114	22,603	23,482	23,984
Engineering, n.e.c.	9,735	12,038	4,563	3,690	5,879	8,076	8,479
Social sciences, total	34,525	36,425	34,440	36,844	29,953	25,360	27,063
Anthropology	3,924	5,948	6,659	6,812	6,301	5,807	6,109
Economics	8,704	10,405	9,460	10,297	7,295	6,744	7,182
Political science	2,348	2,969	3,267	3,544	3,015	2,303	2,306
Sociology	3,600	3,601	3,358	4,300	3,387	2,783	2,487
Social sciences, n.e.c.	15,949	13,502	11,696	11,891	9,955	7,723	8,979
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.	4,541	9,121	21,469	28,779	24,638	17,396	16,039

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

**Table 2L. Federal obligations for basic research, by detailed field of science
& engineering: National Science Foundation,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,132,340	1,261,807	1,275,221	1,371,169	1,433,190	1,562,629	1,586,276
Life sciences, total	214,007	227,881	228,547	250,135	252,686	267,810	252,570
Biol & agricultural, total	213,763	224,794	226,678	248,096	252,374	267,456	251,752
Biol (excl environmental)	155,714	168,734	169,405	181,621	183,667	194,804	179,737
Environmental biology	57,736	56,060	57,273	66,475	68,707	72,652	72,015
Agricultural	313	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	244	3,087	1,869	2,039	312	354	818
Psychology, total	10,179	12,422	10,297	9,372	11,753	12,429	10,854
Biological aspects	7,005	8,600	7,001	6,369	7,728	8,163	4,414
Social aspects	3,174	3,792	3,259	2,948	3,589	3,804	6,426
Psychological sciences, n.e.c.	0	30	37	55	436	462	14
Physical sciences, total	330,209	347,877	343,661	375,752	385,414	422,176	453,561
Astronomy	77,501	76,554	77,545	76,653	77,541	83,115	104,223
Chemistry	106,828	112,721	109,521	111,705	115,295	122,070	127,916
Physics	145,110	155,826	154,896	136,552	142,106	161,841	183,481
Physical sciences, n.e.c.	770	2,776	1,699	50,842	50,472	55,150	37,941
Environmental sciences, total	315,030	353,432	353,519	375,841	391,056	417,868	433,618
Atmospheric sciences	107,251	120,006	121,050	123,890	128,429	135,562	127,530
Geological sciences	69,464	77,133	77,742	83,463	87,436	92,260	107,652
Oceanography	137,924	154,080	154,504	167,984	170,862	185,308	186,026
Environmental sciences, n.e.c.	391	2,213	223	504	4,329	4,738	12,410
Math & computer sciences, total	78,264	99,713	107,603	123,878	122,368	140,970	172,781
Mathematics	46,206	56,709	62,454	65,827	70,247	73,669	76,032
Computer sciences	32,058	43,004	44,099	57,736	52,121	67,301	96,749
Math & computer sciences, n.e.c.	0	0	1,050	315	0	0	0
Engineering, total	141,430	163,493	169,599	149,023	155,924	176,968	133,646
Aeronautical	51	639	121	151	270	293	542
Astronautical	0	0	0	0	0	0	0
Chemical	24,278	26,382	27,414	28,055	29,877	32,765	26,968
Civil	30,610	31,592	27,001	26,591	27,605	30,198	26,830
Electrical	34,715	33,276	35,843	36,782	42,384	52,398	39,998
Mechanical	17,942	19,844	21,799	22,095	24,318	26,550	22,843
Metallurgy & materials	24,705	39,387	40,507	20,807	21,053	23,389	5,257
Engineering, n.e.c.	9,129	12,373	16,914	14,542	10,417	11,375	11,208
Social sciences, total	32,355	35,397	32,575	31,117	33,024	35,249	39,239
Anthropology	7,313	7,150	7,512	7,781	7,900	8,404	8,175
Economics	8,974	10,464	9,106	7,551	8,848	9,443	10,468
Political science	2,605	3,193	1,812	3,055	3,091	3,294	3,065
Sociology	3,510	3,843	3,934	2,921	2,683	2,858	3,462
Social sciences, n.e.c.	9,953	10,747	10,211	9,809	10,502	11,250	14,069
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.	10,866	21,592	29,420	56,051	80,965	89,159	90,007

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

**Table 2L. Federal obligations for basic research, by detailed field of science
& engineering: National Science Foundation,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,676,205	1,741,472	1,743,770	1,870,669	1,973,264	2,007,355	2,056,713
Life sciences, total	260,299	282,897	286,125	296,940	323,987	306,815	320,123
Biol & agricultural, total	259,041	282,659	279,204	295,427	316,311	306,802	320,123
Biol (excl environmental)	180,586	210,000	205,604	219,279	234,838	230,352	239,185
Environmental biology	78,455	72,659	73,600	76,148	81,473	76,450	80,938
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,258	238	6,921	1,513	7,676	13	0
Psychology, total	1,691	10,177	9,629	10,673	11,847	10,276	5,181
Biological aspects	649	5,232	5,002	3,711	2,596	3	0
Social aspects	307	4,015	4,207	4,838	6,877	2,099	5,181
Psychological sciences, n.e.c.	735	930	420	2,124	2,374	8,174	0
Physical sciences, total	456,039	427,911	454,598	448,525	467,914	413,177	464,095
Astronomy	101,623	115,483	109,518	121,969	126,196	119,934	115,199
Chemistry	147,167	127,415	118,061	138,975	139,774	140,606	124,245
Physics	195,852	179,687	160,066	162,511	167,785	135,613	125,728
Physical sciences, n.e.c.	11,397	5,326	66,953	25,070	34,159	17,024	98,923
Environmental sciences, total	388,779	409,254	398,663	427,590	431,320	452,746	440,269
Atmospheric sciences	120,911	126,577	128,561	138,362	149,182	143,950	130,275
Geological sciences	131,245	137,668	134,632	148,423	146,187	91,157	96,863
Oceanography	74,634	78,996	76,727	77,549	77,684	197,894	197,367
Environmental sciences, n.e.c.	61,989	66,013	58,743	63,256	58,267	19,745	15,764
Math & computer sciences, total	177,349	191,290	200,377	214,412	200,249	321,818	318,125
Mathematics	78,538	87,655	81,583	79,662	84,002	83,700	91,629
Computer sciences	98,511	103,635	118,484	130,940	115,550	237,831	226,496
Math & computer sciences, n.e.c.	300	0	310	3,810	697	287	0
Engineering, total	206,371	167,387	180,912	274,811	346,090	336,906	328,360
Aeronautical	659	2,861	3,218	2,288	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	37,241	33,773	27,449	24,983	31,367	27,332	28,925
Civil	25,607	25,732	24,553	25,175	36,320	32,154	28,652
Electrical	45,880	42,200	51,319	48,522	45,576	38,142	41,591
Mechanical	33,613	26,471	26,944	26,793	43,691	5,104	6,253
Metallurgy & materials	24,883	18,526	17,739	109,145	133,547	122,328	103,623
Engineering, n.e.c.	38,488	17,824	29,690	37,905	55,589	111,846	119,316
Social sciences, total	33,097	45,531	47,690	56,684	67,524	74,207	77,101
Anthropology	6,739	7,300	6,830	6,072	11,715	9,232	11,120
Economics	11,014	14,896	14,255	9,564	12,423	9,934	16,606
Political science	3,780	4,036	4,008	4,650	6,716	4,633	4,894
Sociology	3,027	5,505	4,649	5,331	6,754	2,788	4,562
Social sciences, n.e.c.	8,537	13,794	17,948	31,067	29,916	47,620	39,919
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.	152,580	207,025	165,776	141,034	124,333	91,410	103,459

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

Table 2L. Federal obligations for basic research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,118,677	2,359,503	2,540,012	2,862,558	3,058,035	3,204,940
Life sciences, total	351,533	393,556	439,261	446,776	476,619	499,515
Biol & agricultural, total	351,533	393,556	439,261	446,776	NA	NA
Biol (excl environmental)	276,084	296,663	333,817	343,578	NA	NA
Environmental biology	75,449	96,893	105,444	103,198	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	5,877	4,249	5,235	4,092	4,365	4,575
Biological aspects	0	0	0	0	NA	NA
Social aspects	5,877	4,249	5,235	4,092	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	452,653	512,215	516,430	556,404	593,571	622,085
Astronomy	113,234	124,395	128,027	150,508	NA	NA
Chemistry	118,920	135,974	134,112	147,682	NA	NA
Physics	124,537	169,091	163,566	160,753	NA	NA
Physical sciences, n.e.c.	95,962	82,755	90,725	97,461	NA	NA
Environmental sciences, total	432,541	494,435	465,718	522,766	557,686	584,477
Atmospheric sciences	134,796	158,492	150,554	162,446	NA	NA
Geological sciences	94,560	109,467	114,964	127,624	NA	NA
Oceanography	186,851	213,274	184,099	214,705	NA	NA
Environmental sciences, n.e.c.	16,334	13,202	16,101	17,991	NA	NA
Math & computer sciences, total	353,957	380,382	449,156	555,330	592,424	620,884
Mathematics	96,055	90,154	110,051	118,911	NA	NA
Computer sciences	257,902	290,228	339,105	436,419	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	343,074	356,277	385,415	427,777	456,351	478,274
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	31,456	33,158	35,363	39,711	NA	NA
Civil	23,258	31,919	33,731	37,595	NA	NA
Electrical	39,797	38,187	36,435	45,103	NA	NA
Mechanical	7,157	6,135	5,756	5,160	NA	NA
Metallurgy & materials	102,551	109,493	118,026	119,910	NA	NA
Engineering, n.e.c.	138,855	137,385	156,104	180,298	NA	NA
Social sciences, total	75,229	97,125	103,957	106,890	114,029	119,507
Anthropology	10,813	11,308	11,670	11,639	NA	NA
Economics	15,921	15,652	17,314	18,441	NA	NA
Political science	4,624	4,762	5,061	5,721	NA	NA
Sociology	4,361	3,857	4,546	5,018	NA	NA
Social sciences, n.e.c.	39,510	61,546	65,366	66,071	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	103,813	121,264	174,840	242,523	262,990	275,623

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 2M. Federal obligations for basic research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	35,760	31,594	34,508	44,378	37,588	43,790	46,443
Life sciences, total	12,378	8,152	12,645	14,365	14,475	16,396	18,501
Biol & agricultural, total	8,833	6,117	10,570	12,351	12,069	13,736	12,898
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	3,545	2,035	2,075	2,014	2,406	2,615	5,512
Clinical medical	3,245	1,870	1,905	1,249	1,570	1,745	3,682
Other medical	300	165	170	765	836	870	1,830
Life sciences, n.e.c.	0	0	0	0	0	45	91
Psychology, total	2,887	2,497	1,537	396	434	864	1,546
Biological aspects	462	332	342	161	189	195	895
Social aspects	2,229	2,165	1,195	235	245	666	651
Psychological sciences, n.e.c.	196	0	0	0	0	3	0
Physical sciences, total	3,416	2,833	3,844	3,897	3,966	4,248	4,438
Astronomy	3,201	2,704	3,747	3,897	3,966	4,248	4,408
Chemistry	90	33	33	0	0	0	0
Physics	125	96	64	0	0	0	30
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	655	1,563	1,485	1,711	1,889	1,623	2,207
Atmospheric sciences	10	109	97	75	76	85	84
Geological sciences	602	1,352	1,326	1,438	1,572	1,390	1,529
Oceanography	43	102	62	198	241	148	594
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	181	79	180	0	0	0	0
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	315	341	530	203	560	550	69
Aeronautical	16	18	18	0	0	0	0
Astronautical	16	18	18	0	0	25	0
Chemical	16	18	18	0	0	0	0
Civil	114	57	353	76	560	224	0
Electrical	30	144	17	0	0	301	19
Mechanical	32	24	44	0	0	0	0
Metallurgy & materials	16	17	17	0	0	0	0
Engineering, n.e.c.	75	45	45	127	0	0	50
Social sciences, total	15,928	16,059	14,212	23,494	16,085	16,826	19,136
Anthropology	3,169	2,632	2,891	4,256	2,956	2,688	2,575
Economics	2,053	3,176	1,699	1,330	1,199	767	1,233
Political science	105	28	4	0	42	0	506
Sociology	1,631	2,578	3,658	1,417	1,863	6,521	3,903
Social sciences, n.e.c.	8,970	7,645	5,960	16,491	10,025	6,850	10,919
History	3,457	2,838	3,318	3,688	4,786	4,956	NA
Linguistics	255	175	32	63	1	0	NA
Other social sciences	5,258	4,632	2,610	12,740	5,238	1,894	NA
Other sciences, n.e.c.	0	70	75	312	179	3,283	546

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

**Table 2M. Federal obligations for basic research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	61,020	89,432	85,115	96,858	101,100	99,442	108,734
Life sciences, total	21,906	22,832	25,171	29,511	33,393	33,278	39,761
Biol & agricultural, total	14,749	15,925	17,544	19,578	21,494	23,439	30,549
Biol (excl environmental)	NA	7,255	7,699	9,308	10,458	9,412	14,128
Environmental biology	NA	8,670	9,845	10,270	11,036	12,427	11,852
Agricultural	NA	0	0	0	0	1,600	4,569
Medical sciences, total	7,157	6,907	7,627	9,933	11,899	9,839	9,212
Clinical medical	4,781	NA	NA	NA	NA	NA	NA
Other medical	2,376	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	1,897	3,671	1,941	3,333	2,067	2,267	1,408
Biological aspects	975	1,009	1,169	2,157	1,300	1,793	1,307
Social aspects	922	1,762	522	407	767	474	101
Psychological sciences, n.e.c.	0	900	250	769	0	0	0
Physical sciences, total	7,316	11,477	12,131	13,104	13,649	12,223	13,853
Astronomy	5,007	6,417	6,670	7,596	8,144	7,914	9,353
Chemistry	2,309	3,716	4,069	4,288	4,285	3,647	4,500
Physics	0	1,344	1,392	1,220	1,220	662	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	2,383	2,697	2,898	3,128	3,407	3,845	4,016
Atmospheric sciences	103	158	106	115	100	141	88
Geological sciences	1,642	1,792	1,938	2,116	2,134	2,665	2,782
Oceanography	638	747	854	822	913	1,039	1,146
Environmental sciences, n.e.c.	0	0	0	75	260	0	0
Math & computer sciences, total	0	0	0	254	258	1,054	1,247
Mathematics	0	0	0	254	258	1,054	1,197
Computer sciences	0	0	0	0	0	0	50
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	90	1,686	0	0	950	1,000	520
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	1,300	0	0	0	0	0
Civil	90	67	0	0	0	0	20
Electrical	0	0	0	0	100	0	0
Mechanical	0	7	0	0	750	500	300
Metallurgy & materials	0	0	0	0	100	200	100
Engineering, n.e.c.	0	312	0	0	0	300	100
Social sciences, total	27,279	46,927	42,874	47,428	47,176	45,157	47,598
Anthropology	3,805	5,694	5,541	7,006	6,444	6,797	4,817
Economics	1,574	1,315	1,456	5,571	5,983	8,759	8,384
Political science	0	0	325	1,890	1,285	100	341
Sociology	3,188	3,959	1,536	3,049	1,683	1,144	1,530
Social sciences, n.e.c.	18,712	35,959	34,016	29,912	31,781	28,357	32,526
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.	149	142	100	100	200	618	331

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

**Table 2M. Federal obligations for basic research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	118,897	123,906	107,950	116,365	119,476	121,491	131,308
Life sciences, total	42,118	43,351	44,657	46,613	50,037	50,315	51,835
Biol & agricultural, total	29,545	32,077	31,191	32,260	33,846	35,415	36,773
Biol (excl environmental)	13,643	15,169	13,477	14,413	14,994	16,026	16,820
Environmental biology	14,502	13,853	13,951	13,960	15,266	16,462	16,724
Agricultural	1,400	3,055	3,763	3,887	3,586	2,927	3,229
Medical sciences, total	12,523	11,274	13,466	14,353	14,745	13,421	13,366
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	50	0	0	0	1,446	1,479	1,696
Psychology, total	2,838	3,166	1,848	2,830	1,078	1,656	417
Biological aspects	1,381	1,605	454	1,571	854	1,456	417
Social aspects	1,457	1,561	1,202	927	80	100	0
Psychological sciences, n.e.c.	0	0	192	332	144	100	0
Physical sciences, total	14,684	16,561	16,631	15,699	17,466	18,495	21,140
Astronomy	10,186	12,577	11,747	15,134	15,620	16,448	18,066
Chemistry	798	277	4,884	565	1,846	1,997	2,547
Physics	0	7	0	0	0	50	150
Physical sciences, n.e.c.	3,700	3,700	0	0	0	0	377
Environmental sciences, total	6,052	4,985	4,779	5,183	5,703	6,108	6,599
Atmospheric sciences	85	98	95	55	43	40	44
Geological sciences	3,001	3,519	3,328	3,692	4,075	4,369	4,725
Oceanography	1,506	1,368	1,356	1,436	1,585	1,699	1,830
Environmental sciences, n.e.c.	1,460	0	0	0	0	0	0
Math & computer sciences, total	1,454	2,094	3,019	3,100	3,072	1,941	2,144
Mathematics	1,404	1,949	2,438	2,521	2,576	1,665	1,822
Computer sciences	50	145	581	579	496	276	322
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	1,275	801	652	135	22	0	0
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	1,275	556	275	135	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	169	0	0	0	0
Engineering, n.e.c.	0	245	208	0	22	0	0
Social sciences, total	49,835	52,307	34,572	41,392	39,126	40,485	45,893
Anthropology	9,214	8,362	2,909	3,088	2,964	3,243	3,421
Economics	7,917	6,671	3,879	3,391	2,411	2,184	5,017
Political science	200	500	700	1,578	823	920	1,775
Sociology	823	1,282	1,557	2,764	2,031	844	853
Social sciences, n.e.c.	31,681	35,492	25,527	30,571	30,897	33,294	34,827
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.	641	641	1,792	1,413	2,972	2,491	3,280

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

**Table 2M. Federal obligations for basic research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	145,865	145,179	162,948	170,011	222,066	208,343	208,012
Life sciences, total	59,106	57,786	70,359	74,038	71,472	64,154	63,625
Biol & agricultural, total	41,292	41,317	53,803	62,206	62,448	56,404	56,018
Biol (excl environmental)	19,234	18,433	20,886	24,904	25,181	27,040	27,892
Environmental biology	19,628	18,896	22,017	27,611	28,719	28,311	28,126
Agricultural	2,430	3,988	10,900	9,691	8,548	1,053	0
Medical sciences, total	12,829	13,032	10,300	10,336	6,913	6,424	6,985
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	4,985	3,437	6,256	1,496	2,111	1,326	622
Psychology, total	418	838	2,319	429	2,471	1,691	1,144
Biological aspects	407	688	549	379	1,142	700	544
Social aspects	0	150	1,000	50	361	640	600
Psychological sciences, n.e.c.	11	0	770	0	968	351	0
Physical sciences, total	23,223	28,123	30,463	35,223	38,943	37,583	38,508
Astronomy	22,786	27,535	28,352	32,665	36,509	35,416	35,962
Chemistry	287	373	928	1,127	1,107	728	710
Physics	150	215	1,183	1,431	1,327	1,439	1,542
Physical sciences, n.e.c.	0	0	0	0	0	0	294
Environmental sciences, total	7,188	6,770	4,504	5,610	6,504	5,813	5,994
Atmospheric sciences	71	64	60	80	670	181	89
Geological sciences	5,124	4,828	4,148	5,161	5,071	5,225	5,506
Oceanography	1,993	1,878	296	369	361	372	393
Environmental sciences, n.e.c.	0	0	0	0	402	35	6
Math & computer sciences, total	2,631	2,581	6,697	50	17,846	329	665
Mathematics	2,089	2,139	100	0	34	17	40
Computer sciences	542	442	6,597	50	943	237	541
Math & computer sciences, n.e.c.	0	0	0	0	16,869	75	84
Engineering, total	0	1,170	1,591	1,840	21,579	36,084	33,465
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	16	49	0
Civil	0	1,170	1,591	1,840	20,460	8,365	7,668
Electrical	0	0	0	0	23	0	65
Mechanical	0	0	0	0	368	231	33
Metallurgy & materials	0	0	0	0	318	13	0
Engineering, n.e.c.	0	0	0	0	394	27,426	25,699
Social sciences, total	51,290	45,405	44,139	48,369	55,571	57,856	58,754
Anthropology	4,089	3,735	3,187	3,478	3,353	3,470	3,657
Economics	3,062	3,180	6,948	5,904	13,983	11,800	11,300
Political science	2,430	2,398	2,383	100	384	1,115	0
Sociology	1,827	1,330	1,610	4,360	4,259	7,620	511
Social sciences, n.e.c.	39,882	34,762	30,011	34,527	33,592	33,851	43,286
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.	2,009	2,506	2,876	4,452	7,680	4,833	5,857

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

Table 2M. Federal obligations for basic research, by detailed field of science & engineering: All other departments and agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	306,046	330,143	298,331	328,849	331,838	350,527
Life sciences, total	154,532	165,974	170,709	165,478	170,298	179,503
Biol & agricultural, total	40,016	32,992	37,754	37,961	NA	NA
Biol (excl environmental)	18,737	16,648	19,342	19,199	NA	NA
Environmental biology	21,279	16,344	18,412	18,670	NA	NA
Agricultural	0	0	0	92	NA	NA
Medical sciences, total	114,516	132,982	132,955	127,517	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	3,366	11,532	13,362	10,763	11,034	11,348
Biological aspects	0	14	0	0	NA	NA
Social aspects	64	272	0	0	NA	NA
Psychological sciences, n.e.c.	3,302	11,246	13,362	10,763	NA	NA
Physical sciences, total	39,648	40,326	41,725	41,539	42,441	48,320
Astronomy	37,168	36,967	39,404	39,142	NA	NA
Chemistry	690	582	613	587	NA	NA
Physics	1,634	1,978	1,700	1,774	NA	NA
Physical sciences, n.e.c.	156	799	8	36	NA	NA
Environmental sciences, total	4,569	4,128	3,696	3,780	3,949	4,498
Atmospheric sciences	83	70	76	74	NA	NA
Geological sciences	4,025	3,843	3,379	3,459	NA	NA
Oceanography	287	215	241	247	NA	NA
Environmental sciences, n.e.c.	174	0	0	0	NA	NA
Math & computer sciences, total	1,437	1,211	0	2,120	184	194
Mathematics	17	0	0	0	NA	NA
Computer sciences	1,362	801	0	2,120	NA	NA
Math & computer sciences, n.e.c.	58	410	0	0	NA	NA
Engineering, total	35,320	55,595	14,236	25,221	27,765	27,472
Aeronautical	0	6	0	0	NA	NA
Astronautical	0	251	0	0	NA	NA
Chemical	3	251	0	0	NA	NA
Civil	2,867	28,642	3,736	2,914	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	18,885	687	0	0	NA	NA
Engineering, n.e.c.	13,565	26,009	10,500	22,307	NA	NA
Social sciences, total	64,167	49,934	53,778	79,060	75,262	78,156
Anthropology	2,674	1,996	2,245	2,298	NA	NA
Economics	11,100	13,200	13,600	1,748	NA	NA
Political science	0	7	0	0	NA	NA
Sociology	16,372	2,354	2,658	8,335	NA	NA
Social sciences, n.e.c.	34,021	32,377	35,275	66,679	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	3,007	1,443	825	888	905	1,036

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal 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 3A. Federal obligations for applied research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	2,974,890	3,143,030	3,360,759	3,349,423	3,787,559	4,141,281	4,851,878
Life sciences, total	742,953	840,305	981,247	1,042,705	1,232,976	1,339,266	1,427,681
Biol & agricultural, total	380,595	423,800	482,921	514,598	624,304	705,165	717,386
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	344,048	385,610	467,374	505,354	593,252	608,740	668,554
Clinical medical	333,684	361,971	426,893	459,011	532,728	511,737	545,104
Other medical	10,364	23,639	40,481	46,343	60,524	97,003	123,450
Life sciences, n.e.c.	18,310	30,895	30,952	22,753	15,420	25,361	41,741
Psychology, total	59,489	62,003	64,894	64,560	87,295	80,550	98,467
Biological aspects	12,837	12,723	14,895	13,816	30,720	19,211	25,342
Social aspects	31,762	31,958	29,220	29,090	33,944	34,888	38,834
Psychological sciences, n.e.c.	14,890	17,322	20,779	21,654	22,631	26,451	34,291
Physical sciences, total	345,217	312,486	383,611	353,530	366,464	387,685	537,457
Astronomy	5,724	2,800	7,540	1,608	2,689	5,291	3,133
Chemistry	100,778	95,654	106,326	116,068	131,091	126,906	160,179
Physics	215,644	178,050	211,845	192,463	196,341	215,981	320,823
Physical sciences, n.e.c.	23,071	35,982	57,900	43,391	36,343	39,507	53,322
Environmental sciences, total	242,351	273,133	304,940	307,116	344,685	446,506	474,959
Atmospheric sciences	118,361	138,097	126,481	112,673	149,834	191,209	175,305
Geological sciences	74,635	79,226	94,101	88,486	76,154	103,120	131,457
Oceanography	32,295	38,266	45,274	51,693	57,144	70,581	87,387
Environmental sciences, n.e.c.	17,060	17,544	39,084	54,264	61,553	81,596	80,810
Math & computer sciences, total	35,566	51,286	54,122	54,680	61,529	63,253	75,989
Mathematics	NA	NA	NA	NA	NA	NA	26,695
Computer sciences	NA	NA	NA	NA	NA	NA	46,989
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	2,305
Engineering, total	1,336,959	1,295,472	1,244,540	1,149,821	1,348,861	1,454,930	1,795,856
Aeronautical	301,182	261,391	182,204	198,386	303,890	314,907	494,839
Astronautical	165,177	141,564	57,825	38,694	86,405	87,788	167,536
Chemical	97,317	93,922	66,268	59,549	50,144	67,513	69,845
Civil	65,562	70,489	114,423	95,749	93,543	117,874	98,119
Electrical	249,883	242,993	292,102	253,595	230,792	239,202	244,606
Mechanical	143,085	163,187	147,961	185,133	114,427	144,849	165,564
Metallurgy & materials	86,850	99,173	119,544	104,806	116,000	122,126	171,636
Engineering, n.e.c.	227,903	222,753	264,213	213,909	353,660	360,671	383,711
Social sciences, total	148,356	233,740	226,803	218,593	217,365	228,059	306,030
Anthropology	713	2,950	3,289	1,149	4,596	6,866	7,159
Economics	53,269	49,099	58,203	66,432	92,854	104,172	111,943
Political science	3,944	2,735	1,743	4,111	6,240	10,086	4,240
Sociology	25,160	88,922	98,656	89,594	49,864	39,838	37,044
Social sciences, n.e.c.	65,270	90,034	64,912	57,307	63,811	67,097	145,644
History	207	516	248	245	337	956	NA
Linguistics	50	768	1,280	1,128	1,005	941	NA
Other social sciences	65,013	88,750	63,384	55,934	62,469	65,200	NA
Other sciences, n.e.c.	63,999	74,605	100,602	158,418	128,384	141,032	135,439

