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**ABSTRACT**

The data presented in this summary (released in advance of their publication) are derived from four surveys of academic science and engineering (S/E) activities conducted annually by the National Science Foundation's Division of Science Resources Studies, Universities, and Nonprofit Institutions Studies Groups: (1) Survey of Scientific and Engineering Expenditures at Universities and Colleges, fiscal year (FY) 1984 (expenditure survey); (2) Survey of Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, FY 1984 (federal support survey); (3) Survey of Scientific and Engineering Personnel Employed at Universities and Colleges, January 1985 (personnel survey); and Survey of Graduate Science and Engineering Students and Post-doctorates, Fall 1984 (graduate student survey). In expenditures, personnel, and graduate student surveys, data are submitted by institutions of higher education; data on federal obligations to academic institutions are collected directly from the major funding agencies. A brief introduction to the data (which are presented in 29 tables) is included, with information on the higher education universe surveyed as well as information on samples used in the four surveys. (JN)

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EARLY RELEASE OF  
SUMMARY STATISTICS  
ON  
ACADEMIC SCIENCE/ENGINEERING  
RESOURCES

Prepared by:  
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Division of Science Resources Studies  
National Science Foundation  
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December 1985

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## SUMMARY STATISTICS ON ACADEMIC SCIENCE/ENGINEERING RESOURCES

The data presented in this summary are being released in advance of their publication, and are derived from four surveys of academic science/engineering activities conducted annually by the National Science Foundation's Division of Science Resources Studies, Universities and Nonprofit Institutions Studies Group:

1. Survey of Scientific and Engineering Expenditures at Universities and Colleges, FY 1984 (the Expenditures Survey): Tables 1-7.
2. Survey of Federal Support to Universities, Colleges, and Selected Non-profit Institutions, FY 1984 (the Federal Support Survey): Tables 8-13.
3. Survey of Scientific and Engineering Personnel Employed at Universities and Colleges, January 1985 (the Personnel Survey): Tables 14-20.
4. Survey of Graduate Science and Engineering Students and Post-doctorates, Fall 1984 (the Graduate Student Survey): Tables 21-29.

In the Expenditures, Personnel, and Graduate Student Surveys, data are submitted by institutions of higher education; data on Federal obligations to academic institutions are collected directly from the major funding agencies.

The four surveys include different proportions of the higher education universe, depending on the degree of concentration of the variables being examined. Survey coverage is as follows (numbers of institutions shown represent averages for the last eight survey cycles, excluding the 1978/79 cycle when the Expenditures, Personnel, and Graduate Student Surveys were mailed to doctorate-granting institutions only):

1. **Expenditures Survey:** Institutions granting science/engineering graduate degrees and schools with \$50,000 or more in separately budgeted R&D expenditures (about 550 institutions and their associated FFRDCs). Data for FY 1984 are based on a sample of 400 institutions.
2. **Federal Support Survey:** All institutions of higher education in the United States (about 2,400 institutions, their system offices, and their associated FFRDCs).
3. **Personnel Survey:** Institutions of higher education with science/engineering programs (about 2,200 institutions and their associated FFRDCs). Data for January 1985 are based on a sample of 1,100 institutions.
4. **Graduate Student Survey:** Institutions granting science/engineering degrees and their affiliated health professional schools (about 600 institutions). Data for Fall 1984 are based on a sample of 400 institutions.

For further information on the academic science/engineering surveys/data availability, please contact NSF staff responsible for each survey system at (202) 634-4673:

Expenditures Survey:	Judy Coakley or Marge Machen
Personnel Survey:	Judy Coakley or Esther F. Gist
Federal Support Survey:	Richard Bennof
Graduate Student Survey:	J.G. Huckenpahler

## NOTES

- o Data in tables 1-13 cover fiscal years (FYs); data in tables 14-20 are collected as of January in each year; data in tables 21-29 are collected as of Fall in each year.
- o During the 1978/79 survey cycle, an attempt was made in the Expenditures, Personnel, and Graduate Student Surveys to collect some data items on a short form mailed to doctorate-granting institutions only. FY 1978 expenditures data, January 1979 personnel data, and Fall 1978 graduate student data are therefore unavailable at the universe level, although an estimate was made for total FY 1978 expenditures at non-doctorate-granting institutions. In addition, no 1978 data are available for those items excluded from the short forms --e.g., capital expenditures, full-time-equivalent scientists and engineers, and support mechanisms of graduate students. These data gaps are indicated on the tables. The Federal Support Survey, however, continued to request data on all institutions receiving funding from the participating agencies.
- o Data presented in these tables are assembled from the most recently completed surveys and represent the latest totals available as of November 1985. Since both current-year and prior-year data are regularly reviewed and updated in consultation with agency and institutional respondents, the figures are subject to revision in subsequent years.
- o N/A means "not available"; N.E.C. means "not elsewhere classified".

