

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

[Dollars in thousands]

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

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

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

[Dollars in thousands]

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

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

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

[Dollars in thousands]

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

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

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

[Dollars in thousands]

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

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

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