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

Table 3A. Federal obligations for applied research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	5,255,475	5,908,154	6,342,340	6,923,222	7,171,485	7,540,580	7,993,394
Life sciences, total	1,624,384	1,838,743	1,956,504	2,137,910	2,211,792	2,219,482	2,286,595
Biol & agricultural, total	843,993	945,339	1,041,032	1,168,124	1,249,396	1,137,018	1,135,626
Biol (excl environmental)	NA	613,965	646,724	730,755	794,949	678,068	683,686
Environmental biology	NA	120,528	125,751	143,623	137,017	100,368	100,967
Agricultural	NA	210,846	268,557	293,746	317,430	358,582	350,973
Medical sciences, total	723,971	819,775	820,505	879,925	903,725	979,606	1,048,531
Clinical medical	594,802	NA	NA	NA	NA	NA	NA
Other medical	129,169	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	56,420	73,629	94,967	89,861	58,671	102,858	102,438
Psychology, total	100,484	109,194	122,315	114,803	117,906	128,521	147,944
Biological aspects	35,087	29,925	30,407	29,722	26,966	26,689	31,821
Social aspects	34,465	40,133	49,639	63,546	63,277	64,444	71,848
Psychological sciences, n.e.c.	30,932	39,136	42,269	21,535	27,663	37,388	44,275
Physical sciences, total	640,177	704,226	742,552	780,024	895,594	1,106,537	1,304,256
Astronomy	3,984	3,769	3,786	6,251	6,800	4,670	2,950
Chemistry	162,027	201,733	218,820	197,614	188,689	169,152	158,103
Physics	398,846	423,638	487,117	514,391	610,221	819,767	999,462
Physical sciences, n.e.c.	75,320	75,086	32,829	61,768	89,884	112,948	143,741
Environmental sciences, total	518,547	573,288	643,700	738,597	588,247	628,254	671,153
Atmospheric sciences	174,902	155,919	179,544	230,465	199,603	262,634	288,051
Geological sciences	140,710	171,246	201,064	203,420	201,877	180,069	155,245
Oceanography	91,301	103,117	101,369	131,446	118,390	106,813	147,895
Environmental sciences, n.e.c.	111,634	143,006	161,723	173,266	68,377	78,738	79,962
Math & computer sciences, total	112,472	118,543	106,137	124,685	138,565	185,016	211,287
Mathematics	44,279	37,481	24,215	24,101	38,552	37,269	32,605
Computer sciences	58,337	66,973	63,310	82,378	69,315	103,490	124,114
Math & computer sciences, n.e.c.	9,856	14,089	18,612	18,206	30,698	44,257	54,568
Engineering, total	1,775,234	2,028,610	2,136,972	2,364,903	2,545,436	2,776,076	2,827,496
Aeronautical	359,327	400,046	536,460	603,977	596,293	614,693	679,852
Astronautical	148,810	150,197	225,973	275,141	270,757	245,889	271,135
Chemical	80,767	125,327	89,680	70,187	116,294	59,934	94,592
Civil	106,998	131,576	110,842	136,818	135,750	169,942	156,039
Electrical	327,588	375,222	355,840	446,556	478,166	518,561	519,124
Mechanical	169,545	204,658	159,985	165,751	157,268	148,108	205,673
Metallurgy & materials	168,945	151,434	98,229	114,847	117,492	153,241	149,632
Engineering, n.e.c.	413,254	490,150	559,963	551,626	673,416	865,708	751,449
Social sciences, total	330,612	365,139	397,592	376,631	360,476	265,741	297,545
Anthropology	4,339	7,569	4,855	2,945	1,459	1,501	1,624
Economics	113,769	129,616	149,239	152,761	172,610	118,152	124,569
Political science	5,935	5,571	9,781	4,767	4,481	3,173	6,551
Sociology	36,221	41,745	46,117	46,058	42,397	33,266	35,043
Social sciences, n.e.c.	170,348	180,638	187,600	170,100	139,529	109,649	129,758
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.	153,565	170,411	236,568	285,669	313,469	230,953	247,118

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

Table 3A. Federal obligations for applied research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	7,911,414	8,314,739	8,349,123	8,998,096	9,176,527	10,163,520	10,336,771
Life sciences, total	2,348,314	2,575,903	2,605,535	2,979,489	3,222,705	3,579,390	3,652,306
Biol & agricultural, total	1,150,336	1,239,806	1,318,359	1,488,112	1,718,049	1,917,152	1,959,388
Biol (excl environmental)	727,324	779,325	841,922	1,040,483	1,266,828	1,336,003	1,402,478
Environmental biology	129,184	134,633	138,336	148,554	154,220	210,460	174,019
Agricultural	293,828	325,848	338,101	299,075	297,001	370,689	382,891
Medical sciences, total	1,097,538	1,223,057	1,163,829	1,323,780	1,367,786	1,514,131	1,532,723
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	100,440	113,040	123,347	167,597	136,870	148,107	160,195
Psychology, total	158,811	194,284	201,015	222,364	211,986	234,530	233,544
Biological aspects	37,095	43,165	43,060	49,053	52,874	60,754	65,305
Social aspects	74,333	96,012	98,252	108,914	108,448	111,832	116,505
Psychological sciences, n.e.c.	47,383	55,107	59,703	64,397	50,664	61,944	51,734
Physical sciences, total	1,241,032	1,230,771	1,154,627	1,156,641	1,117,683	1,198,757	1,147,215
Astronomy	2,739	14,067	15,110	17,687	12,314	17,296	17,214
Chemistry	203,044	225,378	229,038	235,211	232,314	278,005	259,595
Physics	914,999	856,143	802,560	781,356	769,786	795,465	780,593
Physical sciences, n.e.c.	120,250	135,183	107,919	122,387	103,269	107,991	89,813
Environmental sciences, total	619,182	703,999	732,567	730,604	734,291	756,339	899,274
Atmospheric sciences	241,960	276,767	280,888	309,123	307,123	271,640	329,675
Geological sciences	160,980	178,995	178,423	175,564	174,296	207,847	221,389
Oceanography	143,358	179,250	205,356	177,601	190,931	198,374	220,393
Environmental sciences, n.e.c.	72,884	68,987	67,900	68,316	61,941	78,478	127,817
Math & computer sciences, total	199,518	314,900	322,023	334,252	329,641	389,659	433,854
Mathematics	37,118	53,356	42,103	46,106	52,486	68,266	64,998
Computer sciences	109,739	164,199	171,025	169,296	167,218	205,077	336,919
Math & computer sciences, n.e.c.	52,661	97,345	108,895	118,850	109,937	116,316	31,937
Engineering, total	2,779,064	2,733,394	2,770,438	2,916,837	2,950,169	3,258,447	3,125,111
Aeronautical	634,873	546,512	549,310	573,014	570,776	658,913	657,452
Astronautical	344,418	383,167	474,429	575,867	526,938	618,529	518,490
Chemical	88,916	179,886	172,813	138,348	169,452	92,157	166,004
Civil	160,950	172,978	157,782	158,721	168,725	178,123	270,431
Electrical	499,679	481,924	518,096	610,893	577,130	669,259	493,105
Mechanical	126,341	178,791	152,955	146,226	157,222	156,525	176,907
Metallurgy & materials	153,740	227,360	216,562	152,215	226,595	266,161	294,343
Engineering, n.e.c.	770,147	562,776	528,491	561,553	553,331	618,780	548,379
Social sciences, total	303,758	319,330	302,045	350,526	339,013	396,421	483,992
Anthropology	1,740	2,129	2,437	2,919	2,221	1,780	1,851
Economics	117,627	125,378	104,989	119,551	124,822	129,093	160,051
Political science	6,664	8,879	7,487	5,763	7,058	8,063	6,792
Sociology	36,307	34,022	36,973	39,644	44,987	55,883	91,989
Social sciences, n.e.c.	141,420	148,922	150,159	182,649	159,925	201,602	223,309
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.	261,735	242,158	260,873	307,383	271,039	349,977	361,475

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

Table 3A. Federal obligations for applied research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	11,797,583	12,000,734	13,491,376	13,887,733	14,557,365	13,795,729	14,423,397
Life sciences, total	4,188,429	4,068,773	4,483,283	4,812,225	5,209,768	5,185,336	5,457,569
Biol & agricultural, total	2,223,017	2,115,974	2,271,526	2,351,087	2,566,041	2,707,552	2,598,886
Biol (excl environmental)	1,589,306	1,453,212	1,567,434	1,606,623	1,677,070	1,922,791	1,929,190
Environmental biology	272,809	309,390	333,336	387,803	586,208	498,270	376,449
Agricultural	360,902	353,372	370,756	356,661	302,763	286,491	293,247
Medical sciences, total	1,602,560	1,778,903	2,023,548	2,251,828	2,356,315	2,232,592	2,497,556
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	362,852	173,896	188,209	209,310	287,412	245,192	361,127
Psychology, total	256,880	175,578	303,897	302,249	344,585	233,489	251,512
Biological aspects	71,964	20,283	19,115	23,317	27,419	29,320	27,557
Social aspects	128,230	84,090	118,723	100,548	134,073	73,374	83,738
Psychological sciences, n.e.c.	56,686	71,205	166,059	178,384	183,093	130,795	140,217
Physical sciences, total	1,353,874	1,487,733	1,519,826	1,426,520	1,413,542	1,060,395	1,172,818
Astronomy	19,346	9,370	22,845	22,772	32,901	20,160	20,564
Chemistry	289,689	339,565	299,467	334,189	304,102	330,375	327,931
Physics	815,981	970,694	1,037,739	940,879	943,798	445,660	505,917
Physical sciences, n.e.c.	228,858	168,104	159,775	128,680	132,741	264,200	318,406
Environmental sciences, total	886,257	903,982	1,075,019	1,321,710	1,386,969	1,465,673	1,502,172
Atmospheric sciences	353,728	332,034	348,996	396,698	447,333	414,555	484,809
Geological sciences	229,749	209,206	242,563	350,127	396,601	394,276	303,514
Oceanography	201,043	248,927	260,196	306,601	219,079	265,170	294,177
Environmental sciences, n.e.c.	101,737	113,815	223,264	268,284	323,956	391,672	419,672
Math & computer sciences, total	477,598	678,869	714,138	779,885	976,085	932,010	1,010,466
Mathematics	63,229	90,486	68,944	94,663	94,638	91,843	63,385
Computer sciences	361,425	524,046	541,751	567,896	696,755	743,054	875,148
Math & computer sciences, n.e.c.	52,944	64,337	103,443	117,326	184,692	97,113	71,933
Engineering, total	3,710,760	3,727,148	4,292,014	4,189,002	4,259,509	4,068,879	4,107,261
Aeronautical	760,009	629,520	946,849	946,835	977,216	987,642	1,083,662
Astronautical	583,443	536,000	440,393	439,256	480,187	454,748	526,497
Chemical	202,631	192,523	172,742	167,274	179,396	155,374	166,928
Civil	245,736	276,864	213,323	239,806	269,298	247,282	230,194
Electrical	587,448	593,628	678,376	536,090	551,686	468,252	449,347
Mechanical	219,953	223,389	324,254	236,516	247,784	180,809	149,744
Metallurgy & materials	416,109	453,624	454,344	521,241	446,869	487,161	398,080
Engineering, n.e.c.	695,431	821,600	1,061,733	1,101,984	1,107,073	1,087,611	1,102,809
Social sciences, total	566,014	549,838	480,788	463,347	472,039	442,064	475,303
Anthropology	3,281	3,053	3,714	6,568	6,611	5,594	6,165
Economics	150,099	172,261	158,723	154,949	161,806	154,809	159,088
Political science	9,958	16,122	22,829	20,622	15,232	10,920	9,158
Sociology	155,738	70,486	65,623	54,961	33,533	27,924	17,712
Social sciences, n.e.c.	246,938	287,916	229,899	226,247	254,857	242,817	283,180
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.	357,771	408,813	622,411	592,795	494,868	407,883	446,296

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

Table 3A. Federal obligations for applied research, by detailed field of science & engineering: All agencies, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	15,309,257	16,083,861	18,900,781	22,755,600	25,635,237	27,400,330
Life sciences, total	5,704,150	6,225,338	7,915,730	10,221,833	11,512,950	13,281,039
Biol & agricultural, total	2,851,496	3,106,065	4,764,568	5,342,670	NA	NA
Biol (excl environmental)	2,053,580	2,240,738	3,888,908	4,427,667	NA	NA
Environmental biology	407,640	440,393	426,411	418,991	NA	NA
Agricultural	390,276	424,934	449,249	496,012	NA	NA
Medical sciences, total	2,603,892	2,844,718	2,539,968	3,776,608	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	248,762	274,555	611,194	1,102,555	NA	NA
Psychology, total	278,952	285,320	808,874	448,984	503,030	591,085
Biological aspects	14,271	5,800	2,511	3,220	NA	NA
Social aspects	84,628	56,715	41,705	54,283	NA	NA
Psychological sciences, n.e.c.	180,053	222,805	764,658	391,481	NA	NA
Physical sciences, total	1,268,298	976,358	1,317,334	1,273,642	1,481,089	1,331,590
Astronomy	25,229	39,447	86,279	109,040	NA	NA
Chemistry	301,507	260,322	459,792	288,131	NA	NA
Physics	551,951	528,093	640,974	699,466	NA	NA
Physical sciences, n.e.c.	389,611	148,496	130,289	177,005	NA	NA
Environmental sciences, total	1,533,245	1,479,532	1,490,349	1,588,637	1,814,999	1,860,535
Atmospheric sciences	519,242	505,453	387,316	516,378	NA	NA
Geological sciences	212,146	248,097	209,590	273,168	NA	NA
Oceanography	273,797	272,713	308,144	278,714	NA	NA
Environmental sciences, n.e.c.	528,060	453,269	585,299	520,377	NA	NA
Math & computer sciences, total	1,131,356	1,245,700	1,407,336	1,652,777	1,748,853	1,811,587
Mathematics	83,338	91,277	124,311	108,027	NA	NA
Computer sciences	979,612	1,077,775	1,196,571	1,437,197	NA	NA
Math & computer sciences, n.e.c.	68,406	76,648	86,454	107,553	NA	NA
Engineering, total	4,300,981	4,623,729	4,582,206	6,285,469	7,042,251	6,986,389
Aeronautical	1,311,194	1,278,020	1,141,127	2,060,348	NA	NA
Astronautical	563,159	554,420	426,286	718,870	NA	NA
Chemical	137,881	147,992	143,946	138,877	NA	NA
Civil	208,272	259,664	179,514	240,529	NA	NA
Electrical	425,427	513,079	567,742	642,777	NA	NA
Mechanical	142,881	140,826	195,931	190,444	NA	NA
Metallurgy & materials	310,855	306,858	400,265	489,737	NA	NA
Engineering, n.e.c.	1,201,312	1,422,870	1,527,395	1,803,887	NA	NA
Social sciences, total	581,330	608,326	742,383	730,190	732,241	745,502
Anthropology	4,664	4,901	1,854	1,548	NA	NA
Economics	188,940	171,226	197,717	191,534	NA	NA
Political science	15,600	15,395	17,522	13,577	NA	NA
Sociology	77,368	74,675	78,833	77,562	NA	NA
Social sciences, n.e.c.	294,758	342,129	446,457	445,969	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	510,945	639,558	636,569	554,068	799,824	792,603

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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	156,216	173,738	199,858	211,380	219,453	247,760	270,853
Life sciences, total	91,014	101,343	116,498	123,125	127,282	143,062	157,614
Biol & agricultural, total	89,249	99,442	114,181	120,616	124,773	140,224	154,433
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	1,765	1,901	2,317	2,509	2,509	2,838	3,181
Clinical medical	1,712	1,901	2,317	2,509	2,509	2,838	3,181
Other medical	53	0	0	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	27	26	16	12	18	0	52
Biological aspects	0	0	0	0	0	0	0
Social aspects	27	26	16	12	18	0	52
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	19,112	22,031	25,747	27,124	28,080	29,837	31,580
Astronomy	0	0	0	0	0	0	0
Chemistry	14,880	17,540	20,913	22,114	22,794	24,895	26,426
Physics	4,232	4,491	4,834	5,010	5,286	4,942	5,154
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	3,265	3,715	4,131	4,549	5,042	8,737	9,196
Atmospheric sciences	1,181	1,301	1,571	1,842	2,025	3,911	4,091
Geological sciences	2,084	2,414	756	681	730	744	3,846
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	1,804	2,026	2,287	4,082	1,259
Math & computer sciences, total	379	396	1,042	1,426	1,570	1,783	2,457
Mathematics	NA	NA	NA	NA	NA	NA	2,457
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	18,617	20,475	23,068	24,132	25,448	26,119	27,605
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	1,766	2,110	2,578	2,617	2,726	2,675	2,600
Civil	2,225	2,409	3,121	3,438	3,696	3,363	3,665
Electrical	54	39	199	209	229	197	244
Mechanical	988	1,161	1,354	1,471	1,601	1,993	2,140
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	13,584	14,756	15,816	16,397	17,196	17,891	18,956
Social sciences, total	23,594	25,361	29,128	30,737	31,870	38,216	42,341
Anthropology	0	0	0	9	8	0	0
Economics	22,468	24,219	27,373	28,994	29,819	36,031	40,094
Political science	0	22	20	15	26	0	0
Sociology	867	907	1,301	1,257	1,438	1,132	1,764
Social sciences, n.e.c.	259	213	434	462	579	1,053	483
History	106	89	157	210	182	362	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	153	124	277	252	397	691	NA
Other sciences, n.e.c.	208	391	228	275	143	6	8

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

Table 3B. Federal obligations for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	319,570	351,780	375,500	381,785	426,856	435,708	455,539
Life sciences, total	189,787	221,316	242,658	250,000	274,156	285,438	301,349
Biol & agricultural, total	186,216	214,965	237,527	244,816	266,910	277,347	292,795
Biol (excl environmental)	NA	22,922	29,389	29,113	27,631	25,495	25,091
Environmental biology	NA	34,164	51,640	47,030	43,705	35,640	35,526
Agricultural	NA	157,879	156,498	168,673	195,574	216,212	232,178
Medical sciences, total	3,571	4,157	5,131	5,184	7,246	8,091	8,554
Clinical medical	3,571	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	2,194	0	0	0	0	0
Psychology, total	59	70	71	72	0	69	65
Biological aspects	0	0	0	0	0	0	0
Social aspects	59	70	71	72	0	69	65
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	35,976	26,704	26,870	26,866	25,024	26,033	27,619
Astronomy	0	0	0	0	0	0	0
Chemistry	29,855	24,260	24,950	24,875	22,664	23,953	25,605
Physics	6,121	2,444	1,920	1,991	2,360	2,080	2,014
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	9,720	10,338	9,425	9,395	10,421	8,952	8,541
Atmospheric sciences	3,064	3,579	2,996	2,691	2,966	2,851	2,909
Geological sciences	5,226	6,759	6,429	6,704	7,455	6,101	5,632
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	1,430	0	0	0	0	0	0
Math & computer sciences, total	2,928	3,548	2,935	1,894	16,079	14,768	9,073
Mathematics	2,928	3,548	2,935	1,894	16,079	14,768	9,073
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	32,678	32,141	32,173	32,162	34,161	32,938	34,766
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	3,512	2,967	3,343	3,062	2,837	2,846	2,929
Civil	4,352	4,275	3,150	3,057	3,607	2,901	2,938
Electrical	259	170	243	171	181	177	193
Mechanical	2,347	1,936	2,398	2,637	2,749	2,791	2,803
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	22,208	22,793	23,039	23,235	24,787	24,223	25,903
Social sciences, total	48,422	57,663	61,368	61,396	67,015	67,510	74,126
Anthropology	0	13	0	15	1	0	0
Economics	45,603	53,241	56,897	56,696	62,382	63,081	69,790
Political science	0	0	71	72	225	278	235
Sociology	2,293	3,326	3,472	3,578	3,727	3,556	3,370
Social sciences, n.e.c.	526	1,083	928	1,035	680	595	731
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	0	0	0	0

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

Table 3B. Federal obligations for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	442,238	465,552	463,549	473,443	504,618	517,294	542,096
Life sciences, total	291,965	331,231	327,432	336,008	362,864	374,752	387,206
Biol & agricultural, total	281,487	320,811	317,357	325,203	353,370	365,319	376,474
Biol (excl environmental)	30,005	29,081	30,409	36,697	41,802	42,026	49,793
Environmental biology	60,226	71,839	77,079	82,817	86,873	91,341	97,103
Agricultural	191,256	219,891	209,869	205,689	224,695	231,952	229,578
Medical sciences, total	10,478	10,420	10,075	10,805	9,494	9,433	10,732
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	0	0
Psychology, total	127	131	135	147	160	147	177
Biological aspects	0	0	0	0	160	0	0
Social aspects	127	131	135	147	0	147	177
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	27,346	26,387	28,560	34,375	32,321	31,088	34,627
Astronomy	0	0	0	0	0	0	0
Chemistry	25,472	24,391	26,696	32,084	30,157	29,099	32,395
Physics	1,874	1,996	1,864	2,291	2,164	1,989	2,232
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	7,748	7,268	6,830	6,697	7,146	6,774	7,677
Atmospheric sciences	2,706	2,544	2,266	2,290	2,424	2,359	2,396
Geological sciences	5,042	4,724	4,564	4,407	4,722	4,415	5,281
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	9,578	9,694	9,496	6,729	7,042	6,558	7,445
Mathematics	9,578	8,875	9,007	6,093	6,551	5,900	6,642
Computer sciences	0	819	489	636	491	658	803
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	35,735	18,343	20,517	21,285	21,559	22,791	25,428
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	2,739	2,514	3,674	4,486	5,167	4,794	4,863
Civil	2,708	2,665	3,040	3,769	3,602	3,386	3,699
Electrical	174	99	131	457	527	203	234
Mechanical	2,632	2,399	2,121	2,583	2,481	2,246	2,791
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	27,482	10,666	11,551	9,990	9,782	12,162	13,841
Social sciences, total	69,739	72,498	70,579	68,202	73,526	75,184	79,536
Anthropology	0	0	0	0	0	0	0
Economics	62,055	64,930	62,842	61,157	66,080	67,828	72,350
Political science	118	418	261	324	243	299	354
Sociology	6,835	6,733	6,834	6,374	6,707	6,325	6,029
Social sciences, n.e.c.	731	417	642	347	496	732	803
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	0	0	0	0

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

Table 3B. Federal obligations for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	617,887	665,843	635,784	716,172	703,796	670,024	700,009
Life sciences, total	445,361	458,643	433,725	485,292	477,057	451,537	483,134
Biol & agricultural, total	437,114	447,293	422,482	472,397	464,813	439,967	472,905
Biol (excl environmental)	66,866	52,540	49,521	54,275	54,123	51,251	61,667
Environmental biology	112,347	116,377	118,808	147,290	146,229	141,300	144,094
Agricultural	257,901	278,376	254,153	270,832	264,461	247,416	267,144
Medical sciences, total	8,247	11,350	11,243	12,895	12,239	11,565	10,229
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	5	5	0
Psychology, total	196	343	430	407	403	410	320
Biological aspects	0	0	0	0	0	0	0
Social aspects	196	343	430	407	403	410	320
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	41,661	44,212	44,533	50,433	48,136	49,937	49,900
Astronomy	0	0	17	0	0	0	0
Chemistry	39,042	41,760	42,132	47,439	45,262	46,874	47,001
Physics	2,619	2,452	2,384	2,994	2,874	3,063	2,899
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	9,173	7,589	7,681	8,796	9,293	8,859	8,616
Atmospheric sciences	3,284	6,539	6,654	7,305	7,897	7,505	7,417
Geological sciences	5,889	1,050	1,027	1,491	1,392	1,350	1,199
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	4	4	0
Math & computer sciences, total	8,344	12,444	11,435	14,419	14,376	13,258	12,356
Mathematics	7,465	10,780	10,596	13,402	13,454	12,394	12,356
Computer sciences	879	1,664	839	1,017	922	864	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	28,605	43,647	40,854	52,409	54,656	50,040	46,120
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	5,267	4,469	3,388	4,650	5,347	5,675	5,303
Civil	4,020	3,758	3,996	5,397	5,126	4,714	4,314
Electrical	335	390	388	231	237	177	227
Mechanical	2,680	2,595	2,520	2,922	2,936	2,756	2,674
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	16,303	32,435	30,562	39,209	41,010	36,718	33,602
Social sciences, total	84,547	97,000	95,090	100,883	96,395	92,909	96,558
Anthropology	0	18	17	246	245	220	225
Economics	77,929	88,994	88,756	93,573	90,526	86,718	88,760
Political science	373	0	0	0	0	0	0
Sociology	6,180	7,988	6,317	7,064	5,624	5,971	7,573
Social sciences, n.e.c.	65	0	0	0	0	0	0
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	1,965	2,036	3,533	3,480	3,074	3,005