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AND SCIENCE/ENGINEERING FIELD: FISCAL YEARS 1977-84

(DOLLARS IN THOUSANDS)

SOURCE, CHARACTER, A40 FIELD	1977	1978 1/	1979	1980	1981	1982	1983	1984
TOTAL .....	4,066,953	4,624,673	5,361,408	6,060,288	6,818,595	7,287,645	7,781,471	8,472,749
SOURCE OF FUNDS:								
FEDERAL GOVERNMENT .....	2,726,126	3,058,734	3,595,271	4,096,029	4,561,812	4,752,219	4,956,082	5,386,578
STATE AND LOCAL GOVERNMENTS ..	373,943	414,389	470,073	491,309	545,736	610,729	622,104	652,818
INDUSTRY .....	138,807	169,623	194,186	237,025	291,150	333,905	377,762	457,227
INSTITUTIONAL FUNDS .....	514,275	622,646	728,298	827,338	973,805	1,090,761	1,242,184	1,346,564
ALL OTHER SOURCES .....	313,802	359,281	373,580	408,587	446,092	500,031	583,339	629,562
CHARACTER OF WORK: 2/								
BASIC RESEARCH .....	2,799,649	-	3,612,278	4,026,353	4,576,482	4,867,129	5,238,841	5,621,984
APPLIED RESEARCH AND DEVELOPMENT .....	1,267,304	-	1,749,130	2,033,938	2,242,113	2,420,516	2,542,630	2,850,765
FIELD:								
ENGINEERING, TOTAL 3/.....	498,473	601,062	768,407	864,897	960,978	1,029,372	1,109,429	1,202,625
AERONAUTICAL AND ASTRONAUTICAL .....	-	-	-	46,285	45,522	60,541	64,974	66,096
CHEMICAL .....	-	-	-	67,557	83,213	83,807	90,560	95,941
CIVIL .....	-	-	-	88,644	108,236	108,981	109,698	133,134
ELECTRICAL .....	-	-	-	184,026	193,140	225,446	259,704	291,258
MECHANICAL .....	-	-	-	146,151	149,116	142,581	149,352	175,547
OTHER, N.E.C. ....	-	-	-	332,234	381,671	408,016	435,141	440,648
ALL SCIENCES, TOTAL .....	3,568,480	4,023,611	4,593,001	5,195,391	5,857,617	6,258,273	6,672,042	7,270,124
PHYSICAL SCIENCES .....	423,457	496,399	601,904	677,386	766,266	826,149	898,843	994,810
ASTRONOMY .....	32,361	36,782	48,459	58,741	67,391	73,296	74,234	80,429
CHEMISTRY .....	159,353	183,131	206,421	244,044	285,061	309,889	335,627	370,123
PHYSICS .....	201,655	235,099	292,033	322,249	357,165	366,511	414,295	469,731
OTHER, N.E.C. ....	30,088	41,387	54,991	52,352	56,649	76,453	74,687	74,528
ENVIRONMENTAL SCIENCES 3/..	319,398	379,391	452,915	509,105	550,301	559,590	619,620	646,962
ATMOSPHERIC .....	-	-	-	67,460	78,271	85,458	97,675	102,500
EARTH SCIENCES .....	-	-	-	188,257	190,338	196,409	216,085	223,553
OCEANOGRAPHY .....	-	-	-	171,681	187,667	197,988	224,252	237,234
OTHER, N.E.C. ....	-	-	-	81,707	94,025	79,735	81,608	83,675
MATHEMATICAL SCIENCES .....	52,312	58,756	78,477	78,646	89,078	99,151	105,142	123,592
COMPUTER SCIENCES .....	55,563	67,422	97,921	114,220	133,100	150,026	177,704	222,208
LIFE SCIENCES .....	2,258,806	2,538,004	2,832,523	3,216,876	3,673,142	3,977,112	4,211,961	4,589,546
AGRICULTURAL SCIENCES ..	460,647	521,745	602,485	679,304	773,059	844,722	891,083	920,081
BIOLOGICAL SCIENCES .....	772,290	808,500	914,806	1,030,205	1,187,930	1,288,605	1,395,508	1,555,540
MEDICAL SCIENCES .....	950,907	1,128,652	1,237,556	1,414,352	1,599,406	1,721,694	1,797,860	1,973,318
OTHER, N.E.C. ....	74,962	79,107	77,676	93,015	112,747	122,091	127,510	140,607
PSYCHOLOGY .....	85,133	89,664	100,531	111,329	128,735	132,969	138,897	146,887
SOCIAL SCIENCES .....	268,087	277,497	295,138	341,678	372,435	360,844	356,376	369,084
ECONOMICS .....	72,124	79,129	83,089	90,195	99,749	95,892	97,411	108,340
POLITICAL SCIENCE .....	32,314	36,571	45,431	55,450	56,695	61,303	56,837	53,783
SOCIOLOGY .....	61,939	66,900	74,641	88,594	95,039	80,693	78,941	76,101
OTHER, N.E.C. ....	101,710	94,897	91,977	107,439	120,952	122,456	123,187	130,859
OTHER SCIENCES, N.E.C. ....	105,724	116,478	133,592	146,151	144,560	152,432	163,499	177,035

