

**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