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

Table 3B. Federal obligations for applied research, by detailed field of science & engineering: Department of Agriculture, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	730,142	744,764	803,519	900,620	924,659	861,222
Life sciences, total	508,674	547,333	600,311	676,372	699,714	633,850
Biol & agricultural, total	498,229	538,173	589,062	663,377	NA	NA
Biol (excl environmental)	53,719	58,931	80,201	92,119	NA	NA
Environmental biology	156,477	142,135	164,222	154,741	NA	NA
Agricultural	288,033	337,107	344,639	416,517	NA	NA
Medical sciences, total	10,445	9,160	11,249	12,995	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	370	229	259	276	312	292
Biological aspects	0	0	259	276	NA	NA
Social aspects	370	229	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	46,646	45,801	36,586	44,971	49,092	49,424
Astronomy	0	0	0	0	NA	NA
Chemistry	43,406	43,431	34,560	42,787	NA	NA
Physics	3,240	2,370	2,026	2,184	NA	NA
Physical sciences, n.e.c.	0	0	0	0	NA	NA
Environmental sciences, total	7,304	5,654	5,523	6,566	6,824	6,415
Atmospheric sciences	6,026	4,839	4,642	5,629	NA	NA
Geological sciences	1,278	815	881	937	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	0	0	0	0	NA	NA
Math & computer sciences, total	12,851	9,094	10,223	10,932	12,083	11,626
Mathematics	12,851	9,094	10,223	10,932	NA	NA
Computer sciences	0	0	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	45,523	37,109	34,999	44,139	45,322	44,193
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	5,387	4,845	2,592	2,801	NA	NA
Civil	4,773	3,308	3,095	3,303	NA	NA
Electrical	236	209	306	333	NA	NA
Mechanical	2,920	2,476	2,080	2,221	NA	NA
Metallurgy & materials	0	0	0	0	NA	NA
Engineering, n.e.c.	32,207	26,271	26,926	35,481	NA	NA
Social sciences, total	105,549	97,545	113,355	114,959	108,592	112,875
Anthropology	240	148	168	178	NA	NA
Economics	97,990	89,752	100,955	105,327	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	7,319	7,645	12,232	9,454	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	3,225	1,999	2,263	2,405	2,720	2,547

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 for applied research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	75,951	97,963	135,466	123,511	121,508	136,311	144,712
Life sciences, total	24,157	29,929	42,122	38,773	30,155	40,980	41,920
Biol & agricultural, total	24,157	29,929	42,052	38,773	30,155	40,980	41,920
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	0	0	70	0	0	0	0
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	70	0	0	0	0
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	987	1,173	567	59	74	71	167
Biological aspects	529	656	97	0	0	0	0
Social aspects	458	517	470	59	74	71	167
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	6,067	7,423	15,927	18,781	18,262	16,175	18,044
Astronomy	0	0	173	335	348	380	320
Chemistry	3,709	3,466	6,398	8,395	7,409	5,120	5,812
Physics	2,352	3,833	9,314	10,051	10,505	10,675	11,912
Physical sciences, n.e.c.	6	124	42	0	0	0	0
Environmental sciences, total	22,090	28,159	38,804	39,034	46,886	53,010	56,872
Atmospheric sciences	15,109	18,715	25,808	22,648	29,867	34,916	36,865
Geological sciences	4,545	6,420	8,844	1,946	917	1,355	1,339
Oceanography	2,436	3,024	4,152	14,440	16,102	16,739	18,668
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	927	662	1,065	1,260	1,170	2,187	3,760
Mathematics	NA	NA	NA	NA	NA	NA	1,730
Computer sciences	NA	NA	NA	NA	NA	NA	2,030
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	12,854	23,137	31,103	20,073	19,834	16,129	15,806
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	956	1,185	1,625	0	80	80	62
Civil	3,967	11,614	7,203	3,540	5,233	5,155	4,959
Electrical	4,357	3,657	10,700	4,290	3,490	2,793	3,007
Mechanical	984	1,242	2,968	1,140	764	823	727
Metallurgy & materials	391	119	1,926	1,243	901	1,076	1,182
Engineering, n.e.c.	2,199	5,320	6,681	9,860	9,366	6,202	5,869
Social sciences, total	7,300	4,806	5,775	5,531	5,127	7,739	6,959
Anthropology	0	0	0	0	0	0	0
Economics	6,904	4,284	5,326	5,405	4,965	7,582	6,739
Political science	0	0	0	0	0	0	0
Sociology	396	522	449	126	162	157	220
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	1,569	2,674	103	0	0	20	1,184

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

Table 3C. Federal obligations for applied research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	163,827	180,969	207,558	238,523	233,171	259,188	265,620
Life sciences, total	49,790	48,347	53,899	53,592	55,984	58,827	12,175
Biol & agricultural, total	49,790	48,347	53,899	53,592	55,984	58,659	10,552
Biol (excl environmental)	NA	0	0	0	153	134	23
Environmental biology	NA	0	0	0	531	1,544	2,039
Agricultural	NA	48,347	53,899	53,592	55,300	56,981	8,490
Medical sciences, total	0	0	0	0	0	168	1,623
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	158	154	104	119	219	133	233
Biological aspects	0	0	0	0	0	0	72
Social aspects	158	154	104	119	219	133	161
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	19,608	26,835	27,624	27,385	30,544	32,645	33,875
Astronomy	173	968	100	114	108	127	133
Chemistry	6,714	7,297	7,345	7,286	8,920	8,820	9,324
Physics	12,721	18,570	20,127	19,910	21,516	23,698	24,418
Physical sciences, n.e.c.	0	0	52	75	0	0	0
Environmental sciences, total	61,652	71,182	79,592	105,540	103,654	119,170	152,866
Atmospheric sciences	37,478	34,931	35,992	40,483	42,514	53,434	50,844
Geological sciences	1,146	1,527	1,797	1,880	1,873	2,484	2,051
Oceanography	23,028	34,379	41,720	63,140	59,190	62,952	94,182
Environmental sciences, n.e.c.	0	345	83	37	77	300	5,789
Math & computer sciences, total	4,748	4,875	5,819	7,739	9,963	12,443	11,302
Mathematics	1,839	3,828	4,474	4,659	5,770	5,820	5,648
Computer sciences	2,909	1,047	1,345	1,909	2,504	4,749	3,711
Math & computer sciences, n.e.c.	0	0	0	1,171	1,689	1,874	1,943
Engineering, total	21,301	21,901	29,665	37,680	26,673	30,242	35,774
Aeronautical	0	20	29	85	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	444	389	766	720	1,023	1,880	1,313
Civil	5,137	5,474	8,682	12,084	3,620	5,333	8,817
Electrical	3,738	4,364	7,557	13,112	10,950	10,006	8,488
Mechanical	1,269	1,505	3,049	1,487	1,730	1,284	2,082
Metallurgy & materials	1,693	2,295	2,465	4,586	4,609	5,952	6,855
Engineering, n.e.c.	9,020	7,854	7,117	5,606	4,741	5,787	8,219
Social sciences, total	5,826	7,633	10,743	6,435	4,087	3,624	7,635
Anthropology	0	0	0	0	0	0	0
Economics	5,610	7,424	10,463	6,186	3,678	3,262	6,178
Political science	0	0	140	89	116	184	1,076
Sociology	216	209	140	160	293	178	219
Social sciences, n.e.c.	0	0	0	0	0	0	162
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.	744	42	112	33	2,047	2,104	11,760

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

Table 3C. Federal obligations for applied research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	276,088	300,952	312,936	312,800	311,472	321,879	345,612
Life sciences, total	13,446	14,633	17,113	12,634	12,274	14,401	14,303
Biol & agricultural, total	12,404	12,495	15,583	11,630	10,999	12,969	12,917
Biol (excl environmental)	0	0	2,599	2,035	0	0	0
Environmental biology	6,420	2,320	2,697	2,818	5,097	6,685	5,975
Agricultural	5,984	10,175	10,287	6,777	5,902	6,284	6,942
Medical sciences, total	1,042	2,138	1,530	1,004	1,275	1,432	1,386
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	0	0
Psychology, total	212	232	234	210	236	185	342
Biological aspects	46	49	50	0	0	0	163
Social aspects	166	183	184	210	236	185	179
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	36,939	35,208	35,096	34,227	40,503	39,498	42,246
Astronomy	146	73	84	141	134	116	145
Chemistry	10,543	10,457	10,859	15,269	15,316	15,228	15,556
Physics	26,250	24,678	24,153	18,817	25,053	24,144	26,545
Physical sciences, n.e.c.	0	0	0	0	0	10	0
Environmental sciences, total	160,743	183,463	200,976	205,349	193,780	200,434	217,305
Atmospheric sciences	59,870	67,686	62,452	59,256	46,141	50,856	56,694
Geological sciences	2,277	2,470	4,491	5,957	4,424	4,246	4,991
Oceanography	90,477	104,506	128,965	136,696	140,881	142,738	152,814
Environmental sciences, n.e.c.	8,119	8,801	5,068	3,440	2,334	2,594	2,806
Math & computer sciences, total	12,334	11,858	11,452	11,964	12,766	12,734	12,660
Mathematics	7,277	6,213	5,646	5,456	5,485	4,940	4,460
Computer sciences	3,305	2,624	3,390	4,168	4,752	5,368	4,938
Math & computer sciences, n.e.c.	1,752	3,021	2,416	2,340	2,529	2,426	3,262
Engineering, total	33,224	38,148	37,970	37,422	44,726	47,888	51,565
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	1,469	1,660	2,145	2,131	1,966	2,555	2,828
Civil	7,057	6,651	4,843	4,492	4,567	4,502	5,860
Electrical	9,048	11,001	9,682	9,766	11,052	10,956	11,320
Mechanical	1,969	2,803	649	721	909	1,233	1,496
Metallurgy & materials	5,068	5,421	6,355	7,290	9,463	10,619	10,924
Engineering, n.e.c.	8,613	10,612	14,296	13,022	16,769	18,023	19,137
Social sciences, total	7,640	4,942	5,068	7,146	3,175	2,844	3,226
Anthropology	0	0	0	0	0	0	0
Economics	6,373	3,587	3,680	6,130	2,313	2,003	2,333
Political science	598	637	656	457	333	567	624
Sociology	227	247	248	241	283	12	0
Social sciences, n.e.c.	442	471	484	318	246	262	269
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.	11,550	12,468	5,027	3,848	4,012	3,895	3,965

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

Table 3C. Federal obligations for applied research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	415,374	561,392	544,874	678,161	853,060	813,064	768,823
Life sciences, total	68,242	97,883	93,588	111,153	150,274	160,883	138,944
Biol & agricultural, total	65,659	96,224	88,806	105,677	130,149	144,084	112,662
Biol (excl environmental)	10,269	22,981	16,626	22,474	37,594	57,932	24,386
Environmental biology	41,451	60,576	58,872	62,369	70,708	70,621	64,969
Agricultural	13,939	12,667	13,308	20,834	21,847	15,531	23,307
Medical sciences, total	2,583	1,659	4,344	4,785	19,284	16,799	21,586
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	438	691	841	0	4,696
Psychology, total	374	217	257	221	228	139	205
Biological aspects	0	0	0	0	0	0	0
Social aspects	374	217	257	221	228	139	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	205
Physical sciences, total	44,205	49,432	55,344	67,595	74,408	78,415	76,068
Astronomy	140	0	0	1,651	0	0	0
Chemistry	16,812	18,851	19,764	24,862	31,883	34,655	31,427
Physics	27,253	29,854	35,575	41,077	41,787	43,322	44,142
Physical sciences, n.e.c.	0	727	5	5	738	438	499
Environmental sciences, total	184,690	252,525	224,712	301,811	290,536	258,424	256,984
Atmospheric sciences	74,854	105,426	68,679	96,990	140,884	107,209	111,920
Geological sciences	7,618	4,149	5,391	4,089	43,368	36,631	3,840
Oceanography	97,906	139,714	147,560	191,983	95,930	104,934	133,215
Environmental sciences, n.e.c.	4,312	3,236	3,082	8,749	10,354	9,650	8,009
Math & computer sciences, total	25,994	33,792	37,686	47,646	101,673	75,625	76,444
Mathematics	8,943	11,252	11,394	11,794	12,390	12,775	10,538
Computer sciences	13,481	19,148	22,669	31,274	83,341	56,543	58,463
Math & computer sciences, n.e.c.	3,570	3,392	3,623	4,578	5,942	6,307	7,443
Engineering, total	59,014	77,500	86,062	99,869	179,671	181,557	165,623
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	124	0	0	0	0	0
Chemical	3,508	4,017	5,656	4,773	11,354	12,844	18,494
Civil	5,237	4,522	5,959	8,382	11,637	10,274	13,626
Electrical	14,294	19,842	23,183	27,769	55,798	49,028	49,957
Mechanical	2,683	2,772	4,839	5,128	5,612	4,378	3,703
Metallurgy & materials	13,627	18,729	21,945	25,661	55,597	66,247	46,308
Engineering, n.e.c.	19,665	27,494	24,480	28,156	39,673	38,786	33,535
Social sciences, total	12,050	16,165	15,205	16,777	18,827	19,124	18,225
Anthropology	0	0	0	0	0	0	0
Economics	4,590	4,812	4,165	4,320	5,362	5,479	4,946
Political science	4,189	6,389	6,325	6,561	7,690	7,709	7,092
Sociology	2,987	4,737	4,473	5,536	5,229	5,936	5,578
Social sciences, n.e.c.	284	227	242	360	546	0	609
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.	20,805	33,878	32,020	33,089	37,443	38,897	36,330

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

Table 3C. Federal obligations for applied research, by detailed field of science & engineering: Department of Commerce, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	767,400	798,872	849,554	763,411	835,075	866,357
Life sciences, total	146,121	140,678	160,897	173,571	170,543	152,488
Biol & agricultural, total	131,091	128,832	152,948	166,279	NA	NA
Biol (excl environmental)	31,044	33,221	40,451	30,814	NA	NA
Environmental biology	75,544	72,002	85,070	122,006	NA	NA
Agricultural	24,503	23,609	27,427	13,459	NA	NA
Medical sciences, total	11,312	8,201	6,719	6,083	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,718	3,645	1,230	1,209	NA	NA
Psychology, total	402	1,265	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	402	1,265	0	0	NA	NA
Physical sciences, total	75,399	84,509	84,222	76,911	80,364	82,353
Astronomy	0	0	0	0	NA	NA
Chemistry	31,901	37,146	36,458	25,982	NA	NA
Physics	43,295	47,232	46,946	49,813	NA	NA
Physical sciences, n.e.c.	203	131	818	1,116	NA	NA
Environmental sciences, total	249,895	291,707	304,326	278,287	340,814	374,042
Atmospheric sciences	105,181	115,966	114,783	112,734	NA	NA
Geological sciences	4,180	7,717	4,420	34,225	NA	NA
Oceanography	126,409	106,278	145,773	90,433	NA	NA
Environmental sciences, n.e.c.	14,125	61,746	39,350	40,895	NA	NA
Math & computer sciences, total	76,404	75,236	76,171	73,141	73,568	71,187
Mathematics	12,610	12,509	14,777	4,624	NA	NA
Computer sciences	56,336	57,290	54,914	59,274	NA	NA
Math & computer sciences, n.e.c.	7,458	5,437	6,480	9,243	NA	NA
Engineering, total	155,147	145,920	153,252	151,094	159,734	179,216
Aeronautical	0	5	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	5,794	4,656	5,562	4,386	NA	NA
Civil	23,003	14,857	15,290	18,435	NA	NA
Electrical	41,333	41,416	45,079	52,962	NA	NA
Mechanical	3,188	3,264	3,097	4,965	NA	NA
Metallurgy & materials	36,082	33,009	36,603	37,907	NA	NA
Engineering, n.e.c.	45,747	48,713	47,621	32,439	NA	NA
Social sciences, total	21,448	19,289	22,554	10,407	10,052	7,071
Anthropology	0	0	0	0	NA	NA
Economics	5,414	5,018	5,982	2,389	NA	NA
Political science	8,228	8,011	9,242	1,544	NA	NA
Sociology	6,499	6,260	7,330	772	NA	NA
Social sciences, n.e.c.	1,307	0	0	5,702	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	42,584	40,268	48,132	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 3D. Federal obligations for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	1,012,887	987,124	1,175,780	1,129,368	1,131,465	1,130,942	1,200,596
Life sciences, total	59,861	52,334	59,637	76,830	78,061	63,214	75,633
Biol & agricultural, total	33,671	26,425	30,063	21,654	25,264	23,812	24,264
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	26,025	25,497	29,329	55,176	52,620	39,097	50,946
Clinical medical	24,374	23,977	27,396	46,510	44,344	25,880	29,977
Other medical	1,651	1,520	1,933	8,666	8,276	13,217	20,969
Life sciences, n.e.c.	165	412	245	0	177	305	423
Psychology, total	18,665	18,071	17,610	27,619	22,853	30,080	29,684
Biological aspects	3,782	3,056	2,953	3,246	2,841	804	706
Social aspects	4,934	5,488	4,017	11,977	7,545	15,551	15,951
Psychological sciences, n.e.c.	9,949	9,527	10,640	12,396	12,467	13,725	13,027
Physical sciences, total	196,009	162,836	227,722	178,188	161,698	175,419	186,515
Astronomy	447	630	6,450	323	442	2,259	495
Chemistry	31,321	31,101	34,212	34,317	31,873	30,950	35,448
Physics	142,506	96,532	137,814	100,977	99,817	108,952	107,605
Physical sciences, n.e.c.	21,735	34,573	49,246	42,571	29,566	33,258	42,967
Environmental sciences, total	79,487	88,421	94,651	79,744	70,505	74,100	88,536
Atmospheric sciences	27,589	28,858	31,776	34,294	33,143	41,882	43,055
Geological sciences	22,116	23,187	21,348	16,471	12,919	10,976	18,132
Oceanography	16,922	19,640	24,051	16,278	17,505	15,857	25,390
Environmental sciences, n.e.c.	12,860	16,736	17,476	12,701	6,938	5,385	1,959
Math & computer sciences, total	28,495	34,899	38,924	39,264	49,212	46,750	55,713
Mathematics	NA	NA	NA	NA	NA	NA	14,224
Computer sciences	NA	NA	NA	NA	NA	NA	40,544
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	945
Engineering, total	595,230	591,349	681,533	670,629	697,023	671,969	698,703
Aeronautical	82,250	74,004	82,882	91,533	94,879	105,342	100,679
Astronautical	16,458	9,727	9,984	9,750	10,519	9,797	10,166
Chemical	30,149	27,142	19,783	19,958	21,199	11,810	15,559
Civil	13,513	11,942	18,877	22,102	22,433	25,010	34,288
Electrical	180,720	177,632	222,007	200,908	192,167	196,878	179,887
Mechanical	92,929	100,123	86,064	126,800	90,922	100,242	117,226
Metallurgy & materials	44,208	46,525	43,104	43,368	39,662	43,739	44,684
Engineering, n.e.c.	135,003	144,254	198,832	156,210	225,242	179,151	196,214
Social sciences, total	2,876	3,237	5,435	4,706	6,516	3,733	3,767
Anthropology	0	217	392	0	402	0	18
Economics	646	848	879	557	1,164	1,068	854
Political science	889	661	529	908	264	1,347	891
Sociology	849	955	2,655	2,686	3,976	392	314
Social sciences, n.e.c.	492	556	980	555	710	926	1,690
History	0	0	0	0	0	0	NA
Linguistics	0	0	176	8	0	18	NA
Other social sciences	492	556	804	547	710	908	NA
Other sciences, n.e.c.	32,264	35,977	50,268	52,388	45,597	65,677	62,045

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

Table 3D. Federal obligations for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

Page 2 of 5

Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,342,591	1,413,648	1,542,571	1,721,428	1,996,615	2,266,137	2,437,029
Life sciences, total	86,060	87,038	91,086	100,371	117,443	134,576	140,287
Biol & agricultural, total	37,700	29,009	36,728	41,958	51,584	21,912	17,453
Biol (excl environmental)	NA	27,288	34,101	38,757	47,693	18,208	15,006
Environmental biology	NA	1,541	2,452	2,975	3,643	3,476	2,447
Agricultural	NA	180	175	226	248	228	0
Medical sciences, total	47,285	54,757	50,830	54,495	65,761	76,072	83,639
Clinical medical	31,170	NA	NA	NA	NA	NA	NA
Other medical	16,115	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,075	3,272	3,528	3,918	98	36,592	39,195
Psychology, total	36,567	35,349	40,270	45,062	52,385	62,358	67,723
Biological aspects	697	1,181	621	0	0	0	0
Social aspects	18,815	18,828	26,997	38,505	43,168	49,765	54,844
Psychological sciences, n.e.c.	17,055	15,340	12,652	6,557	9,217	12,593	12,879
Physical sciences, total	215,279	225,772	237,016	243,399	335,188	500,046	561,991
Astronomy	1,189	1,304	1,250	1,498	1,200	1,250	1,133
Chemistry	33,685	38,891	59,487	42,549	47,218	66,601	66,260
Physics	119,766	118,186	165,477	158,217	220,454	334,984	379,741
Physical sciences, n.e.c.	60,639	67,391	10,802	41,135	66,316	97,211	114,857
Environmental sciences, total	64,746	69,051	75,107	98,677	107,066	109,205	151,685
Atmospheric sciences	29,683	29,741	41,866	61,195	63,009	63,915	100,961
Geological sciences	16,981	14,974	10,495	10,722	21,916	22,889	25,782
Oceanography	16,646	18,256	14,099	18,889	18,306	18,753	17,039
Environmental sciences, n.e.c.	1,436	6,080	8,647	7,871	3,835	3,648	7,903
Math & computer sciences, total	64,490	63,946	69,058	90,483	88,160	113,858	120,190
Mathematics	8,373	6,665	5,576	7,266	7,537	7,853	6,319
Computer sciences	47,079	45,599	50,442	69,336	56,984	64,613	69,046
Math & computer sciences, n.e.c.	9,038	11,682	13,040	13,881	23,639	41,392	44,825
Engineering, total	794,913	850,410	909,955	995,489	1,135,983	1,245,038	1,319,720
Aeronautical	117,897	124,562	167,716	186,702	204,101	218,344	279,460
Astronautical	24,596	26,876	35,930	67,813	68,409	75,222	81,434
Chemical	19,522	19,919	25,764	14,539	21,807	28,102	33,608
Civil	22,885	22,836	26,450	28,603	32,245	37,262	41,383
Electrical	268,119	310,676	322,832	395,636	426,543	432,200	455,923
Mechanical	116,649	139,045	120,583	98,640	109,272	114,742	106,598
Metallurgy & materials	55,758	44,150	38,560	46,825	65,717	79,812	82,569
Engineering, n.e.c.	169,487	162,346	172,120	156,731	207,889	259,354	238,745
Social sciences, total	2,054	4,282	6,484	686	765	1,129	3,939
Anthropology	0	0	0	0	0	0	0
Economics	218	1,033	100	101	143	703	1,742
Political science	1,404	2,003	1,940	71	0	0	1,106
Sociology	432	1,246	489	514	577	376	322
Social sciences, n.e.c.	0	0	3,955	0	45	50	769
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.	78,482	77,800	113,595	147,261	159,625	99,927	71,494