1/ ESTIMATED, BASED ON DATA COLLECTED FROM DOCTORATE-GRANTING INSTITUTIONS ONLY.  
2/ DATA HERE NOT COLLECTED IN 1978.  
3/ DATA NOT SEPARATELY AVAILABLE PRIOR TO 1980.  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 2. -- RAD EXPENDITURES AT DOCTORATE-GRANTING INSTITUTIONS BY SOURCE OF FUNDS, CHARACTER OF WORK, AND SCIENCE/ENGINEERING FIELD: FISCAL YEARS 1977-84

(DOLLARS IN THOUSANDS)

SOURCE, CHARACTER, AND FIELD	1977	1978	1979	1980	1981	1982	1983	1984
TOTAL .....	3,987,885	4,540,256	5,271,643	5,958,867	6,695,996	7,159,254	7,649,290	8,321,159
SOURCE OF FUNDS:								
FEDERAL GOVERNMENT .....	2,677,463	3,004,930	3,534,215	4,030,009	4,482,252	4,671,543	4,873,726	5,288,167
STATE AND LOCAL GOVERNMENTS ..	365,569	406,509	461,334	481,354	534,047	595,452	606,546	638,116
INDUSTRY .....	135,031	166,271	190,733	232,758	284,685	326,984	370,234	446,950
INSTITUTIONAL FUNDS .....	502,930	610,068	716,069	813,577	958,595	1,074,976	1,223,820	1,331,865
ALL OTHER SOURCES .....	306,892	352,478	369,092	401,169	436,417	490,299	573,964	616,061
CHARACTER OF WORK: 1/								
BASIC RESEARCH .....	2,758,513	-	3,561,649	3,965,960	4,501,674	4,783,875	5,150,838	5,524,064
APPLIED RESEARCH AND DEVELOPMENT .....	1,229,372	-	1,709,994	1,992,907	2,194,322	2,375,379	2,498,452	2,797,095
FIELD:								
ENGINEERING, TOTAL 2/.....	490,931	591,962	761,142	857,043	952,823	1,021,145	1,099,512	1,184,916
AERONAUTICAL AND ASTRONAUTICAL .....	-	-	-	45,742	44,919	59,669	64,163	64,151
CHEMICAL .....	-	-	-	66,876	82,955	83,586	90,342	95,551
CIVIL .....	-	-	-	86,703	106,115	107,016	107,458	127,900
ELECTRICAL .....	-	-	-	183,219	191,922	224,447	258,248	288,698
MECHANICAL .....	-	-	-	145,125	191,730	141,268	147,627	173,384
OTHER, N.E.C. ....	-	-	-	329,378	379,182	405,159	431,674	435,232
ALL SCIENCES, TOTAL .....	3,496,954	3,948,294	4,510,501	5,101,824	5,743,173	6,138,109	6,549,778	7,136,243
PHYSICAL SCIENCES .....	410,642	481,447	585,227	650,047	746,336	804,788	877,689	972,863
ASTRONOMY .....	32,117	36,505	47,969	58,087	66,746	72,662	73,378	77,402
CHEMISTRY .....	152,454	179,438	198,788	234,359	272,932	296,640	322,520	358,846
PHYSICS .....	197,861	230,678	286,738	316,094	350,797	360,044	407,981	462,529
OTHER, N.E.C. ....	28,210	38,826	51,732	50,507	55,861	75,442	73,810	74,086
ENVIRONMENTAL SCIENCES 2/..	309,283	367,337	443,531	496,188	532,947	542,748	600,925	624,969
ATMOSPHERIC .....	-	-	-	65,236	75,223	83,366	95,407	102,301
EARTH SCIENCES .....	-	-	-	182,457	183,906	189,838	208,176	216,723
OCEANOGRAPHY .....	-	-	-	169,612	183,583	194,788	220,825	227,746
OTHER, N.E.C. ....	-	-	-	78,883	90,235	74,756	76,517	78,199
MATHEMATICAL SCIENCES .....	51,050	57,342	77,141	76,759	86,198	95,082	101,163	119,513
COMPUTER SCIENCES .....	52,996	64,333	95,276	111,415	130,880	146,673	174,997	219,498
LIFE SCIENCES .....	2,234,749	2,515,138	2,802,489	3,184,002	3,631,982	3,931,719	4,165,671	4,537,762
AGRICULTURAL SCIENCES ..	453,787	514,409	591,631	666,756	756,048	825,681	869,463	893,646
BIOLOGICAL SCIENCES .....	752,929	793,613	899,789	1,015,719	1,169,229	1,267,085	1,374,847	1,536,653
MEDICAL SCIENCES .....	947,629	1,128,652	1,234,837	1,410,704	1,596,507	1,719,504	1,795,999	1,969,011
OTHER, N.E.C. ....	74,404	78,464	76,232	90,823	110,098	119,449	125,362	138,452
PSYCHOLOGY .....	82,199	86,556	93,944	106,864	122,134	128,778	134,224	144,789
SOCIAL SCIENCES .....	254,749	264,351	283,183	324,129	350,331	339,441	335,734	341,910
ECONOMICS .....	70,825	74,332	80,780	87,292	96,646	94,022	95,459	103,008
POLITICAL SCIENCE .....	31,144	40,393	44,284	53,331	54,309	59,342	54,533	51,783
SOCIOLOGY .....	59,356	65,030	72,059	83,331	86,364	73,394	71,387	67,442
OTHER, N.E.C. ....	93,424	84,596	86,060	100,175	113,012	112,683	114,355	119,677
OTHER SCIENCES, N.E.C. ....	101,286	111,790	129,710	143,420	142,365	148,880	159,375	174,939

