

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

[Dollars in thousands]

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]

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