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

Table 3D. Federal obligations for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	2,200,674	2,306,876	2,303,348	2,439,957	2,362,201	2,708,197	2,581,608
Life sciences, total	154,655	168,160	163,094	198,067	190,286	235,684	185,383
Biol & agricultural, total	23,157	24,908	23,933	32,607	33,436	56,093	32,366
Biol (excl environmental)	20,362	21,660	20,025	28,665	26,955	5,737	26,528
Environmental biology	2,795	3,248	3,908	3,942	6,481	50,356	5,838
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	89,470	104,512	98,367	123,106	113,484	134,630	110,214
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	42,028	38,740	40,794	42,354	43,366	44,961	42,803
Psychology, total	66,194	86,163	81,315	78,996	77,193	80,250	70,009
Biological aspects	452	0	0	865	830	822	2,759
Social aspects	56,603	74,977	68,582	76,833	75,118	69,535	67,250
Psychological sciences, n.e.c.	9,139	11,186	12,733	1,298	1,245	9,893	0
Physical sciences, total	477,223	411,969	400,047	377,546	345,017	348,460	328,144
Astronomy	1,085	1,178	1,065	1,297	1,300	1,672	1,367
Chemistry	79,821	86,265	90,046	76,914	62,462	64,394	55,444
Physics	285,177	210,198	223,097	201,969	201,465	205,379	222,917
Physical sciences, n.e.c.	111,140	114,328	85,839	97,366	79,790	77,015	48,416
Environmental sciences, total	107,092	154,107	154,407	127,748	124,035	148,721	139,705
Atmospheric sciences	64,366	68,198	64,916	72,646	68,863	68,565	67,722
Geological sciences	16,589	35,255	34,079	34,554	34,157	56,349	54,993
Oceanography	14,873	36,331	40,582	8,210	7,738	8,541	12,329
Environmental sciences, n.e.c.	11,264	14,323	14,830	12,338	13,277	15,266	4,661
Math & computer sciences, total	104,852	200,124	230,217	226,631	223,586	273,697	308,798
Mathematics	4,690	6,929	4,462	6,658	8,493	17,760	14,766
Computer sciences	58,891	104,041	124,156	111,427	112,558	145,665	270,013
Math & computer sciences, n.e.c.	41,271	89,154	101,599	108,546	102,535	110,272	24,019
Engineering, total	1,208,097	1,196,816	1,162,720	1,275,081	1,295,464	1,462,108	1,404,278
Aeronautical	222,273	170,876	169,854	217,886	201,668	210,549	199,201
Astronautical	69,905	63,865	59,750	61,092	79,861	76,410	75,972
Chemical	25,756	34,579	31,699	29,874	27,127	40,176	32,200
Civil	41,605	61,116	54,161	55,642	55,769	59,859	149,246
Electrical	433,366	421,228	456,229	553,558	520,749	608,542	436,134
Mechanical	93,935	135,855	119,109	102,360	111,168	116,585	138,615
Metallurgy & materials	92,863	172,453	148,820	96,668	168,598	211,311	224,708
Engineering, n.e.c.	228,394	136,844	123,098	158,001	130,524	138,676	148,202
Social sciences, total	2,126	4,711	3,723	2,901	2,655	2,669	1,760
Anthropology	0	0	0	0	0	0	0
Economics	665	1,013	1,466	1,353	1,310	1,399	1,056
Political science	1,129	3,214	1,280	645	471	338	0
Sociology	332	484	977	903	874	932	704
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	80,435	84,826	107,825	152,987	103,965	156,608	143,531

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

Table 3D. Federal obligations for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	2,723,754	2,974,461	3,515,246	3,039,950	2,950,098	2,857,639	2,786,947
Life sciences, total	189,087	201,894	212,513	192,328	231,606	175,932	201,910
Biol & agricultural, total	26,594	46,170	69,525	43,094	48,522	32,307	44,739
Biol (excl environmental)	20,958	26,586	41,708	12,599	16,990	19,355	31,822
Environmental biology	5,636	19,584	27,817	30,495	31,532	12,902	11,527
Agricultural	0	0	0	0	0	50	1,390
Medical sciences, total	119,461	155,559	137,417	139,885	144,407	116,215	134,297
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	43,032	165	5,571	9,349	38,677	27,410	22,874
Psychology, total	72,018	86,319	71,417	58,038	88,962	43,130	48,567
Biological aspects	3,137	3,930	3,520	3,403	3,627	10,524	10,603
Social aspects	68,881	65,723	67,367	51,643	80,127	29,519	34,357
Psychological sciences, n.e.c.	0	16,666	530	2,992	5,208	3,087	3,607
Physical sciences, total	394,395	426,542	469,039	391,176	351,906	206,489	222,303
Astronomy	0	0	0	0	0	0	0
Chemistry	69,884	57,908	63,709	68,093	52,263	26,920	44,160
Physics	270,032	305,412	366,602	287,186	268,857	144,917	119,956
Physical sciences, n.e.c.	54,479	63,222	38,728	35,897	30,786	34,652	58,187
Environmental sciences, total	110,371	84,987	94,206	97,586	95,849	239,444	239,249
Atmospheric sciences	52,944	17,110	24,087	25,028	21,079	26,130	28,266
Geological sciences	38,396	30,637	30,298	18,817	20,858	29,753	2,769
Oceanography	12,667	13,645	14,457	16,971	18,914	51,891	55,315
Environmental sciences, n.e.c.	6,364	23,595	25,364	36,770	34,998	131,670	152,899
Math & computer sciences, total	248,097	387,997	410,139	446,581	530,668	481,844	465,227
Mathematics	9,421	32,809	28,513	33,632	44,661	45,368	16,883
Computer sciences	218,781	335,283	361,281	381,217	442,154	407,466	434,375
Math & computer sciences, n.e.c.	19,895	19,905	20,345	31,732	43,853	29,010	13,969
Engineering, total	1,577,348	1,639,579	1,995,888	1,704,900	1,533,309	1,593,543	1,493,546
Aeronautical	197,536	129,083	190,514	129,279	106,112	199,129	200,788
Astronautical	111,074	97,559	102,537	73,261	81,241	67,950	131,963
Chemical	37,247	23,806	57,639	28,820	31,519	35,506	21,231
Civil	138,758	170,363	88,261	71,620	72,384	49,372	53,163
Electrical	496,284	498,317	578,666	425,379	410,802	366,756	350,470
Mechanical	144,145	153,417	262,654	176,294	174,872	146,299	113,276
Metallurgy & materials	341,595	383,649	371,785	372,906	327,818	348,143	302,895
Engineering, n.e.c.	110,709	183,385	343,832	427,341	328,561	380,388	319,760
Social sciences, total	1,774	2,132	1,534	981	488	2,387	557
Anthropology	0	652	303	217	0	0	0
Economics	1,064	888	739	365	292	217	373
Political science	0	0	0	0	0	0	0
Sociology	710	592	492	244	196	145	184
Social sciences, n.e.c.	0	0	0	155	0	2,025	0
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.	130,664	145,011	260,510	148,360	117,310	114,870	115,588

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

Table 3D. Federal obligations for applied research, by detailed field of science & engineering: Department of Defense, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,939,052	3,102,052	3,690,234	4,796,874	5,162,071	4,773,055
Life sciences, total	322,860	327,733	392,974	476,361	545,859	557,305
Biol & agricultural, total	110,293	127,310	129,153	158,096	NA	NA
Biol (excl environmental)	100,600	117,915	114,408	154,627	NA	NA
Environmental biology	9,154	9,395	13,996	2,299	NA	NA
Agricultural	539	0	749	1,170	NA	NA
Medical sciences, total	187,449	163,325	142,811	167,974	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	25,118	37,098	121,010	150,291	NA	NA
Psychology, total	48,916	40,114	48,141	57,871	63,461	63,382
Biological aspects	9,787	964	1,761	2,671	NA	NA
Social aspects	36,199	10,501	11,362	14,401	NA	NA
Psychological sciences, n.e.c.	2,930	28,649	35,018	40,799	NA	NA
Physical sciences, total	280,665	262,109	249,816	365,043	414,656	363,153
Astronomy	0	15,000	0	0	NA	NA
Chemistry	55,936	42,256	30,849	67,467	NA	NA
Physics	164,598	158,175	197,986	251,415	NA	NA
Physical sciences, n.e.c.	60,131	46,678	20,981	46,161	NA	NA
Environmental sciences, total	224,179	180,579	182,655	135,113	158,719	112,344
Atmospheric sciences	28,023	36,178	17,063	19,715	NA	NA
Geological sciences	2,856	3,639	3,668	5,898	NA	NA
Oceanography	55,414	64,091	78,595	80,506	NA	NA
Environmental sciences, n.e.c.	137,886	76,671	83,329	28,994	NA	NA
Math & computer sciences, total	521,511	521,925	562,910	741,445	823,856	867,509
Mathematics	37,084	38,808	33,075	55,082	NA	NA
Computer sciences	476,710	472,861	492,202	650,378	NA	NA
Math & computer sciences, n.e.c.	7,717	10,256	37,633	35,985	NA	NA
Engineering, total	1,355,443	1,528,382	2,014,933	2,855,817	2,888,141	2,561,110
Aeronautical	287,129	285,140	489,679	899,768	NA	NA
Astronautical	31,800	39,254	57,528	117,078	NA	NA
Chemical	25,012	24,209	24,026	22,131	NA	NA
Civil	43,330	40,183	63,001	62,075	NA	NA
Electrical	339,663	414,573	469,205	528,063	NA	NA
Mechanical	106,266	102,269	143,888	151,757	NA	NA
Metallurgy & materials	230,409	193,481	231,160	355,452	NA	NA
Engineering, n.e.c.	291,834	429,273	536,446	719,493	NA	NA
Social sciences, total	176	0	19,162	16,638	16,774	14,943
Anthropology	0	0	0	349	NA	NA
Economics	0	0	3,091	0	NA	NA
Political science	0	0	1,965	0	NA	NA
Sociology	176	0	0	87	NA	NA
Social sciences, n.e.c.	0	0	14,106	16,202	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	185,302	241,210	219,643	148,586	250,605	233,309

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 3E. Federal obligations for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	146,448	152,094	148,833	149,628	195,244	280,673	400,709
Life sciences, total	43,120	43,607	43,909	47,585	75,731	107,682	78,545
Biol & agricultural, total	35,050	35,382	35,740	37,926	65,258	98,766	50,597
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	8,070	8,225	8,169	9,659	10,473	8,916	8,523
Clinical medical	8,070	8,225	8,169	9,659	10,473	8,916	3,957
Other medical	0	0	0	0	0	0	4,566
Life sciences, n.e.c.	0	0	0	0	0	0	19,425
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	69,312	71,431	68,380	75,591	82,975	88,082	208,040
Astronomy	0	0	0	0	0	0	0
Chemistry	25,202	23,776	19,435	13,437	13,272	14,448	22,667
Physics	44,110	47,655	48,945	62,154	66,598	73,553	180,654
Physical sciences, n.e.c.	0	0	0	0	3,105	81	4,719
Environmental sciences, total	9,462	10,116	14,626	14,200	14,320	14,438	72,300
Atmospheric sciences	5,318	5,812	7,942	7,931	7,346	8,830	14,959
Geological sciences	1,942	2,085	3,711	2,687	1,635	587	21,712
Oceanography	2,202	2,219	2,973	2,963	3,211	5,021	13,787
Environmental sciences, n.e.c.	0	0	0	619	2,128	0	21,842
Math & computer sciences, total	0	0	0	0	0	0	0
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	24,554	26,940	21,918	12,252	22,218	70,471	39,515
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,350	4,375	4,438	0	7,537	24,927	11,876
Civil	0	0	0	0	0	17,000	1,000
Electrical	0	0	0	0	920	5,656	100
Mechanical	0	0	0	0	1,363	7,210	2,822
Metallurgy & materials	18,900	21,400	16,613	12,252	11,898	6,002	14,421
Engineering, n.e.c.	1,304	1,165	867	0	500	9,676	9,296
Social sciences, total	0	0	0	0	0	0	2,309
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	2,309
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

Table 3E. Federal obligations for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

Page 2 of 5

Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	501,816	661,709	668,878	754,190	827,265	1,053,877	1,193,409
Life sciences, total	89,042	105,372	110,629	116,692	115,858	125,747	116,710
Biol & agricultural, total	55,410	68,275	63,730	70,375	70,484	77,431	74,407
Biol (excl environmental)	NA	66,275	60,496	63,218	70,484	73,368	66,212
Environmental biology	NA	0	0	3,356	0	0	0
Agricultural	NA	2,000	3,234	3,801	0	4,063	8,195
Medical sciences, total	9,028	6,000	7,310	7,285	20,405	22,104	21,867
Clinical medical	2,100	NA	NA	NA	NA	NA	NA
Other medical	6,928	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	24,604	31,097	39,589	39,032	24,969	26,212	20,436
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	258,943	290,454	317,745	359,960	390,165	482,809	584,806
Astronomy	0	0	0	0	0	300	0
Chemistry	14,560	28,178	14,629	22,205	13,722	29,868	13,306
Physics	237,163	262,210	286,915	321,271	357,157	447,741	550,882
Physical sciences, n.e.c.	7,220	66	16,201	16,484	19,286	4,900	20,618
Environmental sciences, total	81,225	86,700	96,370	109,166	73,254	69,924	72,822
Atmospheric sciences	13,433	13,890	15,503	15,937	25,044	27,021	23,916
Geological sciences	24,849	27,938	25,388	24,891	28,861	25,610	31,265
Oceanography	13,354	12,438	13,094	14,284	10,001	11,213	6,971
Environmental sciences, n.e.c.	29,589	32,434	42,385	54,054	9,348	6,080	10,670
Math & computer sciences, total	0	300	599	1,448	3,500	3,545	8,344
Mathematics	0	0	99	0	0	0	0
Computer sciences	0	300	500	0	0	3,000	4,500
Math & computer sciences, n.e.c.	0	0	0	1,448	3,500	545	3,844
Engineering, total	59,920	161,515	129,107	150,553	216,338	367,052	367,523
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	2,025	0	0	2,539	0
Chemical	14,177	40,663	10,642	14,201	28,450	1,061	38,440
Civil	3,700	4,114	0	1,030	20,696	43,770	35,240
Electrical	2,402	17,570	6,271	14,383	13,737	44,595	25,676
Mechanical	4,754	1,286	1,412	23,431	13,581	3,486	70,433
Metallurgy & materials	18,194	22,671	13,748	14,124	12,735	20,562	18,254
Engineering, n.e.c.	16,693	75,211	95,009	83,384	127,139	251,039	179,480
Social sciences, total	2,686	325	2,906	2,269	3,950	3,405	5,941
Anthropology	0	0	0	0	0	0	0
Economics	1,551	120	0	0	0	0	0
Political science	0	0	557	0	0	0	0
Sociology	135	205	0	0	0	0	0
Social sciences, n.e.c.	1,000	0	2,349	2,269	3,950	3,405	5,941
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.	10,000	17,043	11,522	14,102	24,200	1,395	37,263

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

Table 3E. Federal obligations for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,194,457	1,198,445	1,080,653	1,029,386	1,050,559	1,020,779	1,065,687
Life sciences, total	110,343	98,802	85,451	89,027	104,148	57,291	44,288
Biol & agricultural, total	70,941	60,786	51,623	54,960	58,354	18,891	5,481
Biol (excl environmental)	67,426	55,517	50,745	54,390	57,829	16,748	4,731
Environmental biology	3,494	5,269	548	322	350	1,943	425
Agricultural	21	0	330	248	175	200	325
Medical sciences, total	20,434	21,565	22,624	21,729	33,117	36,899	36,890
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	18,968	16,451	11,204	12,338	12,677	1,501	1,917
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	603,519	606,093	529,421	530,797	529,404	589,366	548,123
Astronomy	0	0	0	0	0	0	0
Chemistry	32,031	40,637	35,294	26,323	37,256	78,272	60,450
Physics	569,863	561,546	490,106	501,368	486,370	503,569	476,712
Physical sciences, n.e.c.	1,625	3,910	4,021	3,106	5,778	7,525	10,961
Environmental sciences, total	74,856	67,481	67,866	61,945	61,001	64,185	162,816
Atmospheric sciences	25,747	29,122	31,463	28,251	32,219	9,136	8,851
Geological sciences	28,954	24,066	28,630	23,365	20,612	36,948	46,262
Oceanography	10,572	9,784	3,619	3,723	4,352	0	0
Environmental sciences, n.e.c.	9,583	4,509	4,154	6,606	3,818	18,101	107,703
Math & computer sciences, total	8,926	19,028	5,121	5,754	4,756	4,736	4,804
Mathematics	0	13,838	0	371	0	0	0
Computer sciences	5,600	5,190	4,684	5,090	4,756	4,736	4,804
Math & computer sciences, n.e.c.	3,326	0	437	293	0	0	0
Engineering, total	359,293	405,614	390,233	327,378	342,525	294,351	295,486
Aeronautical	0	0	182	0	0	0	0
Astronautical	0	0	0	174	0	0	0
Chemical	34,527	114,799	102,577	65,138	98,337	3,303	77,775
Civil	40,601	44,676	41,741	36,670	30,721	29,253	26,570
Electrical	31,488	31,476	33,561	27,385	23,214	22,292	20,718
Mechanical	7,196	14,594	6,710	12,220	8,756	891	2,091
Metallurgy & materials	19,725	17,404	29,516	21,044	18,212	19,676	17,009
Engineering, n.e.c.	225,756	182,665	175,946	164,747	163,285	218,936	151,323
Social sciences, total	5,136	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	5,136	0	0	0	0	0	0
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.	32,384	1,427	2,561	14,485	8,725	10,850	10,170

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

Table 3E. Federal obligations for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,587,177	1,676,131	1,685,383	1,679,243	1,825,581	1,432,497	1,596,836
Life sciences, total	124,281	136,485	60,720	86,084	80,512	73,892	52,298
Biol & agricultural, total	4,914	7,841	8,911	11,932	30,080	28,660	0
Biol (excl environmental)	4,164	7,006	7,385	9,152	28,239	24,660	0
Environmental biology	425	460	1,128	2,233	1,841	4,000	0
Agricultural	325	375	398	547	0	0	0
Medical sciences, total	115,587	124,092	48,915	70,809	47,374	45,232	52,298
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	3,780	4,552	2,894	3,343	3,058	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	670,588	750,262	788,253	741,826	718,246	496,422	564,417
Astronomy	0	0	12,229	14,235	0	0	0
Chemistry	60,943	90,309	106,659	110,963	86,946	124,629	106,474
Physics	458,015	574,817	570,575	538,857	548,415	159,142	223,042
Physical sciences, n.e.c.	151,630	85,136	98,790	77,771	82,885	212,651	234,901
Environmental sciences, total	113,560	111,971	156,494	155,229	233,979	223,614	149,296
Atmospheric sciences	4,510	7,216	8,653	11,846	8,996	34,989	0
Geological sciences	39,935	28,229	61,077	35,582	48,677	34,807	0
Oceanography	198	0	492	554	1,410	3,380	215
Environmental sciences, n.e.c.	68,917	76,526	86,272	107,247	174,896	150,438	149,081
Math & computer sciences, total	82,745	120,763	116,819	104,958	109,596	199,140	299,256
Mathematics	0	0	800	1,750	489	0	0
Computer sciences	64,395	91,552	82,549	72,915	80,396	187,290	298,956
Math & computer sciences, n.e.c.	18,350	29,211	33,470	30,293	28,711	11,850	300
Engineering, total	551,426	538,863	548,245	545,995	620,242	417,723	508,049
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	803	11,633	0	0
Chemical	104,528	99,154	77,221	100,578	98,937	75,217	95,924
Civil	32,303	25,169	32,288	36,512	52,478	37,701	37,152
Electrical	42,473	38,344	42,653	41,735	50,721	24,817	24,264
Mechanical	32,455	26,873	23,695	21,313	21,877	514	213
Metallurgy & materials	6,161	5,399	3,172	9,964	4,083	32,759	34,022
Engineering, n.e.c.	333,506	343,924	369,216	335,090	380,513	246,715	316,474
Social sciences, total	0	135	500	932	500	0	0
Anthropology	0	0	370	420	500	0	0
Economics	0	135	130	512	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	44,577	17,652	14,352	44,219	62,506	21,706	23,520

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

Table 3E. Federal obligations for applied research, by detailed field of science & engineering: Department of Energy, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	1,758,706	1,787,991	1,925,018	2,297,630	2,806,517	2,833,055
Life sciences, total	62,995	62,306	83,158	95,263	157,661	79,514
Biol & agricultural, total	9,300	9,300	9,295	10,763	NA	NA
Biol (excl environmental)	2,300	2,300	2,325	5,613	NA	NA
Environmental biology	7,000	7,000	6,970	5,150	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	53,695	53,006	73,293	84,500	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	570	0	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	639,325	334,846	448,208	509,526	589,864	542,829
Astronomy	0	0	0	0	NA	NA
Chemistry	99,002	52,563	55,840	61,105	NA	NA
Physics	232,069	202,403	307,631	339,197	NA	NA
Physical sciences, n.e.c.	308,254	79,880	84,737	109,224	NA	NA
Environmental sciences, total	124,425	80,219	63,062	69,275	71,735	63,824
Atmospheric sciences	0	0	0	511	NA	NA
Geological sciences	0	0	0	6,228	NA	NA
Oceanography	240	490	0	0	NA	NA
Environmental sciences, n.e.c.	124,185	79,729	63,062	62,536	NA	NA
Math & computer sciences, total	374,127	488,686	602,298	677,478	670,654	677,389
Mathematics	0	0	0	0	NA	NA
Computer sciences	374,127	483,726	600,998	676,732	NA	NA
Math & computer sciences, n.e.c.	0	4,960	1,300	746	NA	NA
Engineering, total	538,684	802,832	716,388	935,396	1,311,927	1,464,778
Aeronautical	0	0	500	772	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	86,720	90,348	89,557	91,452	NA	NA
Civil	37,979	45,707	41,812	45,753	NA	NA
Electrical	25,230	30,837	27,697	30,339	NA	NA
Mechanical	717	761	739	342	NA	NA
Metallurgy & materials	30,071	69,609	59,534	68,642	NA	NA
Engineering, n.e.c.	357,967	565,570	496,549	698,096	NA	NA
Social sciences, total	0	0	0	0	0	0
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	0	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	19,150	19,102	11,904	10,692	4,676	4,721

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 1970-74 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 3F. Federal obligations for applied research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	502,709	601,438	734,325	765,534	985,612	1,013,093	1,136,379
Life sciences, total	395,236	475,599	585,735	602,983	764,439	805,185	884,510
Biol & agricultural, total	129,964	161,693	201,955	223,713	300,764	299,906	331,000
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	259,055	306,325	374,247	368,713	450,460	482,391	533,344
Clinical medical	259,055	298,572	356,565	357,838	424,373	427,564	472,699
Other medical	0	7,753	17,682	10,875	26,087	54,827	60,645
Life sciences, n.e.c.	6,217	7,581	9,533	10,557	13,215	22,888	20,166
Psychology, total	20,008	26,639	29,631	25,299	50,697	34,792	46,495
Biological aspects	4,120	4,429	4,897	4,184	21,832	12,816	16,971
Social aspects	11,052	14,480	16,539	13,514	18,793	10,464	17,576
Psychological sciences, n.e.c.	4,836	7,730	8,195	7,601	10,072	11,512	11,948
Physical sciences, total	14,076	14,542	12,028	12,637	25,041	18,217	19,635
Astronomy	0	0	0	0	0	0	0
Chemistry	13,202	5,076	10,572	11,235	23,184	16,200	17,432
Physics	874	8,401	1,456	1,402	1,857	2,017	2,203
Physical sciences, n.e.c.	0	1,065	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	2,197	3,453	3,949	3,726	5,094	5,259	5,438
Mathematics	NA	NA	NA	NA	NA	NA	5,438
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	8,431	10,358	14,640	16,858	20,495	18,927	20,676
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	29	989	1,441	0	0
Civil	0	31	0	0	0	0	0
Electrical	87	0	303	5	122	0	0
Mechanical	0	0	1,305	183	490	0	0
Metallurgy & materials	0	0	0	105	0	0	0
Engineering, n.e.c.	8,344	10,327	13,003	15,576	18,442	18,927	20,676
Social sciences, total	44,680	49,345	61,098	73,591	80,404	84,362	112,236
Anthropology	711	2,481	2,676	894	4,074	3,366	3,478
Economics	0	0	0	0	18,682	20,521	15,369
Political science	0	0	0	0	0	1,328	490
Sociology	10,331	17,341	33,847	46,557	30,334	24,443	22,049
Social sciences, n.e.c.	33,638	29,523	24,575	26,140	27,314	34,704	70,850
History	0	21	47	35	149	372	NA
Linguistics	0	618	841	734	954	743	NA
Other social sciences	33,638	28,884	23,687	25,371	26,211	33,589	NA
Other sciences, n.e.c.	18,081	21,502	27,244	30,440	39,442	46,351	47,389

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

**Table 3F. Federal obligations for applied research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	1,266,616	1,417,411	1,439,658	1,570,109	1,591,857	1,460,890	1,545,446
Life sciences, total	977,096	1,108,659	1,092,958	1,224,178	1,264,044	1,159,538	1,223,808
Biol & agricultural, total	367,583	424,155	434,041	529,907	563,026	430,426	452,073
Biol (excl environmental)	NA	424,155	434,041	529,858	562,975	430,349	451,947
Environmental biology	NA	0	0	49	51	77	126
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	581,887	654,867	619,976	651,952	668,209	694,048	735,633
Clinical medical	510,815	NA	NA	NA	NA	NA	NA
Other medical	71,072	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	27,626	29,637	38,941	42,319	32,809	35,064	36,102
Psychology, total	42,792	50,056	64,601	51,845	51,178	54,500	65,326
Biological aspects	16,194	18,643	19,489	21,680	20,398	21,486	23,011
Social aspects	12,939	16,275	18,119	18,126	12,554	11,446	14,263
Psychological sciences, n.e.c.	13,659	15,138	26,993	12,039	18,226	21,568	28,052
Physical sciences, total	21,659	25,375	29,064	26,054	25,062	17,585	22,614
Astronomy	0	0	0	0	0	0	0
Chemistry	19,226	22,645	26,084	22,502	22,078	15,295	19,197
Physics	2,433	2,730	2,980	3,552	2,984	2,290	3,417
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	6,693	6,539	3,944	4,115	4,637	3,971	5,653
Mathematics	6,210	6,383	3,360	3,760	4,637	3,871	5,459
Computer sciences	483	156	92	85	0	100	194
Math & computer sciences, n.e.c.	0	0	492	270	0	0	0
Engineering, total	29,325	32,079	28,203	17,170	20,518	16,541	15,499
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	29,325	32,079	28,203	17,170	20,518	16,541	15,499
Social sciences, total	137,729	139,865	140,393	147,201	133,717	105,302	96,425
Anthropology	1,733	3,096	2,572	568	390	528	301
Economics	12,370	19,040	16,813	17,224	14,629	10,575	10,862
Political science	175	244	506	535	953	481	941
Sociology	17,992	23,889	23,823	26,381	24,682	20,166	19,380
Social sciences, n.e.c.	105,459	93,596	96,679	102,493	93,063	73,552	64,941
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.	51,322	54,838	80,495	99,546	92,701	103,453	116,121

