

**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	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]

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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