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

**Table 3F. Federal obligations for applied research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,651,498	1,795,787	1,850,791	2,194,026	2,415,560	2,700,427	2,818,062
Life sciences, total	1,295,410	1,432,843	1,497,578	1,809,779	2,029,088	2,240,379	2,313,336
Biol & agricultural, total	506,928	576,094	638,376	793,996	995,217	1,101,771	1,147,847
Biol (excl environmental)	506,434	575,646	638,020	793,369	994,635	1,100,971	1,147,451
Environmental biology	144	199	157	291	411	443	334
Agricultural	350	249	199	336	171	357	62
Medical sciences, total	756,105	816,168	819,898	948,599	994,443	1,085,790	1,112,380
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	32,377	40,581	39,304	67,184	39,428	52,818	53,109
Psychology, total	77,075	88,469	95,923	117,791	107,606	125,020	133,983
Biological aspects	27,202	30,482	31,981	35,507	38,439	45,149	47,356
Social aspects	15,679	17,558	18,913	21,741	24,099	32,498	37,741
Psychological sciences, n.e.c.	34,194	40,429	45,029	60,543	45,068	47,373	48,886
Physical sciences, total	24,728	27,803	29,018	33,078	34,193	29,980	29,294
Astronomy	0	0	0	0	0	0	0
Chemistry	21,343	25,262	25,553	28,738	30,839	26,019	25,091
Physics	3,385	2,541	3,443	4,317	3,320	3,907	4,203
Physical sciences, n.e.c.	0	0	22	23	34	54	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	8,193	6,946	6,228	6,019	7,581	6,180	6,476
Mathematics	7,702	5,715	4,912	4,630	6,221	5,103	5,629
Computer sciences	491	1,231	1,316	1,389	1,360	1,077	847
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	26,443	17,661	21,235	26,305	24,539	20,562	19,670
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	26,443	17,661	21,235	26,305	24,539	20,562	19,670
Social sciences, total	102,775	102,497	88,636	105,357	102,412	139,209	176,242
Anthropology	329	358	676	988	781	505	600
Economics	8,624	6,438	4,089	5,699	3,687	6,523	9,949
Political science	1,277	1,516	1,616	1,126	1,418	1,666	1,552
Sociology	17,581	18,615	17,224	20,321	26,272	34,911	74,171
Social sciences, n.e.c.	74,964	75,570	65,031	77,223	70,254	95,604	89,970
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.	116,874	119,568	112,173	95,697	110,141	139,097	139,061

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

**Table 3F. Federal obligations for applied research, by detailed field of science
& engineering: Department of Health & Human Services,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	3,112,373	2,886,816	3,495,916	3,852,458	4,014,893	4,041,256	4,376,326
Life sciences, total	2,527,711	2,417,999	2,872,524	3,158,230	3,373,845	3,510,478	3,772,386
Biol & agricultural, total	1,305,175	1,149,488	1,321,471	1,335,804	1,373,136	1,611,491	1,648,269
Biol (excl environmental)	1,304,369	1,149,425	1,318,519	1,335,745	1,373,121	1,611,467	1,648,241
Environmental biology	381	63	2,952	59	15	24	28
Agricultural	425	0	0	0	0	0	0
Medical sciences, total	1,108,993	1,179,277	1,421,121	1,663,038	1,832,396	1,730,758	1,969,032
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	113,543	89,234	129,932	159,388	168,313	168,229	155,085
Psychology, total	149,062	44,445	158,771	176,210	180,989	126,760	137,092
Biological aspects	52,012	0	0	6,262	7,301	4,859	4,181
Social aspects	42,686	79	0	1,701	3,112	2,784	2,274
Psychological sciences, n.e.c.	54,364	44,366	158,771	168,247	170,576	119,117	130,637
Physical sciences, total	32,306	33,309	36,440	34,305	36,146	52,733	58,111
Astronomy	0	0	0	0	0	0	0
Chemistry	25,844	28,461	31,342	29,234	31,342	46,857	51,587
Physics	6,462	4,839	5,098	5,071	4,804	5,876	6,524
Physical sciences, n.e.c.	0	9	0	0	0	0	0
Environmental sciences, total	0	0	0	0	11,546	10,241	11,218
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	11,546	10,241	11,218
Math & computer sciences, total	6,997	8,155	22,145	36,364	37,963	39,013	41,664
Mathematics	2,963	7,139	8,116	23,572	13,633	13,881	15,763
Computer sciences	470	501	13,862	12,618	24,330	24,811	25,558
Math & computer sciences, n.e.c.	3,564	515	167	174	0	321	343
Engineering, total	23,170	25,745	32,803	36,363	43,406	48,480	53,104
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	23,170	25,745	32,803	36,363	43,406	48,480	53,104
Social sciences, total	266,626	215,163	130,834	122,737	109,912	74,868	102,267
Anthropology	748	0	0	0	0	0	32
Economics	6,613	8,785	1,652	11,123	14,344	17,365	28,987
Political science	1,887	249	40	2,840	2,502	143	0
Sociology	134,264	43,850	32,530	17,610	2,159	1,501	921
Social sciences, n.e.c.	123,114	162,279	96,612	91,164	90,907	55,859	72,327
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.	106,501	142,000	242,399	288,249	221,086	178,683	200,484

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

Table 3F. Federal obligations for applied research, by detailed field of science & engineering: Department of Health & Human Services, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	4,663,111	5,082,114	7,857,672	9,056,338	10,234,076	12,332,544
Life sciences, total	4,007,996	4,382,009	5,998,026	8,015,130	9,059,327	10,937,150
Biol & agricultural, total	1,740,536	1,853,957	3,489,354	3,964,347	NA	NA
Biol (excl environmental)	1,740,506	1,853,925	3,489,354	3,964,347	NA	NA
Environmental biology	30	32	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	2,098,809	2,352,516	2,077,274	3,216,430	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	168,651	175,536	431,398	834,353	NA	NA
Psychology, total	148,619	158,631	685,199	303,676	346,150	433,975
Biological aspects	4,484	4,836	0	0	NA	NA
Social aspects	2,488	2,720	143	179	NA	NA
Psychological sciences, n.e.c.	141,647	151,075	685,056	303,497	NA	NA
Physical sciences, total	62,323	67,222	285,852	73,257	83,531	104,729
Astronomy	0	0	0	0	NA	NA
Chemistry	55,327	59,676	278,157	67,460	NA	NA
Physics	6,996	7,546	0	0	NA	NA
Physical sciences, n.e.c.	0	0	7,695	5,797	NA	NA
Environmental sciences, total	12,031	12,977	184,036	167,350	190,778	239,092
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	463	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	12,031	12,977	184,036	166,887	NA	NA
Math & computer sciences, total	47,787	52,576	70,613	41,402	45,876	51,788
Mathematics	16,806	18,090	59,143	28,443	NA	NA
Computer sciences	30,981	33,621	11,470	12,134	NA	NA
Math & computer sciences, n.e.c.	0	865	0	825	NA	NA
Engineering, total	56,953	61,430	180,216	46,338	52,836	66,244
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	24,398	20,077	NA	NA
Engineering, n.e.c.	56,953	61,430	155,818	26,261	NA	NA
Social sciences, total	118,846	104,718	201,484	183,008	200,271	208,117
Anthropology	0	0	30	0	NA	NA
Economics	39,092	17,645	37,149	41,788	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	1,011	1,100	672	1,373	NA	NA
Social sciences, n.e.c.	78,743	85,973	163,633	139,847	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	208,556	242,551	252,246	226,177	255,307	291,449

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: 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.

Data shown for fiscal years 1970-78 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.

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 3G. Federal obligations for applied research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	NA	NA	NA	69,636	102,319	73,180	84,060
Life sciences, total	NA	NA	NA	43,165	54,100	36,820	39,401
Biol & agricultural, total	NA	NA	NA	7,898	28,830	16,019	23,851
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	35,267	25,270	12,607	11,411
Clinical medical	NA	NA	NA	35,267	18,433	8,023	9,586
Other medical	NA	NA	NA	0	6,837	4,584	1,825
Life sciences, n.e.c.	NA	NA	NA	0	0	8,194	4,139
Psychology, total	NA	NA	NA	13,937	34,385	22,581	28,294
Biological aspects	NA	NA	NA	4,093	21,679	12,816	16,971
Social aspects	NA	NA	NA	9,844	12,706	9,190	11,323
Psychological sciences, n.e.c.	NA	NA	NA	0	0	575	0
Physical sciences, total	NA	NA	NA	0	2,409	298	61
Astronomy	NA	NA	NA	0	0	0	0
Chemistry	NA	NA	NA	0	2,409	298	61
Physics	NA	NA	NA	0	0	0	0
Physical sciences, n.e.c.	NA	NA	NA	0	0	0	0
Environmental sciences, total	NA	NA	NA	0	0	0	0
Atmospheric sciences	NA	NA	NA	0	0	0	0
Geological sciences	NA	NA	NA	0	0	0	0
Oceanography	NA	NA	NA	0	0	0	0
Environmental sciences, n.e.c.	NA	NA	NA	0	0	0	0
Math & computer sciences, total	NA	NA	NA	696	1,165	993	777
Mathematics	NA	NA	NA	NA	NA	NA	777
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	NA	NA	NA	0	0	0	0
Aeronautical	NA	NA	NA	0	0	0	0
Astronautical	NA	NA	NA	0	0	0	0
Chemical	NA	NA	NA	0	0	0	0
Civil	NA	NA	NA	0	0	0	0
Electrical	NA	NA	NA	0	0	0	0
Mechanical	NA	NA	NA	0	0	0	0
Metallurgy & materials	NA	NA	NA	0	0	0	0
Engineering, n.e.c.	NA	NA	NA	0	0	0	0
Social sciences, total	NA	NA	NA	11,838	10,260	9,858	14,617
Anthropology	NA	NA	NA	592	698	1,591	3,478
Economics	NA	NA	NA	0	0	74	137
Political science	NA	NA	NA	0	0	74	0
Sociology	NA	NA	NA	10,477	8,459	3,716	9,350
Social sciences, n.e.c.	NA	NA	NA	769	1,103	4,403	1,652
History	NA	NA	NA	35	149	372	NA
Linguistics	NA	NA	NA	734	954	743	NA
Other social sciences	NA	NA	NA	0	0	3,288	NA
Other sciences, n.e.c.	NA	NA	NA	0	0	2,630	910

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

**Table 3G. Federal obligations for applied research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	89,296	98,834	118,913	128,800	121,375	128,725	155,402
Life sciences, total	42,987	47,024	58,043	65,077	63,460	70,491	88,443
Biol & agricultural, total	25,001	26,949	30,834	31,808	32,295	34,358	41,372
Biol (excl environmental)	NA	26,949	30,834	31,759	32,244	34,358	41,372
Environmental biology	NA	0	0	49	51	0	0
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	8,126	9,862	12,249	16,435	23,732	28,929	37,723
Clinical medical	6,690	NA	NA	NA	NA	NA	NA
Other medical	1,436	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	9,860	10,213	14,960	16,834	7,433	7,204	9,348
Psychology, total	28,142	32,494	38,045	40,411	37,173	36,501	42,410
Biological aspects	16,194	18,643	19,489	21,680	20,398	21,486	23,011
Social aspects	11,948	13,596	18,119	18,126	12,554	11,446	14,263
Psychological sciences, n.e.c.	0	255	437	605	4,221	3,569	5,136
Physical sciences, total	40	1,047	224	696	232	350	1,153
Astronomy	0	0	0	0	0	0	0
Chemistry	40	1,047	224	696	232	350	1,129
Physics	0	0	0	0	0	0	24
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,363	718	584	355	0	339	288
Mathematics	1,063	562	0	0	0	239	94
Computer sciences	300	156	92	85	0	100	194
Math & computer sciences, n.e.c.	0	0	492	270	0	0	0
Engineering, total	0	136	136	49	49	0	55
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	136	136	49	49	0	55
Social sciences, total	14,386	17,415	20,378	19,737	17,079	18,602	20,639
Anthropology	1,733	3,096	2,572	568	390	528	301
Economics	153	184	273	50	88	200	31
Political science	157	112	272	298	563	481	941
Sociology	10,557	12,162	15,314	16,081	12,704	14,120	15,770
Social sciences, n.e.c.	1,786	1,861	1,947	2,740	3,334	3,273	3,596
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.	2,378	0	1,503	2,475	3,382	2,442	2,414

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

**Table 3G. Federal obligations for applied research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	165,178	179,671	191,522	241,124	286,640	384,660	415,017
Life sciences, total	92,109	100,114	109,447	142,795	169,256	236,082	253,014
Biol & agricultural, total	44,677	50,929	55,886	74,011	88,600	136,269	137,178
Biol (excl environmental)	44,327	50,555	55,621	73,507	88,087	135,555	136,867
Environmental biology	0	125	66	168	342	357	249
Agricultural	350	249	199	336	171	357	62
Medical sciences, total	45,377	46,871	50,677	65,992	75,077	92,060	106,317
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,055	2,314	2,884	2,792	5,579	7,753	9,519
Psychology, total	48,075	51,891	54,271	64,961	71,740	89,757	97,684
Biological aspects	27,202	30,482	31,981	35,507	38,439	45,149	47,356
Social aspects	15,452	17,343	17,852	21,741	24,099	32,498	37,741
Psychological sciences, n.e.c.	5,421	4,066	4,438	7,713	9,202	12,110	12,587
Physical sciences, total	1,100	1,909	2,494	3,701	4,884	5,330	5,424
Astronomy	0	0	0	0	0	0	0
Chemistry	1,093	1,883	2,324	3,587	4,884	5,330	5,424
Physics	7	26	170	114	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	688	590	392	927	1,099	816	1,102
Mathematics	197	150	174	320	341	266	652
Computer sciences	491	440	218	607	758	550	450
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	101	51	98	281	131	0	0
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	101	51	98	281	131	0	0
Social sciences, total	21,327	23,153	23,224	27,057	34,841	48,126	48,699
Anthropology	329	358	676	988	781	505	600
Economics	1,162	491	655	875	929	1,760	2,287
Political science	1,277	1,078	1,365	755	1,206	1,300	1,319
Sociology	14,643	15,986	15,524	18,094	24,999	32,713	33,200
Social sciences, n.e.c.	3,916	5,240	5,004	6,345	6,926	11,848	11,293
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.	1,778	1,963	1,596	1,402	4,689	4,549	9,094

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

**Table 3G. Federal obligations for applied research, by detailed field of science
& engineering: HHS, Alcohol, Drug Abuse, & Mental Health
Administration, fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	463,880	NA	NA	NA	NA	NA	NA
Life sciences, total	283,015	NA	NA	NA	NA	NA	NA
Biol & agricultural, total	154,294	NA	NA	NA	NA	NA	NA
Biol (excl environmental)	153,656	NA	NA	NA	NA	NA	NA
Environmental biology	213	NA	NA	NA	NA	NA	NA
Agricultural	425	NA	NA	NA	NA	NA	NA
Medical sciences, total	119,788	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.	8,933	NA	NA	NA	NA	NA	NA
Psychology, total	109,849	NA	NA	NA	NA	NA	NA
Biological aspects	52,012	NA	NA	NA	NA	NA	NA
Social aspects	42,686	NA	NA	NA	NA	NA	NA
Psychological sciences, n.e.c.	15,151	NA	NA	NA	NA	NA	NA
Physical sciences, total	7,078	NA	NA	NA	NA	NA	NA
Astronomy	0	NA	NA	NA	NA	NA	NA
Chemistry	7,078	NA	NA	NA	NA	NA	NA
Physics	0	NA	NA	NA	NA	NA	NA
Physical sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Environmental sciences, total	0	NA	NA	NA	NA	NA	NA
Atmospheric sciences	0	NA	NA	NA	NA	NA	NA
Geological sciences	0	NA	NA	NA	NA	NA	NA
Oceanography	0	NA	NA	NA	NA	NA	NA
Environmental sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Math & computer sciences, total	1,439	NA	NA	NA	NA	NA	NA
Mathematics	969	NA	NA	NA	NA	NA	NA
Computer sciences	470	NA	NA	NA	NA	NA	NA
Math & computer sciences, n.e.c.	0	NA	NA	NA	NA	NA	NA
Engineering, total	0	NA	NA	NA	NA	NA	NA
Aeronautical	0	NA	NA	NA	NA	NA	NA
Astronautical	0	NA	NA	NA	NA	NA	NA
Chemical	0	NA	NA	NA	NA	NA	NA
Civil	0	NA	NA	NA	NA	NA	NA
Electrical	0	NA	NA	NA	NA	NA	NA
Mechanical	0	NA	NA	NA	NA	NA	NA
Metallurgy & materials	0	NA	NA	NA	NA	NA	NA
Engineering, n.e.c.	0	NA	NA	NA	NA	NA	NA
Social sciences, total	55,562	NA	NA	NA	NA	NA	NA
Anthropology	748	NA	NA	NA	NA	NA	NA
Economics	1,326	NA	NA	NA	NA	NA	NA
Political science	1,446	NA	NA	NA	NA	NA	NA
Sociology	38,140	NA	NA	NA	NA	NA	NA
Social sciences, n.e.c.	13,902	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.	6,937	NA	NA	NA	NA	NA	NA

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

Table 3G. Federal obligations for applied research, by detailed field of science & engineering: HHS, Alcohol, Drug Abuse, & Mental Health Administration, fiscal years 1970-2003

[Dollars in thousands]

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

Data shown for fiscal years 1970-78 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.

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 for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	336,035	409,782	513,650	539,084	714,340	775,697	847,380
Life sciences, total	292,216	356,346	446,670	468,787	621,190	674,546	736,882
Biol & agricultural, total	110,757	135,064	169,299	177,682	235,447	255,670	279,296
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	175,242	213,701	267,868	281,132	372,528	404,526	441,909
Clinical medical	175,242	213,701	267,868	281,132	372,528	404,526	441,909
Other medical	0	0	0	0	0	0	0
Life sciences, n.e.c.	6,217	7,581	9,503	9,973	13,215	14,350	15,677
Psychology, total	4,738	5,778	7,243	7,601	10,072	10,937	11,948
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	4,738	5,778	7,243	7,601	10,072	10,937	11,948
Physical sciences, total	7,763	9,466	11,865	12,453	16,501	17,919	19,574
Astronomy	0	0	0	0	0	0	0
Chemistry	6,889	0	10,530	11,051	14,644	15,902	17,371
Physics	874	8,401	1,335	1,402	1,857	2,017	2,203
Physical sciences, n.e.c.	0	1,065	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,848	2,254	2,825	2,965	3,929	4,266	4,661
Mathematics	NA	NA	NA	NA	NA	NA	4,661
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	8,199	9,999	12,533	13,154	17,430	18,927	20,676
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	8,199	9,999	12,533	13,154	17,430	18,927	20,676
Social sciences, total	3,831	4,671	5,856	6,146	8,144	8,843	9,660
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	3,831	4,671	5,856	6,146	8,144	8,843	9,660
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	3,831	4,671	5,856	6,146	8,144	8,843	NA
Other sciences, n.e.c.	17,440	21,268	26,658	27,978	37,074	40,259	43,979

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

Table 3H. Federal obligations for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	935,882	1,051,502	1,066,408	1,145,129	1,181,521	1,103,802	1,165,179
Life sciences, total	813,843	914,341	889,752	990,753	1,035,127	940,067	977,943
Biol & agricultural, total	308,467	346,594	349,314	431,747	467,899	352,268	373,901
Biol (excl environmental)	NA	346,594	349,314	431,747	467,899	352,191	373,775
Environmental biology	NA	0	0	0	0	77	126
Agricultural	NA	0	0	0	0	0	0
Medical sciences, total	488,062	548,323	516,457	533,521	543,375	559,939	577,288
Clinical medical	488,062	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	17,314	19,424	23,981	25,485	23,853	27,860	26,754
Psychology, total	13,196	14,883	26,556	11,434	12,242	17,999	22,916
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	13,196	14,883	26,556	11,434	12,242	17,999	22,916
Physical sciences, total	21,619	24,328	28,840	25,358	24,830	17,235	21,461
Astronomy	0	0	0	0	0	0	0
Chemistry	19,186	21,598	25,860	21,806	21,846	14,945	18,068
Physics	2,433	2,730	2,980	3,552	2,984	2,290	3,393
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	5,147	5,821	3,360	3,760	4,299	3,632	5,365
Mathematics	5,147	5,821	3,360	3,760	4,299	3,632	5,365
Computer sciences	0	0	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	22,836	25,605	28,067	17,121	15,404	16,541	15,444
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	22,836	25,605	28,067	17,121	15,404	16,541	15,444
Social sciences, total	10,669	11,986	11,141	5,072	5,768	12,474	13,488
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	10,669	11,986	11,141	5,072	5,768	12,474	13,488
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.	48,572	54,538	78,692	91,631	83,851	95,854	108,562

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

Table 3H. Federal obligations for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	1,285,643	1,410,113	1,469,000	1,739,142	1,885,571	2,008,466	2,074,100
Life sciences, total	1,072,558	1,195,168	1,248,360	1,507,842	1,671,157	1,778,209	1,849,172
Biol & agricultural, total	424,551	485,090	544,490	678,335	862,027	916,992	962,159
Biol (excl environmental)	424,407	485,016	544,399	678,212	861,958	916,906	962,074
Environmental biology	144	74	91	123	69	86	85
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	617,685	671,811	667,450	765,115	775,281	816,152	843,423
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	30,322	38,267	36,420	64,392	33,849	45,065	43,590
Psychology, total	28,773	36,363	40,591	52,830	35,866	35,263	36,299
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	28,773	36,363	40,591	52,830	35,866	35,263	36,299
Physical sciences, total	23,628	25,894	26,524	29,377	29,309	24,650	23,870
Astronomy	0	0	0	0	0	0	0
Chemistry	20,250	23,379	23,229	25,151	25,955	20,689	19,667
Physics	3,378	2,515	3,273	4,203	3,320	3,907	4,203
Physical sciences, n.e.c.	0	0	22	23	34	54	0
Environmental sciences, total	0	0	0	0	0	0	0
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	7,505	5,710	4,787	4,356	5,987	4,896	5,074
Mathematics	7,505	5,565	4,738	4,310	5,880	4,837	4,977
Computer sciences	0	145	49	46	107	59	97
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	26,342	17,610	21,137	26,024	24,408	20,562	19,670
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	26,342	17,610	21,137	26,024	24,408	20,562	19,670
Social sciences, total	21,105	21,153	20,127	24,418	13,392	10,338	10,048
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	21,105	21,153	20,127	24,418	13,392	10,338	10,048
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.	105,732	108,215	107,474	94,295	105,452	134,548	129,967

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

Table 3H. Federal obligations for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	2,193,511	2,341,320	2,942,913	3,197,358	3,273,555	3,373,287	3,668,966
Life sciences, total	1,987,171	2,100,682	2,441,115	2,642,985	2,742,396	2,936,237	3,185,453
Biol & agricultural, total	1,040,672	1,024,788	1,186,171	1,181,538	1,220,664	1,452,808	1,489,640
Biol (excl environmental)	1,040,504	1,024,725	1,183,219	1,181,479	1,220,649	1,452,784	1,489,612
Environmental biology	168	63	2,952	59	15	24	28
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	856,700	997,660	1,217,584	1,407,513	1,457,191	1,385,719	1,588,784
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	89,799	78,234	37,360	53,934	64,541	97,710	107,029
Psychology, total	39,213	44,366	158,771	175,861	179,873	125,736	136,532
Biological aspects	0	0	0	6,262	7,280	4,859	4,181
Social aspects	0	0	0	1,352	2,380	2,037	2,060
Psychological sciences, n.e.c.	39,213	44,366	158,771	168,247	170,213	118,840	130,291
Physical sciences, total	25,228	33,300	36,440	34,305	36,146	52,733	58,111
Astronomy	0	0	0	0	0	0	0
Chemistry	18,766	28,461	31,342	29,234	31,342	46,857	51,587
Physics	6,462	4,839	5,098	5,071	4,804	5,876	6,524
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	0	0	0	0	11,546	10,241	11,218
Atmospheric sciences	0	0	0	0	0	0	0
Geological sciences	0	0	0	0	0	0	0
Oceanography	0	0	0	0	0	0	0
Environmental sciences, n.e.c.	0	0	0	0	11,546	10,241	11,218
Math & computer sciences, total	5,558	6,670	18,325	23,389	27,199	28,849	33,022
Mathematics	1,994	6,219	7,660	23,219	13,505	13,873	15,382
Computer sciences	0	451	10,665	170	13,694	14,976	17,640
Math & computer sciences, n.e.c.	3,564	0	0	0	0	0	0
Engineering, total	23,170	25,745	32,803	36,363	43,406	48,480	53,104
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	0	0	0	0	0	0	0
Civil	0	0	0	0	0	0	0
Electrical	0	0	0	0	0	0	0
Mechanical	0	0	0	0	0	0	0
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	23,170	25,745	32,803	36,363	43,406	48,480	53,104
Social sciences, total	13,607	14,615	40,269	40,946	43,914	31,042	34,014
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	1,063	0	0	66	84
Social sciences, n.e.c.	13,607	14,615	39,206	40,946	43,914	30,976	33,930
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.	99,564	115,942	215,190	243,509	189,075	139,969	157,512

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

Table 3H. Federal obligations for applied research, by detailed field of science & engineering: HHS, National Institutes of Health, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	3,934,867	4,244,159	6,864,240	7,890,499	8,997,073	11,280,283
Life sciences, total	3,416,313	3,684,841	5,178,825	7,036,727	8,023,566	10,059,729
Biol & agricultural, total	1,597,599	1,723,155	3,344,912	3,802,521	NA	NA
Biol (excl environmental)	1,597,569	1,723,123	3,344,912	3,802,521	NA	NA
Environmental biology	30	32	0	0	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	1,703,928	1,837,876	1,464,267	2,541,616	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	114,786	123,810	369,646	692,590	NA	NA
Psychology, total	146,426	157,937	685,036	303,497	346,060	433,880
Biological aspects	4,484	4,836	0	0	NA	NA
Social aspects	2,209	2,383	0	0	NA	NA
Psychological sciences, n.e.c.	139,733	150,718	685,036	303,497	NA	NA
Physical sciences, total	62,323	67,222	285,852	73,257	83,531	104,729
Astronomy	0	0	0	0	NA	NA
Chemistry	55,327	59,676	278,157	67,460	NA	NA
Physics	6,996	7,546	0	0	NA	NA
Physical sciences, n.e.c.	0	0	7,695	5,797	NA	NA
Environmental sciences, total	12,031	12,977	169,361	166,887	190,292	238,582
Atmospheric sciences	0	0	0	0	NA	NA
Geological sciences	0	0	0	0	NA	NA
Oceanography	0	0	0	0	NA	NA
Environmental sciences, n.e.c.	12,031	12,977	169,361	166,887	NA	NA
Math & computer sciences, total	35,415	38,199	58,881	28,181	32,134	40,288
Mathematics	16,497	17,794	58,881	28,181	NA	NA
Computer sciences	18,918	20,405	0	0	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	56,953	61,430	180,216	46,338	52,836	66,244
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	0	0	0	0	NA	NA
Civil	0	0	0	0	NA	NA
Electrical	0	0	0	0	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	0	0	24,398	20,077	NA	NA
Engineering, n.e.c.	56,953	61,430	155,818	26,261	NA	NA
Social sciences, total	36,479	39,347	108,871	71,965	82,058	102,882
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	90	97	0	0	NA	NA
Social sciences, n.e.c.	36,389	39,250	108,871	71,965	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	168,927	182,206	197,198	163,647	186,596	233,949

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: 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.

Data shown for fiscal years 1970-78 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.

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 3I. Federal obligations for applied research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	81,105	95,145	104,261	111,420	94,817	179,109	205,128
Life sciences, total	11,830	14,632	12,793	14,760	14,247	37,897	40,215
Biol & agricultural, total	11,800	14,605	12,728	14,696	14,185	37,817	40,155
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	0	0	0	42	42	53	40
Clinical medical	0	0	0	0	0	0	0
Other medical	0	0	0	42	42	53	40
Life sciences, n.e.c.	30	27	65	22	20	27	20
Psychology, total	58	66	185	254	244	315	243
Biological aspects	0	0	160	0	0	0	0
Social aspects	58	66	25	254	244	315	243
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	5,173	5,451	6,456	6,461	4,932	5,139	5,988
Astronomy	0	0	0	0	0	0	31
Chemistry	4,664	4,886	5,687	5,753	4,239	4,394	5,200
Physics	509	565	769	708	693	745	757
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	24,219	28,288	35,761	40,155	40,269	70,844	73,465
Atmospheric sciences	4,870	6,642	6,802	6,592	4,070	4,229	4,821
Geological sciences	18,221	20,472	26,958	31,237	33,825	58,230	59,320
Oceanography	1,109	1,150	1,648	1,942	2,004	7,537	8,718
Environmental sciences, n.e.c.	19	24	353	384	370	848	606
Math & computer sciences, total	949	1,355	1,366	1,086	1,073	1,996	2,332
Mathematics	NA	NA	NA	NA	NA	NA	1,702
Computer sciences	NA	NA	NA	NA	NA	NA	579
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	51
Engineering, total	37,579	43,543	44,145	46,247	31,925	56,607	76,509
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	14,233	14,727	15,869	16,739	5,427	8,574	12,374
Civil	5,347	5,902	7,558	7,616	7,764	9,881	12,793
Electrical	2,398	3,507	2,113	2,270	1,610	4,041	5,539
Mechanical	1,557	2,843	2,269	2,273	1,664	4,719	6,080
Metallurgy & materials	12,681	14,960	15,282	14,768	14,790	28,526	39,046
Engineering, n.e.c.	1,363	1,604	1,054	2,581	670	866	677
Social sciences, total	1,144	1,631	2,105	1,912	1,604	5,144	5,398
Anthropology	0	250	220	210	90	3,125	3,623
Economics	726	808	951	898	625	714	560
Political science	141	255	264	440	423	548	421
Sociology	156	176	242	190	302	467	440
Social sciences, n.e.c.	121	142	428	174	164	290	354
History	10	9	39	0	0	64	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	111	133	389	174	164	226	NA
Other sciences, n.e.c.	153	179	1,450	545	523	1,167	978

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

Table 3I. Federal obligations for applied research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	192,363	217,616	266,946	282,812	289,174	275,006	254,675
Life sciences, total	45,206	57,323	75,960	81,138	87,548	90,226	94,091
Biol & agricultural, total	45,113	57,228	75,800	81,003	87,548	90,226	93,616
Biol (excl environmental)	NA	41,205	60,649	38,860	55,347	50,133	55,209
Environmental biology	NA	15,265	14,081	40,756	27,421	32,822	36,521
Agricultural	NA	758	1,070	1,387	4,780	7,271	1,886
Medical sciences, total	50	60	95	79	0	0	475
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	50	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	43	35	65	56	0	0	0
Psychology, total	320	350	414	462	0	0	0
Biological aspects	0	0	414	0	0	0	0
Social aspects	320	350	0	323	0	0	0
Psychological sciences, n.e.c.	0	0	0	139	0	0	0
Physical sciences, total	6,844	7,807	6,553	6,400	7,274	10,240	5,526
Astronomy	27	0	0	0	0	0	0
Chemistry	5,895	6,796	5,308	4,448	5,290	3,703	4,418
Physics	922	1,011	942	1,552	1,277	905	984
Physical sciences, n.e.c.	0	0	303	400	707	5,632	124
Environmental sciences, total	80,775	91,880	109,933	111,154	125,255	95,792	83,217
Atmospheric sciences	6,564	7,890	9,398	10,784	10,165	6,914	4,371
Geological sciences	64,052	73,384	89,633	84,697	99,077	77,989	75,531
Oceanography	7,830	7,266	6,941	8,976	10,180	9,667	3,315
Environmental sciences, n.e.c.	2,329	3,340	3,961	6,697	5,833	1,222	0
Math & computer sciences, total	2,278	4,089	5,478	6,265	4,533	1,933	2,395
Mathematics	1,375	2,325	4,166	4,346	3,000	159	312
Computer sciences	807	1,654	1,192	1,821	1,203	1,619	2,083
Math & computer sciences, n.e.c.	96	110	120	98	330	155	0
Engineering, total	51,740	51,293	62,809	72,248	61,017	74,973	67,802
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	161	0	0	0	0
Chemical	6,283	4,746	5,028	3,949	3,445	1,292	400
Civil	8,407	13,776	12,887	20,029	19,234	11,176	8,751
Electrical	774	820	1,178	560	4,351	959	638
Mechanical	5,119	4,560	6,232	6,381	4,646	1,556	909
Metallurgy & materials	30,427	25,910	35,762	40,809	27,255	27,865	22,287
Engineering, n.e.c.	730	1,481	1,561	520	2,086	32,125	34,817
Social sciences, total	4,598	4,174	4,980	4,391	3,537	1,832	1,601
Anthropology	2,606	2,270	2,283	2,300	1,056	883	950
Economics	788	559	845	548	289	392	15
Political science	480	640	750	600	0	0	70
Sociology	425	485	797	551	108	86	566
Social sciences, n.e.c.	299	220	305	392	2,084	471	0
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.	602	700	819	754	10	10	43

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

Table 3I. Federal obligations for applied research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	254,303	230,978	234,926	247,253	266,016	253,031	269,783
Life sciences, total	57,268	49,599	56,792	63,233	69,402	69,417	77,260
Biol & agricultural, total	57,268	49,599	56,792	63,115	69,367	69,415	77,180
Biol (excl environmental)	26,815	21,161	27,797	31,586	39,259	40,776	48,289
Environmental biology	28,797	25,684	27,150	29,618	27,853	26,734	26,886
Agricultural	1,656	2,754	1,845	1,911	2,255	1,905	2,005
Medical sciences, total	0	0	0	0	35	2	0
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	118	0	0	80
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	15,709	15,456	16,220	17,160	17,834	17,214	18,483
Astronomy	0	0	0	0	0	0	0
Chemistry	13,564	13,324	13,991	14,807	15,402	14,485	14,783
Physics	2,055	2,132	2,229	2,353	2,432	2,305	2,358
Physical sciences, n.e.c.	90	0	0	0	0	424	1,342
Environmental sciences, total	101,933	107,076	104,352	112,602	112,114	103,800	109,346
Atmospheric sciences	5,500	5,791	5,800	5,702	1,353	224	210
Geological sciences	91,667	97,327	90,246	93,421	95,768	85,783	92,861
Oceanography	4,195	3,958	8,306	8,638	8,953	10,697	10,580
Environmental sciences, n.e.c.	571	0	0	4,841	6,040	7,096	5,695
Math & computer sciences, total	6,914	7,364	7,934	8,544	8,871	8,918	9,669
Mathematics	1,405	1,203	1,254	1,317	1,356	1,292	1,359
Computer sciences	5,509	6,161	6,680	7,227	7,515	7,626	8,310
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	70,743	50,068	48,178	44,088	55,890	51,782	52,795
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	4,510	4,764	4,728	5,016	5,130	5,820	5,823
Civil	7,414	6,595	5,222	3,264	2,368	3,564	3,155
Electrical	573	520	586	852	591	640	710
Mechanical	791	554	846	341	765	537	744
Metallurgy & materials	23,424	15,728	17,058	10,870	11,533	11,362	11,570
Engineering, n.e.c.	34,031	21,907	19,738	23,745	35,503	29,859	30,793
Social sciences, total	1,691	1,415	1,450	1,626	1,705	1,700	2,131
Anthropology	1,025	1,000	1,000	1,100	960	1,000	1,021
Economics	166	0	0	0	30	0	95
Political science	0	15	0	26	15	0	0
Sociology	500	400	450	500	700	700	1,015
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	45	0	0	0	200	200	99

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

Table 3I. Federal obligations for applied research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	324,102	339,675	349,821	566,928	477,257	486,036	496,213
Life sciences, total	94,479	98,740	93,272	146,035	132,340	122,055	129,235
Biol & agricultural, total	94,179	98,640	93,072	146,035	132,340	122,055	129,235
Biol (excl environmental)	43,273	44,830	43,349	74,215	69,209	64,191	70,075
Environmental biology	47,723	50,056	45,445	71,635	62,930	57,623	58,571
Agricultural	3,183	3,754	4,278	185	201	241	589
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	300	100	200	0	0	0	0
Psychology, total	0	0	0	0	0	0	0
Biological aspects	0	0	0	0	0	0	0
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	22,860	25,333	24,481	37,337	38,113	40,658	41,055
Astronomy	0	0	0	0	0	0	0
Chemistry	17,983	19,444	20,401	31,114	31,761	33,525	33,966
Physics	2,877	3,889	4,080	6,223	6,352	7,133	7,089
Physical sciences, n.e.c.	2,000	2,000	0	0	0	0	0
Environmental sciences, total	130,899	127,272	132,105	266,402	252,196	269,709	271,929
Atmospheric sciences	740	450	3,175	2,711	3,126	2,464	4,346
Geological sciences	109,417	113,807	108,136	249,830	236,427	251,679	253,634
Oceanography	10,921	11,025	18,821	12,078	12,643	15,078	13,182
Environmental sciences, n.e.c.	9,821	1,990	1,973	1,783	0	488	767
Math & computer sciences, total	11,174	11,778	12,759	18,296	18,139	18,319	18,613
Mathematics	1,839	2,056	2,452	2,996	3,049	3,146	3,247
Computer sciences	9,335	9,722	10,307	13,881	13,771	14,088	15,366
Math & computer sciences, n.e.c.	0	0	0	1,419	1,319	1,085	0
Engineering, total	60,724	72,554	76,754	85,165	21,475	21,409	21,177
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	7,123	8,963	8,776	12,591	12,318	12,422	13,175
Civil	3,767	4,937	9,809	7,528	7,864	8,389	7,593
Electrical	967	770	195	125	126	123	101
Mechanical	1,272	771	200	824	836	151	163
Metallurgy & materials	15,107	14,721	17,941	63,634	135	282	145
Engineering, n.e.c.	32,488	42,392	39,833	463	196	42	0
Social sciences, total	3,911	3,998	5,585	12,589	14,327	13,855	14,204
Anthropology	1,400	1,535	2,485	4,672	4,782	4,730	5,290
Economics	150	0	0	71	76	139	753
Political science	0	0	0	0	0	31	0
Sociology	1,260	1,400	2,000	1,124	1,852	564	77
Social sciences, n.e.c.	1,101	1,063	1,100	6,722	7,617	8,391	8,084
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.	55	0	4,865	1,104	667	31	0

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

Table 31. Federal obligations for applied research, by detailed field of science & engineering: Department of the Interior, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	454,119	550,910	496,642	511,008	537,914	496,341
Life sciences, total	106,997	145,103	122,543	145,129	154,187	152,594
Biol & agricultural, total	106,997	145,103	122,338	144,775	NA	NA
Biol (excl environmental)	56,903	75,131	66,673	72,859	NA	NA
Environmental biology	49,598	69,673	55,520	71,612	NA	NA
Agricultural	496	299	145	304	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	205	354	NA	NA
Psychology, total	0	0	18	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	18	0	NA	NA
Physical sciences, total	1,007	42	18	0	20	20
Astronomy	0	0	0	0	NA	NA
Chemistry	917	0	0	0	NA	NA
Physics	90	0	0	0	NA	NA
Physical sciences, n.e.c.	0	42	18	0	NA	NA
Environmental sciences, total	309,703	369,797	337,721	342,685	357,877	320,493
Atmospheric sciences	3,445	2,054	6,975	1,926	NA	NA
Geological sciences	162,215	196,486	173,763	186,343	NA	NA
Oceanography	17,491	18,028	19,499	12,878	NA	NA
Environmental sciences, n.e.c.	126,552	153,229	137,484	141,538	NA	NA
Math & computer sciences, total	6,874	6,813	4,809	7,384	6,981	7,269
Mathematics	904	1,052	684	1,371	NA	NA
Computer sciences	5,970	4,454	4,065	5,943	NA	NA
Math & computer sciences, n.e.c.	0	1,307	60	70	NA	NA
Engineering, total	8,653	11,972	11,114	11,499	14,264	11,767
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	3,094	4,938	3,404	2,682	NA	NA
Civil	4,468	5,545	6,177	6,950	NA	NA
Electrical	187	636	584	764	NA	NA
Mechanical	0	0	0	0	NA	NA
Metallurgy & materials	904	633	640	506	NA	NA
Engineering, n.e.c.	0	220	309	597	NA	NA
Social sciences, total	20,885	17,183	20,341	4,311	4,585	4,198
Anthropology	3,761	4,487	53	4	NA	NA
Economics	2,593	195	745	348	NA	NA
Political science	0	1,877	0	0	NA	NA
Sociology	1,543	3,028	1,643	3,111	NA	NA
Social sciences, n.e.c.	12,988	7,596	17,900	848	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	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 3J. Federal obligations for applied research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

Page 1 of 5

Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	47,534	47,718	44,950	65,257	86,794	124,311	141,695
Life sciences, total	17,057	13,702	11,690	16,595	23,619	27,700	43,060
Biol & agricultural, total	11,013	10,908	8,650	13,942	20,219	23,600	37,419
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	6,044	2,794	3,040	2,653	3,400	4,100	5,641
Clinical medical	660	344	350	0	0	0	0
Other medical	5,384	2,450	2,690	2,653	3,400	4,100	5,641
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	8	45	60	0	0	0	0
Biological aspects	8	45	35	0	0	0	0
Social aspects	0	0	25	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	5,929	6,535	4,440	21,457	23,800	27,500	45,642
Astronomy	0	0	0	0	0	0	0
Chemistry	3,849	4,627	4,080	16,857	20,600	21,000	41,990
Physics	1,144	1,908	360	4,600	3,200	6,500	3,652
Physical sciences, n.e.c.	936	0	0	0	0	0	0
Environmental sciences, total	4,240	5,000	4,400	3,450	4,700	5,700	3,566
Atmospheric sciences	749	3,120	2,715	1,805	2,775	3,300	683
Geological sciences	36	80	185	670	825	1,000	1,205
Oceanography	1,716	1,800	1,500	975	1,100	1,400	1,678
Environmental sciences, n.e.c.	1,739	0	0	0	0	0	0
Math & computer sciences, total	193	460	270	1,485	1,575	2,300	2,330
Mathematics	NA	NA	NA	NA	NA	NA	466
Computer sciences	NA	NA	NA	NA	NA	NA	1,864
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	0
Engineering, total	19,586	21,174	23,060	19,300	32,200	55,471	45,197
Aeronautical	0	0	0	0	0	0	0
Astronautical	137	100	90	0	0	0	0
Chemical	6,747	7,500	7,150	5,580	9,200	14,200	16,988
Civil	7,870	7,234	9,455	6,860	12,800	19,800	17,750
Electrical	197	220	145	1,960	3,100	4,471	5,232
Mechanical	4,635	6,120	6,220	4,900	7,100	17,000	5,227
Metallurgy & materials	0	0	0	0	0	0	0
Engineering, n.e.c.	0	0	0	0	0	0	0
Social sciences, total	521	802	1,030	2,970	900	5,640	1,900
Anthropology	0	0	0	0	0	0	0
Economics	377	615	772	1,782	700	4,400	1,520
Political science	0	0	0	0	0	0	0
Sociology	63	187	258	1,188	200	1,240	380
Social sciences, n.e.c.	81	0	0	0	0	0	0
History	0	0	0	0	0	0	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	81	0	0	0	0	0	NA
Other sciences, n.e.c.	0	0	0	0	0	0	0

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

**Table 3J. Federal obligations for applied research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

Page 2 of 5

Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	196,956	246,660	248,900	231,500	207,800	210,692	152,380
Life sciences, total	70,688	73,998	79,907	68,999	60,533	71,996	57,728
Biol & agricultural, total	66,176	69,558	71,528	58,701	57,494	56,627	45,191
Biol (excl environmental)	NA	0	0	0	0	37,015	27,522
Environmental biology	NA	69,558	53,628	44,560	57,494	18,331	16,116
Agricultural	NA	0	17,900	14,141	0	1,281	1,553
Medical sciences, total	4,512	4,440	8,379	10,298	3,039	15,369	12,537
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	4,512	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	0	0	0
Psychology, total	0	0	0	0	0	514	581
Biological aspects	0	0	0	0	0	514	581
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	48,694	69,065	71,446	69,283	66,420	16,612	13,856
Astronomy	0	0	0	0	0	0	0
Chemistry	44,984	66,425	70,671	68,408	66,420	15,338	12,825
Physics	3,710	2,640	775	875	0	1,274	1,031
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	5,444	4,464	2,204	5,188	3,618	43,744	32,620
Atmospheric sciences	590	1,311	460	810	0	31,070	24,837
Geological sciences	3,179	2,051	1,586	4,226	2,980	5,154	5,829
Oceanography	1,675	1,102	158	152	638	3,420	1,954
Environmental sciences, n.e.c.	0	0	0	0	0	4,100	0
Math & computer sciences, total	3,100	3,699	1,024	1,038	0	3,339	3,766
Mathematics	2,370	1,797	0	0	0	423	194
Computer sciences	730	1,902	1,024	1,038	0	2,916	3,572
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	65,715	92,950	92,733	85,253	77,229	66,108	41,859
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	25,212	39,828	42,205	31,966	55,788	21,586	14,053
Civil	24,890	33,673	34,558	37,081	21,441	29,599	19,084
Electrical	7,814	7,780	4,325	4,426	0	2,645	933
Mechanical	7,799	11,669	11,645	11,780	0	6,304	3,975
Metallurgy & materials	0	0	0	0	0	4,952	3,198
Engineering, n.e.c.	0	0	0	0	0	1,022	616
Social sciences, total	3,315	2,484	1,586	1,739	0	476	352
Anthropology	0	0	0	0	0	0	0
Economics	2,395	2,279	1,586	1,239	0	476	352
Political science	0	0	0	0	0	0	0
Sociology	920	205	0	500	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	0	0	7,903	1,618

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

**Table 3J. Federal obligations for applied research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	142,336	175,994	179,292	246,126	240,723	222,635	241,610
Life sciences, total	59,531	68,558	71,404	87,378	91,619	100,908	107,070
Biol & agricultural, total	52,916	54,835	59,013	75,440	81,748	89,115	93,058
Biol (excl environmental)	29,978	33,381	38,804	55,079	56,518	58,797	61,779
Environmental biology	20,251	19,211	17,954	17,312	18,856	23,914	22,450
Agricultural	2,687	2,243	2,255	3,049	6,374	6,404	8,829
Medical sciences, total	6,615	13,723	12,391	11,938	9,871	11,793	14,012
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	0	0
Psychology, total	650	803	821	1,254	933	1,042	1,176
Biological aspects	650	803	821	1,254	933	1,042	1,176
Social aspects	0	0	0	0	0	0	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	13,782	15,730	18,462	32,536	29,740	29,217	29,818
Astronomy	0	0	0	0	0	0	0
Chemistry	12,907	14,481	15,834	30,317	27,716	26,920	27,437
Physics	875	1,249	2,628	2,219	2,024	2,297	2,381
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	31,989	36,706	40,611	70,668	72,881	45,545	49,846
Atmospheric sciences	21,426	29,755	34,217	65,637	67,052	40,053	43,632
Geological sciences	8,931	4,624	4,226	3,179	3,434	3,580	4,080
Oceanography	1,632	2,327	2,168	1,852	2,395	1,912	2,134
Environmental sciences, n.e.c.	0	0	0	0	0	0	0
Math & computer sciences, total	1,086	4,074	5,063	3,611	791	3,078	4,112
Mathematics	0	151	404	22	0	39	35
Computer sciences	1,086	3,923	4,659	3,589	791	3,039	4,077
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	31,427	36,523	39,972	45,959	43,762	38,647	45,308
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	14,944	14,144	19,664	20,960	21,111	16,893	20,822
Civil	16,483	15,504	15,596	17,850	17,443	15,436	17,815
Electrical	0	711	376	408	3	412	450
Mechanical	0	3,511	3,549	4,569	3,599	3,600	3,734
Metallurgy & materials	0	2,505	453	526	343	758	585
Engineering, n.e.c.	0	148	334	1,646	1,263	1,548	1,902
Social sciences, total	3,871	11,180	479	500	560	0	0
Anthropology	0	0	0	0	0	0	0
Economics	3,871	11,180	0	0	0	0	0
Political science	0	0	240	250	280	0	0
Sociology	0	0	239	250	280	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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	2,420	2,480	4,220	437	4,198	4,280

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

**Table 3J. Federal obligations for applied research, by detailed field of science
& engineering: Environmental Protection Agency,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	261,915	293,900	272,385	300,962	331,330	329,100	357,976
Life sciences, total	117,381	120,835	71,452	76,115	91,595	90,979	98,962
Biol & agricultural, total	111,231	114,248	58,545	62,366	74,223	73,723	80,192
Biol (excl environmental)	66,772	76,885	0	0	0	0	0
Environmental biology	43,572	36,704	58,545	62,366	74,223	73,723	80,192
Agricultural	887	659	0	0	0	0	0
Medical sciences, total	6,150	6,587	12,907	13,749	17,372	17,256	18,770
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	0	0
Psychology, total	1,091	1,223	0	0	0	0	0
Biological aspects	658	0	0	0	0	0	0
Social aspects	433	658	0	0	0	0	0
Psychological sciences, n.e.c.	0	565	0	0	0	0	0
Physical sciences, total	37,304	59,945	0	0	0	0	0
Astronomy	0	0	0	0	0	0	0
Chemistry	36,051	56,180	0	0	0	0	0
Physics	1,253	3,765	0	0	0	0	0
Physical sciences, n.e.c.	0	0	0	0	0	0	0
Environmental sciences, total	62,326	57,030	171,388	182,981	141,791	140,837	153,194
Atmospheric sciences	54,274	50,067	76,432	81,531	66,120	65,675	71,437
Geological sciences	7,305	5,081	10,564	11,254	9,225	9,163	9,967
Oceanography	747	1,882	349	371	0	0	0
Environmental sciences, n.e.c.	0	0	84,043	89,825	66,446	65,999	71,790
Math & computer sciences, total	773	847	0	0	0	0	0
Mathematics	0	0	0	0	0	0	0
Computer sciences	773	847	0	0	0	0	0
Math & computer sciences, n.e.c.	0	0	0	0	0	0	0
Engineering, total	41,199	54,020	29,545	41,866	97,944	97,284	105,820
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	21,634	32,283	1,852	1,973	2,159	2,144	2,332
Civil	15,043	15,810	0	0	0	0	0
Electrical	886	845	0	0	0	0	0
Mechanical	2,286	3,765	0	0	0	0	0
Metallurgy & materials	178	376	0	0	0	0	0
Engineering, n.e.c.	1,172	941	27,693	39,893	95,785	95,140	103,488
Social sciences, total	0	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	1,841	0	0	0	0	0	0

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

Table 3J. Federal obligations for applied research, by detailed field of science & engineering: Environmental Protection Agency, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	419,800	399,994	352,068	276,222	379,700	414,751
Life sciences, total	116,052	154,271	139,350	98,807	141,154	159,797
Biol & agricultural, total	94,041	153,953	134,924	79,346	NA	NA
Biol (excl environmental)	0	33,079	49,587	33,253	NA	NA
Environmental biology	94,041	120,796	85,251	45,851	NA	NA
Agricultural	0	78	86	242	NA	NA
Medical sciences, total	22,011	156	163	204	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	162	4,263	19,257	NA	NA
Psychology, total	0	0	0	0	0	0
Biological aspects	0	0	0	0	NA	NA
Social aspects	0	0	0	0	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	0	10,505	9,860	7,592	8,985	12,322
Astronomy	0	0	0	0	NA	NA
Chemistry	0	8,853	9,285	7,592	NA	NA
Physics	0	0	575	0	NA	NA
Physical sciences, n.e.c.	0	1,652	0	0	NA	NA
Environmental sciences, total	179,651	119,043	110,690	102,658	133,427	149,567
Atmospheric sciences	83,775	56,481	34,083	38,869	NA	NA
Geological sciences	11,688	10,618	8,034	8,490	NA	NA
Oceanography	0	12,756	12,788	10,651	NA	NA
Environmental sciences, n.e.c.	84,188	39,188	55,785	44,648	NA	NA
Math & computer sciences, total	0	15,633	9,499	7,978	11,665	14,816
Mathematics	0	9,013	4,459	4,448	NA	NA
Computer sciences	0	6,449	4,769	1,494	NA	NA
Math & computer sciences, n.e.c.	0	171	271	2,036	NA	NA
Engineering, total	124,097	59,303	45,146	30,314	38,889	40,635
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	2,735	9,475	9,755	5,670	NA	NA
Civil	0	21,446	16,039	13,359	NA	NA
Electrical	0	294	469	326	NA	NA
Mechanical	0	505	469	802	NA	NA
Metallurgy & materials	0	1,032	729	687	NA	NA
Engineering, n.e.c.	121,362	26,551	17,685	9,470	NA	NA
Social sciences, total	0	2,938	3,612	4,270	7,462	8,968
Anthropology	0	0	0	0	NA	NA
Economics	0	261	1,828	2,932	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	10	NA	NA
Social sciences, n.e.c.	0	2,677	1,784	1,328	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	0	38,301	33,911	24,603	38,118	28,646

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 3K. Federal obligations for applied research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	672,687	595,387	432,981	443,641	539,810	625,804	929,632
Life sciences, total	24,132	29,306	25,909	24,572	9,806	10,995	16,325
Biol & agricultural, total	11,682	5,582	2,285	3,849	2,009	2,860	1,078
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	2,203	1,429	6,801	8,907	6,887	6,906	14,333
Clinical medical	2,203	0	0	1,286	720	749	875
Other medical	0	1,429	6,801	7,621	6,167	6,157	13,458
Life sciences, n.e.c.	10,247	22,295	16,823	11,816	910	1,229	914
Psychology, total	705	903	4,159	4,112	5,873	7,933	9,702
Biological aspects	705	903	2,215	2,227	1,337	1,058	0
Social aspects	0	0	0	228	4,488	5,719	386
Psychological sciences, n.e.c.	0	0	1,944	1,657	48	1,156	9,316
Physical sciences, total	23,851	16,109	9,708	8,602	10,985	13,801	14,198
Astronomy	5,263	2,151	907	950	1,824	2,292	2,287
Chemistry	1,355	1,406	2,922	1,309	1,910	1,705	519
Physics	17,233	12,552	5,879	6,043	5,357	3,883	6,683
Physical sciences, n.e.c.	0	0	0	300	1,894	5,921	4,709
Environmental sciences, total	89,156	98,093	90,931	105,174	142,851	199,300	158,646
Atmospheric sciences	60,533	68,972	42,033	30,315	60,110	84,179	65,241
Geological sciences	22,339	20,771	30,123	33,333	21,359	25,739	20,074
Oceanography	6,284	8,350	8,911	13,876	14,890	22,300	18,506
Environmental sciences, n.e.c.	0	0	9,864	27,650	46,492	67,082	54,825
Math & computer sciences, total	0	0	0	1,254	718	1,157	906
Mathematics	NA	NA	NA	NA	NA	NA	0
Computer sciences	NA	NA	NA	NA	NA	NA	0
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	906
Engineering, total	534,843	446,760	300,176	255,247	367,670	385,554	719,731
Aeronautical	210,921	175,153	98,294	104,203	205,030	205,727	392,393
Astronautical	148,355	131,078	46,988	28,352	75,423	77,586	156,988
Chemical	35,885	30,867	11,353	10,899	220	2,813	8,159
Civil	101	0	0	100	742	256	1,145
Electrical	51,727	42,833	48,474	32,620	19,084	18,196	46,703
Mechanical	19,502	21,616	43,771	39,952	3,925	9,665	28,081
Metallurgy & materials	7,715	10,044	39,421	31,730	43,123	39,493	69,839
Engineering, n.e.c.	60,637	35,169	11,875	7,391	20,123	31,818	16,423
Social sciences, total	0	0	884	1,911	540	896	1,744
Anthropology	0	0	0	0	0	0	0
Economics	0	0	0	65	504	595	1,647
Political science	0	0	0	50	30	211	57
Sociology	0	0	0	20	0	0	0
Social sciences, n.e.c.	0	0	884	1,776	6	90	40
History	0	0	0	0	6	47	NA
Linguistics	0	0	0	0	0	0	NA
Other social sciences	0	0	884	1,776	0	43	NA
Other sciences, n.e.c.	0	4,216	1,214	42,769	1,367	6,168	8,380

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

**Table 3K. Federal obligations for applied research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	792,302	865,438	938,389	1,050,531	876,036	871,407	927,787
Life sciences, total	12,861	29,020	38,787	53,705	45,980	40,490	46,744
Biol & agricultural, total	1,699	4,544	8,011	19,267	22,708	18,600	20,529
Biol (excl environmental)	NA	4,544	5,759	6,482	6,640	7,746	9,303
Environmental biology	NA	0	2,248	1,420	1,203	20	0
Agricultural	NA	0	4	11,365	14,865	10,834	11,226
Medical sciences, total	10,433	24,476	29,965	33,548	22,705	21,031	24,647
Clinical medical	982	NA	NA	NA	NA	NA	NA
Other medical	9,451	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	729	0	811	890	567	859	1,568
Psychology, total	10,332	9,664	1,150	1,323	1,134	1,064	1,163
Biological aspects	9,637	747	0	0	0	0	19
Social aspects	477	359	992	1,165	945	912	1,061
Psychological sciences, n.e.c.	218	8,558	158	158	189	152	83
Physical sciences, total	24,564	21,714	12,294	12,253	11,271	8,927	40,401
Astronomy	2,595	1,497	2,436	4,614	5,425	2,981	1,645
Chemistry	1,419	339	1,134	1,491	1,081	1,020	1,684
Physics	13,829	13,059	3,701	3,902	2,162	2,040	30,388
Physical sciences, n.e.c.	6,721	6,819	5,023	2,246	2,603	2,886	6,684
Environmental sciences, total	201,624	234,881	265,069	294,374	162,428	173,509	163,730
Atmospheric sciences	80,268	64,272	72,803	98,246	55,763	75,062	78,845
Geological sciences	23,154	41,211	62,455	67,834	38,543	37,017	5,906
Oceanography	28,361	29,014	24,067	24,975	19,428	240	23,551
Environmental sciences, n.e.c.	69,841	100,384	105,744	103,319	48,694	61,190	55,428
Math & computer sciences, total	23,423	16,183	1,654	1,908	2,025	23,469	39,740
Mathematics	20,557	1,341	1,370	1,179	1,042	2,455	3,197
Computer sciences	2,866	14,842	284	635	860	20,923	34,999
Math & computer sciences, n.e.c.	0	0	0	94	123	91	1,544
Engineering, total	517,320	552,585	618,397	686,334	652,026	622,823	635,314
Aeronautical	238,875	272,628	367,590	415,808	390,962	395,208	398,247
Astronautical	123,833	122,879	187,332	206,609	201,614	167,462	188,951
Chemical	10,859	15,898	13	33	12	45	91
Civil	1,314	1,564	0	0	0	0	0
Electrical	38,703	24,098	1,406	2,203	1,975	14,636	15,985
Mechanical	22,508	34,813	941	1,614	2,240	2,687	2,020
Metallurgy & materials	60,615	54,315	5,114	3,776	4,479	10,387	11,884
Engineering, n.e.c.	20,613	26,390	56,001	56,291	50,744	32,398	18,136
Social sciences, total	533	49	15	30	0	13	0
Anthropology	0	0	0	0	0	0	0
Economics	457	0	0	0	0	0	0
Political science	30	29	15	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	46	20	0	30	0	13	0
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.	1,645	1,342	1,023	604	1,172	1,112	695

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

**Table 3K. Federal obligations for applied research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

Page 3 of 5

Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	954,700	1,032,700	1,152,300	1,255,530	1,218,862	1,461,400	1,423,765
Life sciences, total	39,561	50,147	62,121	71,074	72,453	84,095	104,337
Biol & agricultural, total	11,243	10,188	10,262	9,350	16,261	19,399	30,616
Biol (excl environmental)	11,072	9,825	9,921	9,116	16,189	19,100	25,167
Environmental biology	47	247	280	184	7	261	5,449
Agricultural	124	116	61	50	65	38	0
Medical sciences, total	27,291	29,412	31,803	31,353	33,167	40,280	46,205
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	1,027	10,547	20,056	30,371	23,025	24,416	27,516
Psychology, total	192	1,376	1,614	1,161	1,180	5,156	7,135
Biological aspects	20	0	0	25	27	0	0
Social aspects	0	1,200	1,537	987	1,030	5,073	7,005
Psychological sciences, n.e.c.	172	176	77	149	123	83	130
Physical sciences, total	25,645	76,293	82,684	74,324	70,317	88,621	84,084
Astronomy	1,420	12,816	13,698	12,456	10,783	15,250	15,312
Chemistry	1,908	6,141	6,251	5,416	3,309	6,980	8,244
Physics	16,485	42,214	45,943	39,032	40,488	45,173	35,468
Physical sciences, n.e.c.	5,832	15,122	16,792	17,420	15,737	21,218	25,060
Environmental sciences, total	128,409	139,938	149,726	139,866	155,587	175,375	201,779
Atmospheric sciences	61,005	72,177	78,153	73,193	87,051	98,275	148,614
Geological sciences	4,660	7,569	9,292	8,684	7,774	10,350	7,336
Oceanography	20,083	19,779	19,466	17,530	25,832	32,617	40,200
Environmental sciences, n.e.c.	42,661	40,413	42,815	40,459	34,930	34,133	5,629
Math & computer sciences, total	40,212	43,227	33,751	46,780	45,601	53,318	46,166
Mathematics	4,345	6,377	10,736	16,245	19,025	26,662	22,629
Computer sciences	32,138	32,937	19,741	26,815	23,332	25,927	23,314
Math & computer sciences, n.e.c.	3,729	3,913	3,274	3,720	3,244	729	223
Engineering, total	720,053	718,279	818,642	909,273	870,213	1,046,740	974,627
Aeronautical	410,241	372,850	377,119	353,387	366,790	444,529	453,964
Astronautical	273,438	318,091	413,699	513,824	445,948	540,420	440,842
Chemical	0	121	94	157	576	2,000	5,749
Civil	0	42	0	0	7	0	0
Electrical	13,186	2,878	2,026	1,778	2,026	2,314	5,147
Mechanical	1,900	2,099	2,162	4,789	6,952	7,473	8,559
Metallurgy & materials	8,119	8,512	9,300	12,797	10,220	7,546	26,794
Engineering, n.e.c.	13,169	13,686	14,242	22,541	37,694	42,458	33,572
Social sciences, total	0	2,637	3,336	12,425	3,026	2,450	0
Anthropology	0	0	0	0	0	0	0
Economics	0	3	3	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	2,634	3,333	12,425	3,026	2,450	0
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.	628	803	426	627	485	5,645	5,637

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

**Table 3K. Federal obligations for applied research, by detailed field of science
& engineering: National Aeronautics & Space Administration,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	1,665,587	1,491,134	1,748,641	1,876,650	2,067,896	1,897,097	2,090,120
Life sciences, total	129,427	108,516	159,436	171,922	184,692	172,391	186,394
Biol & agricultural, total	42,595	42,953	54,960	58,979	64,988	63,998	64,469
Biol (excl environmental)	32,284	34,757	49,924	53,561	59,094	57,421	58,569
Environmental biology	10,271	8,196	5,036	5,418	5,894	5,784	5,900
Agricultural	40	0	0	0	0	793	0
Medical sciences, total	65,898	57,440	97,395	105,346	111,318	100,256	113,626
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	20,934	8,123	7,081	7,597	8,386	8,137	8,299
Psychology, total	9,043	8,430	13,429	14,505	15,447	14,584	15,697
Biological aspects	0	0	0	0	0	0	0
Social aspects	8,863	8,273	12,479	13,502	14,247	13,043	14,125
Psychological sciences, n.e.c.	180	157	950	1,003	1,200	1,541	1,572
Physical sciences, total	86,199	69,822	75,552	74,725	119,213	86,927	93,943
Astronomy	19,117	7,718	10,406	6,790	32,872	20,148	20,551
Chemistry	8,293	10,392	6,076	6,248	8,465	7,179	7,322
Physics	39,670	36,624	48,484	50,432	64,859	47,429	53,656
Physical sciences, n.e.c.	19,119	15,088	10,586	11,255	13,017	12,171	12,414
Environmental sciences, total	267,342	249,002	276,096	293,741	338,560	301,600	392,785
Atmospheric sciences	161,588	139,495	157,086	166,870	193,825	164,039	252,474
Geological sciences	17,778	22,018	23,715	24,360	33,168	28,137	28,699
Oceanography	76,900	81,299	76,330	82,334	88,311	87,462	89,211
Environmental sciences, n.e.c.	11,076	6,190	18,965	20,177	23,256	21,962	22,401
Math & computer sciences, total	52,358	45,271	48,098	51,869	55,709	52,085	56,294
Mathematics	22,687	15,684	3,294	3,559	3,784	3,775	3,850
Computer sciences	26,890	25,163	7,142	7,583	8,832	8,328	8,495
Math & computer sciences, n.e.c.	2,781	4,424	37,662	40,727	43,093	39,982	43,949
Engineering, total	1,114,549	1,003,574	1,170,995	1,264,612	1,347,714	1,263,743	1,338,178
Aeronautical	559,431	499,556	755,988	816,266	870,829	788,513	882,874
Astronautical	472,169	438,017	337,856	365,192	387,313	386,798	394,534
Chemical	4,273	4,885	454	472	608	537	548
Civil	0	0	0	0	0	40	40
Electrical	9,880	9,951	15,410	16,629	17,798	17,684	18,214
Mechanical	9,794	5,176	6,653	7,121	7,956	7,679	7,833
Metallurgy & materials	34,116	26,428	28,178	30,377	32,685	32,250	3,289
Engineering, n.e.c.	24,886	19,561	26,456	28,555	30,525	30,242	30,846
Social sciences, total	36	0	0	0	0	0	0
Anthropology	0	0	0	0	0	0	0
Economics	36	0	0	0	0	0	0
Political science	0	0	0	0	0	0	0
Sociology	0	0	0	0	0	0	0
Social sciences, n.e.c.	0	0	0	0	0	0	0
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.	6,633	6,519	5,035	5,276	6,561	5,767	6,829

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

Table 3K. Federal obligations for applied research, by detailed field of science & engineering: National Aeronautics & Space Administration, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	2,389,858	2,317,028	1,658,538	2,706,640	3,084,248	3,310,346
Life sciences, total	191,784	185,939	133,096	217,104	247,508	265,652
Biol & agricultural, total	68,519	66,430	48,052	78,026	NA	NA
Biol (excl environmental)	62,627	60,718	43,463	70,928	NA	NA
Environmental biology	5,892	5,712	4,089	6,673	NA	NA
Agricultural	0	0	500	425	NA	NA
Medical sciences, total	113,800	110,332	78,976	128,358	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	9,465	9,177	6,068	10,720	NA	NA
Psychology, total	16,919	16,403	1,848	19,162	21,835	23,436
Biological aspects	0	0	416	273	NA	NA
Social aspects	15,316	14,849	145	17,346	NA	NA
Psychological sciences, n.e.c.	1,603	1,554	1,287	1,543	NA	NA
Physical sciences, total	106,082	102,849	139,725	120,143	136,905	146,941
Astronomy	25,215	24,447	83,604	105,629	NA	NA
Chemistry	8,471	8,212	5,879	8,607	NA	NA
Physics	60,937	59,080	42,290	2,431	NA	NA
Physical sciences, n.e.c.	11,459	11,110	7,952	3,476	NA	NA
Environmental sciences, total	393,295	381,309	273,353	445,427	507,570	544,778
Atmospheric sciences	271,291	263,024	188,478	307,251	NA	NA
Geological sciences	26,661	25,849	18,502	30,195	NA	NA
Oceanography	72,627	70,414	50,402	82,254	NA	NA
Environmental sciences, n.e.c.	22,716	22,022	15,971	25,727	NA	NA
Math & computer sciences, total	57,816	56,054	40,124	65,480	74,615	80,085
Mathematics	2,688	2,606	1,865	3,044	NA	NA
Computer sciences	8,665	8,401	6,013	13,500	NA	NA
Math & computer sciences, n.e.c.	46,463	45,047	32,246	48,936	NA	NA
Engineering, total	1,615,868	1,566,625	1,063,679	1,830,058	2,085,270	2,238,142
Aeronautical	1,024,065	992,857	647,128	1,159,808	NA	NA
Aeronautical	531,359	515,166	368,758	601,792	NA	NA
Chemical	442	429	440	501	NA	NA
Civil	28	27	0	32	NA	NA
Electrical	14,158	13,727	9,826	16,035	NA	NA
Mechanical	9,465	9,177	6,569	10,720	NA	NA
Metallurgy & materials	3,301	3,200	8,023	3,739	NA	NA
Engineering, n.e.c.	33,050	32,042	22,935	37,431	NA	NA
Social sciences, total	0	0	0	100	100	100
Anthropology	0	0	0	0	NA	NA
Economics	0	0	0	0	NA	NA
Political science	0	0	0	0	NA	NA
Sociology	0	0	0	0	NA	NA
Social sciences, n.e.c.	0	0	0	100	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	8,094	7,849	6,713	9,166	10,445	11,212

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: During the Vol. 45 (fiscal years 1995-97) survey cycle, the National Aeronautics & Space Administration made a statistical adjustment to the 1994 and 1995 field of science and engineering values to diminish a computational error introduced by its software.

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 3L. Federal obligations for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	29,812	45,720	59,579	71,511	105,039	84,026	72,142
Life sciences, total	7,457	8,527	10,543	7,643	14,716	6,223	6,759
Biol & agricultural, total	7,247	8,527	6,900	7,285	14,703	6,223	6,745
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	210	0	0	0	13	0	0
Clinical medical	0	0	0	0	13	0	0
Other medical	210	0	0	0	0	0	0
Life sciences, n.e.c.	0	0	3,643	358	0	0	14
Psychology, total	120	180	880	910	940	638	0
Biological aspects	90	150	680	700	720	463	0
Social aspects	30	30	200	210	220	175	0
Psychological sciences, n.e.c.	0	0	0	0	0	0	0
Physical sciences, total	1,627	2,246	10,186	2,654	5,572	11,366	4,573
Astronomy	0	0	0	0	75	360	0
Chemistry	500	1,466	780	1,174	3,420	6,353	2,510
Physics	893	780	1,080	1,229	2,077	4,653	2,063
Physical sciences, n.e.c.	234	0	8,326	251	0	0	0
Environmental sciences, total	6,239	6,381	11,321	14,952	12,639	12,518	9,289
Atmospheric sciences	2,425	3,979	4,833	5,579	7,289	6,902	5,545
Geological sciences	1,482	612	685	662	3,214	4,147	3,113
Oceanography	1,375	1,790	1,828	865	2,136	1,469	478
Environmental sciences, n.e.c.	957	0	3,975	7,846	0	0	153
Math & computer sciences, total	100	9,231	140	324	450	1,484	1,846
Mathematics	NA	NA	NA	NA	NA	NA	96
Computer sciences	NA	NA	NA	NA	NA	NA	1,585
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	165
Engineering, total	4,258	11,491	10,700	6,704	20,744	23,428	15,506
Aeronautical	0	0	0	0	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	830	2,740	760	790	810	446	532
Civil	380	1,716	760	857	810	446	562
Electrical	1,030	2,185	760	898	810	446	531
Mechanical	1,488	1,909	760	3,289	810	446	551
Metallurgy & materials	330	2,941	760	792	4,728	2,728	1,992
Engineering, n.e.c.	200	0	6,900	78	12,776	18,916	11,338
Social sciences, total	5,348	6,228	10,347	12,187	12,902	13,192	22,104
Anthropology	0	0	0	0	0	350	40
Economics	1,022	1,538	1,987	2,444	1,050	1,135	886
Political science	951	470	356	209	210	186	77
Sociology	400	280	350	500	510	333	234
Social sciences, n.e.c.	2,975	3,940	7,654	9,034	11,132	11,188	20,867
History	0	0	0	0	0	111	NA
Linguistics	0	0	0	0	0	180	NA
Other social sciences	2,975	3,940	7,654	9,034	11,132	10,897	NA
Other sciences, n.e.c.	4,663	1,436	5,462	26,137	37,076	15,177	12,065

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

Table 3L. Federal obligations for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	63,400	65,462	66,770	58,441	58,895	57,087	62,854
Life sciences, total	5,085	3,084	4,743	8,071	4,205	13,771	12,873
Biol & agricultural, total	5,005	116	211	7,897	3,977	13,624	12,873
Biol (excl environmental)	NA	116	211	5,974	2,877	5,722	5,499
Environmental biology	NA	0	0	1,923	1,100	7,623	7,106
Agricultural	NA	0	0	0	0	279	268
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	0	NA	NA	NA	NA	NA	NA
Other medical	0	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	80	2,968	4,532	174	228	147	0
Psychology, total	0	0	571	1,621	1,266	359	179
Biological aspects	0	0	5	370	268	82	118
Social aspects	0	0	566	1,251	967	223	53
Psychological sciences, n.e.c.	0	0	0	0	31	54	8
Physical sciences, total	4,980	5,922	8,717	4,652	2,223	6,030	9,410
Astronomy	0	0	0	25	67	12	32
Chemistry	3,269	3,571	5,284	2,339	913	2,784	3,916
Physics	1,711	2,351	3,365	1,777	851	3,154	5,366
Physical sciences, n.e.c.	0	0	68	511	392	80	96
Environmental sciences, total	4,733	3,709	3,803	3,021	1,794	5,321	4,126
Atmospheric sciences	2,930	300	126	109	21	1,088	1,168
Geological sciences	1,792	3,165	3,087	2,036	841	1,974	2,046
Oceanography	0	3	75	15	485	345	870
Environmental sciences, n.e.c.	11	241	515	861	447	1,914	42
Math & computer sciences, total	3,279	1,161	2,733	4,909	5,844	2,693	2,533
Mathematics	249	336	460	206	104	489	540
Computer sciences	3,030	825	2,273	4,634	4,510	2,204	1,993
Math & computer sciences, n.e.c.	0	0	0	69	1,230	0	0
Engineering, total	15,711	19,479	20,142	17,424	20,783	18,559	20,043
Aeronautical	120	125	0	0	0	56	3
Astronautical	0	0	0	0	30	1	0
Chemical	584	616	617	442	1,977	2,407	2,680
Civil	1,652	1,437	11,519	10,876	10,009	6,780	6,570
Electrical	649	680	360	605	3,778	3,998	4,741
Mechanical	657	676	46	387	2,153	1,413	1,548
Metallurgy & materials	1,462	1,280	2,348	3,503	1,613	2,871	3,269
Engineering, n.e.c.	10,587	14,665	5,252	1,611	1,223	1,033	1,232
Social sciences, total	19,491	18,699	17,165	10,647	10,388	6,276	6,874
Anthropology	0	0	0	62	12	90	173
Economics	1,500	1,460	2,988	5,216	5,239	3,063	2,932
Political science	120	415	298	325	370	472	535
Sociology	210	357	303	830	641	586	664
Social sciences, n.e.c.	17,661	16,467	13,576	4,214	4,126	2,065	2,570
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.	10,121	13,408	8,896	8,096	12,392	4,078	6,816

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

Table 3L. Federal obligations for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	70,480	83,776	78,114	99,336	99,583	107,767	103,259
Life sciences, total	13,749	13,233	11,127	14,113	9,489	9,624	9,900
Biol & agricultural, total	13,749	10,726	9,656	11,861	9,452	9,583	9,884
Biol (excl environmental)	6,500	4,275	4,087	5,919	3,993	4,108	6,170
Environmental biology	6,695	6,451	5,569	5,942	5,459	5,475	3,714
Agricultural	554	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	2,507	1,471	2,252	37	41	16
Psychology, total	185	349	422	346	298	313	73
Biological aspects	130	172	63	236	61	68	34
Social aspects	54	177	231	39	17	18	39
Psychological sciences, n.e.c.	1	0	128	71	220	227	0
Physical sciences, total	10,942	11,751	12,184	14,727	11,692	11,632	15,109
Astronomy	33	0	263	136	97	258	390
Chemistry	3,134	2,893	3,053	3,554	5,299	5,284	5,302
Physics	7,756	8,858	8,524	8,376	5,551	5,342	6,593
Physical sciences, n.e.c.	19	0	344	2,661	745	748	2,824
Environmental sciences, total	5,076	7,366	6,466	4,975	5,190	5,366	4,824
Atmospheric sciences	1,057	1,396	1,621	2,148	2,020	1,419	819
Geological sciences	2,705	2,727	2,820	1,636	2,000	1,702	835
Oceanography	1,122	2,302	1,912	952	780	1,869	2,266
Environmental sciences, n.e.c.	192	941	113	239	390	376	904
Math & computer sciences, total	1,674	2,192	2,098	2,996	3,418	4,274	14,143
Mathematics	300	742	1,009	648	238	242	1,800
Computer sciences	948	1,428	1,089	2,348	3,180	4,032	12,343
Math & computer sciences, n.e.c.	426	22	0	0	0	0	0
Engineering, total	23,420	29,846	29,486	42,633	50,891	55,074	37,933
Aeronautical	49	56	40	76	89	98	107
Astronautical	0	0	0	0	0	0	0
Chemical	3,377	6,224	5,958	9,238	8,998	9,689	8,968
Civil	6,899	6,393	5,327	7,799	5,897	6,397	4,041
Electrical	5,959	7,147	8,804	13,350	15,220	16,754	9,429
Mechanical	3,483	4,569	4,306	6,690	8,596	9,259	6,739
Metallurgy & materials	2,621	3,305	2,958	2,118	4,588	4,710	2,584
Engineering, n.e.c.	1,032	2,152	2,093	3,362	7,503	8,167	6,065
Social sciences, total	5,061	7,761	5,638	8,188	7,778	8,016	9,986
Anthropology	186	506	511	581	330	125	22
Economics	1,871	3,438	2,127	4,426	4,044	4,400	3,232
Political science	491	574	478	358	364	374	850
Sociology	748	1,105	767	834	1,005	1,041	1,191
Social sciences, n.e.c.	1,765	2,138	1,755	1,989	2,035	2,076	4,691
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.	10,373	11,278	10,693	11,358	10,827	13,468	11,291

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

Table 3L. Federal obligations for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	109,018	126,925	138,119	169,689	176,013	180,958	191,807
Life sciences, total	9,009	14,733	13,614	17,271	17,053	9,925	10,354
Biol & agricultural, total	8,968	14,717	11,959	16,535	14,812	9,901	10,354
Biol (excl environmental)	4,733	8,500	8,779	12,139	6,697	2,635	1,189
Environmental biology	4,235	6,217	3,180	4,396	8,115	7,266	9,165
Agricultural	0	0	0	0	0	0	0
Medical sciences, total	0	0	0	0	0	0	0
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41	16	1,655	736	2,241	24	0
Psychology, total	222	2,166	4,656	5,085	3,468	4,536	53
Biological aspects	23	233	229	8	630	219	0
Social aspects	90	232	183	554	1,084	1,701	53
Psychological sciences, n.e.c.	109	1,701	4,244	4,523	1,754	2,616	0
Physical sciences, total	11,111	16,771	14,476	17,800	17,884	12,836	13,831
Astronomy	89	643	193	96	29	12	13
Chemistry	4,516	7,995	3,441	10,133	10,023	7,582	4,582
Physics	5,856	7,449	2,176	5,187	4,309	2,844	2,608
Physical sciences, n.e.c.	650	684	8,666	2,384	3,523	2,398	6,628
Environmental sciences, total	4,538	5,581	4,876	7,670	6,422	5,141	5,450
Atmospheric sciences	594	1,027	259	928	837	224	48
Geological sciences	2,316	2,656	2,355	3,288	3,384	2,756	2,980
Oceanography	901	715	1,205	1,598	1,290	1,795	2,388
Environmental sciences, n.e.c.	727	1,183	1,057	1,856	911	366	34
Math & computer sciences, total	8,932	22,102	15,298	24,172	16,607	19,749	15,166
Mathematics	1,217	1,905	1,382	2,050	3,063	314	184
Computer sciences	7,715	19,530	8,524	14,572	8,539	15,442	14,982
Math & computer sciences, n.e.c.	0	667	5,392	7,550	5,005	3,993	0
Engineering, total	56,298	49,675	61,884	70,542	86,342	105,653	114,144
Aeronautical	163	130	97	1,045	0	0	0
Astronautical	0	0	0	0	0	0	0
Chemical	11,937	11,767	11,279	8,628	14,775	10,133	9,921
Civil	5,207	4,953	4,197	5,460	5,033	5,347	9,081
Electrical	11,987	11,091	8,658	17,978	11,438	920	641
Mechanical	6,599	7,411	7,801	9,545	13,196	942	1,110
Metallurgy & materials	4,013	3,416	3,603	9,374	16,296	2,500	3,215
Engineering, n.e.c.	16,392	10,907	26,249	18,512	25,604	85,811	90,176
Social sciences, total	7,269	8,614	9,101	9,030	11,954	10,282	10,896
Anthropology	783	647	239	813	1,022	589	588
Economics	2,303	3,279	3,373	2,003	2,883	1,733	3,197
Political science	467	565	583	467	763	403	587
Sociology	1,358	1,519	1,468	1,442	2,127	343	1,161
Social sciences, n.e.c.	2,358	2,604	3,438	4,305	5,159	7,214	5,363
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.	11,639	7,283	14,214	18,119	16,283	12,836	21,913

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

Table 3L. Federal obligations for applied research, by detailed field of science & engineering: National Science Foundation, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	170,660	146,528	185,500	180,926	191,656	198,674
Life sciences, total	15,312	17,116	13,539	12,344	13,077	13,556
Biol & agricultural, total	15,312	17,116	13,539	12,344	NA	NA
Biol (excl environmental)	5,881	5,518	2,446	2,081	NA	NA
Environmental biology	9,431	11,598	11,093	10,263	NA	NA
Agricultural	0	0	0	0	NA	NA
Medical sciences, total	0	0	0	0	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	0	0	0	0	NA	NA
Psychology, total	18	4	21	38	41	42
Biological aspects	0	0	0	0	NA	NA
Social aspects	18	4	21	38	NA	NA
Psychological sciences, n.e.c.	0	0	0	0	NA	NA
Physical sciences, total	15,267	15,238	20,156	19,845	21,022	21,792
Astronomy	14	0	2,675	3,411	NA	NA
Chemistry	5,099	7,541	8,297	5,859	NA	NA
Physics	4,839	3,442	4,655	4,808	NA	NA
Physical sciences, n.e.c.	5,315	4,255	4,529	5,767	NA	NA
Environmental sciences, total	4,327	205	1,709	3,132	3,317	3,439
Atmospheric sciences	62	2	208	228	NA	NA
Geological sciences	2,842	33	322	356	NA	NA
Oceanography	1,065	105	487	1,352	NA	NA
Environmental sciences, n.e.c.	358	65	692	1,196	NA	NA
Math & computer sciences, total	9,127	6,841	16,992	14,041	14,874	15,418
Mathematics	200	9	85	83	NA	NA
Computer sciences	8,927	6,832	16,907	13,958	NA	NA
Math & computer sciences, n.e.c.	0	0	0	0	NA	NA
Engineering, total	100,557	94,039	106,676	108,096	114,507	118,700
Aeronautical	0	0	0	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	8,682	8,309	8,610	9,144	NA	NA
Civil	15,008	7,534	7,501	7,724	NA	NA
Electrical	450	8,645	12,849	12,003	NA	NA
Mechanical	1,026	965	1,141	929	NA	NA
Metallurgy & materials	3,902	2,391	1,818	2,033	NA	NA
Engineering, n.e.c.	71,489	66,195	74,757	76,263	NA	NA
Social sciences, total	9,799	12,212	12,900	13,403	14,197	14,717
Anthropology	663	266	647	972	NA	NA
Economics	3,508	3,538	3,941	4,329	NA	NA
Political science	550	563	531	699	NA	NA
Sociology	1,024	1,006	1,114	1,001	NA	NA
Social sciences, n.e.c.	4,054	6,839	6,667	6,402	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	16,253	873	13,507	10,027	10,621	11,010

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 3M. Federal obligations for applied research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1970	1971	1972	1973	1974	1975	1976
Total, all fields	249,541	346,703	324,726	278,173	307,817	319,252	350,032
Life sciences, total	69,089	71,326	72,411	89,839	94,920	96,328	83,100
Biol & agricultural, total	26,762	31,307	28,367	32,144	26,974	30,977	29,775
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	40,676	39,439	43,401	57,695	66,848	64,439	52,546
Clinical medical	37,610	28,952	32,096	41,209	50,296	45,790	34,415
Other medical	3,066	10,487	11,305	16,486	16,552	18,649	18,131
Life sciences, n.e.c.	1,651	580	643	0	1,098	912	779
Psychology, total	18,911	14,900	11,786	6,295	6,596	6,721	12,124
Biological aspects	3,603	3,484	3,858	3,459	3,990	4,070	7,665
Social aspects	15,203	11,351	7,928	2,836	2,562	2,593	4,459
Psychological sciences, n.e.c.	105	65	0	0	44	58	0
Physical sciences, total	4,061	3,882	3,017	2,035	5,119	2,149	3,242
Astronomy	14	19	10	0	0	0	0
Chemistry	2,096	2,310	1,327	1,477	2,390	1,841	2,175
Physics	1,791	1,333	1,394	289	951	61	140
Physical sciences, n.e.c.	160	220	286	269	1,778	247	927
Environmental sciences, total	4,193	4,960	10,315	5,858	7,473	7,859	3,089
Atmospheric sciences	587	698	3,001	1,667	3,209	3,060	45
Geological sciences	1,870	3,185	1,491	799	730	342	2,716
Oceanography	251	293	211	354	196	258	162
Environmental sciences, n.e.c.	1,485	784	5,612	3,038	3,338	4,199	166
Math & computer sciences, total	2,326	830	7,366	4,855	667	337	1,207
Mathematics	NA	NA	NA	NA	NA	NA	582
Computer sciences	NA	NA	NA	NA	NA	NA	387
Math & computer sciences, n.e.c.	NA	NA	NA	NA	NA	NA	238
Engineering, total	81,007	100,245	94,197	78,379	111,304	130,255	136,608
Aeronautical	8,011	12,234	1,028	2,650	3,981	3,838	1,767
Astronautical	227	659	763	592	463	405	382
Chemical	2,401	3,276	2,683	1,977	1,504	1,988	1,695
Civil	32,159	29,641	67,449	51,236	40,065	36,963	21,957
Electrical	9,313	12,920	7,401	10,435	9,260	6,524	3,363
Mechanical	21,002	28,173	3,250	5,125	5,788	2,751	2,710
Metallurgy & materials	2,625	3,184	2,438	548	898	562	472
Engineering, n.e.c.	5,269	10,158	9,185	5,816	49,345	77,224	104,262
Social sciences, total	62,893	142,330	111,001	85,048	77,502	69,137	107,272
Anthropology	2	2	1	36	22	25	0
Economics	21,126	16,787	20,915	26,287	35,345	32,126	41,965
Political science	1,963	1,327	574	2,489	5,287	6,466	2,304
Sociology	12,098	68,554	59,554	37,070	12,942	11,674	11,643
Social sciences, n.e.c.	27,704	55,660	29,957	19,166	23,906	18,846	51,360
History	91	397	5	0	0	0	NA
Linguistics	50	150	263	386	51	0	NA
Other social sciences	27,563	55,113	29,689	18,780	23,855	18,846	NA
Other sciences, n.e.c.	7,061	8,230	14,633	5,864	4,236	6,466	3,390

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

**Table 3M. Federal obligations for applied research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1977	1978	1979	1980	1981	1982	1983
Total, all fields	416,034	487,461	587,170	633,903	663,816	650,588	698,655
Life sciences, total	98,769	104,586	165,877	181,164	186,041	238,873	280,830
Biol & agricultural, total	29,301	29,142	59,557	60,608	69,681	92,166	116,137
Biol (excl environmental)	NA	27,460	22,078	18,493	21,149	29,898	27,874
Environmental biology	NA	0	1,702	1,554	1,869	835	1,086
Agricultural	NA	1,682	35,777	40,561	46,663	61,433	87,177
Medical sciences, total	67,205	71,018	98,819	117,084	116,360	142,723	159,556
Clinical medical	46,164	NA	NA	NA	NA	NA	NA
Other medical	21,041	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	2,263	4,426	7,501	3,472	0	3,984	5,137
Psychology, total	10,256	13,551	15,134	14,299	11,724	9,524	12,674
Biological aspects	8,559	9,354	9,878	7,672	6,300	4,607	8,020
Social aspects	1,697	4,097	2,790	3,985	5,424	1,896	1,401
Psychological sciences, n.e.c.	0	100	2,466	2,642	0	3,021	3,253
Physical sciences, total	3,630	4,578	5,223	3,772	2,423	5,610	4,158
Astronomy	0	0	0	0	0	0	7
Chemistry	2,420	3,331	3,928	1,511	383	1,770	1,568
Physics	470	437	915	1,344	1,460	1,601	1,221
Physical sciences, n.e.c.	740	810	380	917	580	2,239	1,362
Environmental sciences, total	8,628	1,083	2,197	2,082	757	2,637	1,546
Atmospheric sciences	892	5	400	210	121	1,279	200
Geological sciences	331	237	194	430	331	851	1,203
Oceanography	407	659	1,215	1,015	162	223	13
Environmental sciences, n.e.c.	6,998	182	388	427	143	284	130
Math & computer sciences, total	1,533	14,203	12,893	4,886	3,824	4,997	8,291
Mathematics	378	11,258	1,775	791	383	1,431	1,863
Computer sciences	433	648	6,158	2,920	3,254	3,366	4,016
Math & computer sciences, n.e.c.	722	2,297	4,960	1,175	187	200	2,412
Engineering, total	186,611	214,257	213,788	270,590	300,708	301,802	289,196
Aeronautical	2,435	2,711	1,125	1,382	1,230	1,085	2,142
Astronautical	381	442	525	719	704	665	750
Chemical	174	301	1,302	1,275	955	715	1,078
Civil	34,661	44,427	13,596	24,058	24,898	33,121	33,256
Electrical	5,130	9,064	11,668	15,460	16,651	9,345	6,547
Mechanical	8,443	9,168	13,679	19,394	20,897	13,845	15,305
Metallurgy & materials	796	813	232	1,224	1,084	840	1,316
Engineering, n.e.c.	134,591	147,331	171,661	207,078	234,289	242,186	228,802
Social sciences, total	105,958	129,965	151,952	141,837	137,017	76,174	100,652
Anthropology	0	2,190	0	0	0	0	200
Economics	43,277	44,460	59,547	65,551	86,250	36,600	32,698
Political science	3,726	2,240	5,504	3,075	2,817	1,758	2,588
Sociology	13,598	11,823	17,093	13,544	12,369	8,318	10,522
Social sciences, n.e.c.	45,357	69,252	69,808	59,667	35,581	29,498	54,644
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.	649	5,238	20,106	15,273	21,322	10,971	1,308

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

**Table 3M. Federal obligations for applied research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1984	1985	1986	1987	1988	1989	1990
Total, all fields	724,640	723,679	693,214	700,239	706,933	850,111	945,289
Life sciences, total	312,386	348,697	313,423	298,176	281,082	392,839	409,223
Biol & agricultural, total	120,243	119,364	135,764	109,950	89,845	174,597	173,565
Biol (excl environmental)	28,732	28,779	19,515	23,627	29,648	47,740	32,570
Environmental biology	315	165	2,994	5,308	2,833	3,308	5,845
Agricultural	91,196	90,420	113,255	81,015	57,364	123,549	135,150
Medical sciences, total	186,103	225,119	167,141	175,246	172,900	193,872	200,904
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	6,040	4,214	10,518	12,980	18,337	24,370	34,754
Psychology, total	14,176	16,761	20,551	22,459	24,380	22,417	20,649
Biological aspects	8,595	11,659	10,145	11,166	12,424	13,673	13,817
Social aspects	1,704	1,786	8,670	8,957	7,948	4,376	4,114
Psychological sciences, n.e.c.	3,877	3,316	1,736	2,336	4,008	4,368	2,718
Physical sciences, total	5,199	4,081	2,935	7,871	6,662	13,681	17,287
Astronomy	55	0	0	3,657	0	0	0
Chemistry	2,321	1,527	1,461	1,789	4,558	11,324	14,893
Physics	1,279	731	573	614	919	1,360	1,184
Physical sciences, n.e.c.	1,544	1,823	901	1,811	1,185	997	1,210
Environmental sciences, total	1,336	594	1,333	754	2,557	6,139	5,976
Atmospheric sciences	283	98	0	0	0	753	737
Geological sciences	155	233	75	361	1,405	4,474	4,750
Oceanography	404	263	338	0	0	0	70
Environmental sciences, n.e.c.	494	0	920	393	1,152	912	419
Math & computer sciences, total	5,749	10,393	10,663	15,224	15,229	16,166	19,581
Mathematics	1,821	3,313	4,673	4,666	5,117	6,328	7,678
Computer sciences	1,771	5,845	4,821	6,607	8,483	6,949	7,470
Math & computer sciences, n.e.c.	2,157	1,235	1,169	3,951	1,629	2,889	4,433
Engineering, total	270,629	222,096	201,485	187,413	200,600	218,504	218,021
Aeronautical	2,310	2,730	2,115	1,665	2,229	3,737	4,180
Astronautical	1,075	1,211	980	777	1,129	1,699	1,676
Chemical	1,594	1,081	2,274	1,348	1,040	6,927	6,976
Civil	38,183	29,336	27,852	29,235	48,351	55,726	60,045
Electrical	5,885	6,864	6,701	3,339	3,748	7,146	8,963
Mechanical	14,435	12,407	13,503	11,953	13,996	14,701	12,138
Metallurgy & materials	1,920	2,032	2,102	902	3,638	179	169
Engineering, n.e.c.	205,227	166,435	145,958	138,194	126,469	128,389	123,874
Social sciences, total	105,719	111,689	123,136	144,181	144,176	164,349	211,111
Anthropology	200	265	250	250	150	150	208
Economics	34,002	34,789	30,782	40,786	47,358	46,940	71,036
Political science	3,051	2,505	2,956	2,577	3,934	4,819	3,412
Sociology	10,084	6,438	10,234	10,221	8,866	11,962	8,879
Social sciences, n.e.c.	58,382	67,692	78,914	90,347	83,868	100,478	127,576
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.	9,446	9,368	19,688	24,161	32,247	16,016	43,441

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

**Table 3M. Federal obligations for applied research, by detailed field of science
& engineering: All other departments and agencies,
fiscal years 1970-2003**

[Dollars in thousands]

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Field of science & engineering	1991	1992	1993	1994	1995	1996	1997
Total, all fields	980,396	984,457	1,105,207	1,007,520	1,157,441	1,088,058	1,058,340
Life sciences, total	483,451	413,045	472,439	367,795	470,794	417,264	383,952
Biol & agricultural, total	126,588	98,400	141,795	98,268	232,978	181,366	36,061
Biol (excl environmental)	35,618	29,702	31,623	32,463	32,003	33,879	33,241
Environmental biology	6,768	11,157	11,553	1,542	184,721	125,027	2,003
Agricultural	84,202	57,541	98,619	64,263	16,254	22,460	817
Medical sciences, total	175,641	242,939	290,206	241,321	171,925	194,511	177,718
Clinical medical	NA	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	181,222	71,706	40,438	28,206	65,891	41,387	170,173
Psychology, total	24,874	32,435	54,937	47,783	55,088	43,930	49,578
Biological aspects	16,134	16,120	15,366	13,644	15,861	13,718	12,773
Social aspects	6,707	8,565	38,007	32,520	34,872	25,778	32,609
Psychological sciences, n.e.c.	2,033	7,750	1,564	1,619	4,355	4,434	4,196
Physical sciences, total	13,245	12,105	11,708	11,323	9,490	35,978	53,190
Astronomy	0	1,009	0	0	0	0	0
Chemistry	10,321	8,265	5,943	6,103	6,157	2,154	1,412
Physics	1,944	1,593	2,765	3,852	1,541	31,934	46,001
Physical sciences, n.e.c.	980	1,238	3,000	1,368	1,792	1,890	5,777
Environmental sciences, total	3,358	8,025	7,461	7,494	6,797	7,804	13,451
Atmospheric sciences	940	4,704	3,971	3,489	4,569	6,320	8,901
Geological sciences	1,095	1,579	0	1,416	102	0	426
Oceanography	803	647	982	712	581	630	651
Environmental sciences, n.e.c.	520	1,095	2,508	1,877	1,545	854	3,473
Math & computer sciences, total	32,184	35,720	39,759	35,580	91,354	32,977	25,446
Mathematics	8,694	8,861	2,397	1,908	115	190	564
Computer sciences	18,706	20,636	34,578	32,819	34,470	28,222	18,953
Math & computer sciences, n.e.c.	4,784	6,223	2,784	853	56,769	4,565	5,929
Engineering, total	198,427	221,991	248,984	287,281	274,750	289,447	261,500
Aeronautical	2,879	751	250	245	275	0	0
Astronautical	200	300	0	0	0	0	0
Chemical	7,114	3,179	6,477	4,789	2,379	896	0
Civil	41,401	47,352	68,813	104,907	114,776	131,445	105,225
Electrical	10,342	14,078	9,223	6,244	4,766	8,747	5,473
Mechanical	18,039	20,609	15,892	13,369	20,499	18,090	20,772
Metallurgy & materials	1,312	906	7,720	9,325	10,255	4,980	8,206
Engineering, n.e.c.	117,140	134,816	140,609	148,402	121,800	125,289	121,824
Social sciences, total	189,801	206,631	222,939	199,418	219,636	228,639	232,596
Anthropology	350	201	300	200	62	55	30
Economics	57,414	65,368	59,908	42,982	48,323	43,158	32,072
Political science	3,042	8,919	15,881	10,754	4,277	2,634	1,479
Sociology	8,979	10,400	18,343	21,941	16,346	13,464	2,218
Social sciences, n.e.c.	120,016	121,743	128,507	123,541	150,628	169,328	196,797
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.	35,056	54,505	46,980	50,846	29,532	32,019	38,627

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

Table 3M. Federal obligations for applied research, by detailed field of science & engineering: All other departments and agencies, fiscal years 1970-2003

[Dollars in thousands]

Field of science & engineering	1998	1999	2000	2001	Preliminary	
					2002	2003
Total, all fields	1,016,409	1,153,608	1,082,036	1,265,931	1,479,321	1,313,985
Life sciences, total	225,359	262,850	271,836	311,752	323,920	329,133
Biol & agricultural, total	77,178	65,891	75,903	65,317	NA	NA
Biol (excl environmental)	0	0	0	1,026	NA	NA
Environmental biology	473	2,050	200	396	NA	NA
Agricultural	76,705	63,841	75,703	63,895	NA	NA
Medical sciences, total	106,371	148,022	149,483	160,064	NA	NA
Clinical medical	NA	NA	NA	NA	NA	NA
Other medical	NA	NA	NA	NA	NA	NA
Life sciences, n.e.c.	41,810	48,937	46,450	86,371	NA	NA
Psychology, total	63,708	68,674	73,388	67,961	71,231	69,958
Biological aspects	0	0	75	0	NA	NA
Social aspects	30,237	28,412	30,034	22,319	NA	NA
Psychological sciences, n.e.c.	33,471	40,262	43,279	45,642	NA	NA
Physical sciences, total	41,584	53,237	42,891	56,354	96,650	8,027
Astronomy	0	0	0	0	NA	NA
Chemistry	1,448	644	467	1,272	NA	NA
Physics	35,887	47,845	38,865	49,618	NA	NA
Physical sciences, n.e.c.	4,249	4,748	3,559	5,464	NA	NA
Environmental sciences, total	28,435	38,042	27,274	38,144	43,938	46,541
Atmospheric sciences	21,439	26,909	21,084	29,515	NA	NA
Geological sciences	426	2,940	0	33	NA	NA
Oceanography	551	551	600	640	NA	NA
Environmental sciences, n.e.c.	6,019	7,642	5,590	7,956	NA	NA
Math & computer sciences, total	24,859	12,842	13,697	13,496	14,681	14,500
Mathematics	195	96	0	0	NA	NA
Computer sciences	17,896	4,141	5,233	3,784	NA	NA
Math & computer sciences, n.e.c.	6,768	8,605	8,464	9,712	NA	NA
Engineering, total	300,056	316,117	255,803	272,718	331,361	261,604
Aeronautical	0	18	3,820	0	NA	NA
Astronautical	0	0	0	0	NA	NA
Chemical	15	783	0	110	NA	NA
Civil	79,683	121,057	26,599	82,898	NA	NA
Electrical	4,170	2,742	1,727	1,952	NA	NA
Mechanical	19,299	21,409	37,948	18,708	NA	NA
Metallurgy & materials	6,186	3,503	37,360	694	NA	NA
Engineering, n.e.c.	190,703	166,605	148,349	168,356	NA	NA
Social sciences, total	304,627	354,441	348,975	383,094	370,208	374,513
Anthropology	0	0	956	45	NA	NA
Economics	40,343	54,817	44,026	34,421	NA	NA
Political science	6,822	4,944	5,784	11,334	NA	NA
Sociology	59,796	55,636	55,842	61,754	NA	NA
Social sciences, n.e.c.	197,666	239,044	242,367	275,540	NA	NA
History	NA	NA	NA	NA	NA	NA
Linguistics	NA	NA	NA	NA	NA	NA
Other social sciences	NA	NA	NA	NA	NA	NA
Other sciences, n.e.c.	27,781	47,405	48,172	122,412	227,332	209,709

KEY: NA = Not applicable (indicates that the data collected for this table were not recorded at that level in that particular fiscal 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