1/ DATA HERE NOT COLLECTED IN 1978.  
 2/ DETAIL NOT SEPARATELY AVAILABLE PRIOR TO 1980.  
 SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 3. -- R&D EXPENDITURES AT DOCTORATE-GRANTING INSTITUTIONS  
BY GEOGRAPHIC DIVISION, STATE, AND SOURCE OF FUNDS: FISCAL YEAR 1984

(DOLLARS IN THOUSANDS)

DIVISION AND STATE	TOTAL	FEDERAL GOVERNMENT	STATE AND LOCAL GOVERNMENTS	INDUSTRY	INSTITUTIONAL FUNDS	ALL OTHER SOURCES
TOTAL.....	8,321,159	5,288,167	638,116	46,950	1,331,865	616,061
NEM ENGLAND .....	831,882	631,809	13,442	54,769	66,772	65,090
CONNECTICUT .....	178,504	134,542	3,788	5,174	26,277	8,723
MAINE .....	17,107	8,444	1,587	2,320	4,284	472
MASSACHUSETTS .....	532,863	409,692	3,141	41,855	26,469	51,706
NEM HAMPSHIRE .....	31,865	21,324	2,445	1,063	4,651	1,882
RHODE ISLAND .....	49,275	42,375	947	2,227	2,226	1,500
VERMONT .....	27,268	14,932	1,534	2,130	2,865	807
MIDDLE ATLANTIC .....	1,356,347	904,191	54,019	86,654	170,412	141,071
NEM JERSEY .....	122,573	66,156	9,129	4,527	30,370	12,389
NEM YORK .....	831,602	565,717	35,951	42,002	92,996	94,926
PENNSYLVANIA .....	402,172	272,316	8,929	40,125	47,046	33,756
EAST NORTH CENTRAL .....	1,223,713	745,555	109,471	59,778	228,116	80,793
ILLINOIS .....	357,414	223,093	21,228	11,418	81,487	20,188
INDIANA .....	144,945	86,523	10,778	13,588	28,540	5,516
MICHIGAN .....	283,448	165,600	23,335	13,256	64,174	17,083
OHIO .....	224,458	145,630	15,506	14,159	25,105	24,058
WISCONSIN .....	213,448	124,709	38,624	7,357	28,810	13,948
WEST NORTH CENTRAL .....	579,108	288,752	79,093	30,346	142,555	38,342
ILLINOIS .....	119,257	62,238	17,231	4,713	29,680	5,395
KANSAS .....	61,166	26,805	20,367	1,058	9,825	3,111
MINNESOTA .....	158,223	79,489	16,123	8,053	38,235	16,323
MISSOURI .....	150,240	86,278	9,234	11,941	32,071	10,716
NEBRASKA .....	53,801	19,702	2,567	3,075	26,462	1,995
NORTH DAKOTA .....	27,439	10,212	13,142	1,168	2,718	199
SOUTH DAKOTA .....	8,982	4,028	429	358	3,564	603
SOUTH ATLANTIC .....	1,318,178	886,695	98,116	76,773	200,471	56,123
DELAWARE .....	21,343	10,811	348	2,752	6,386	1,046
DISTRICT OF COLUMBIA .....	61,737	47,353	205	2,988	5,552	5,639
FLORIDA .....	182,235	92,529	7,874	12,501	55,814	13,517
GEORGIA .....	207,596	110,748	2,971	25,540	65,338	2,999
MARYLAND .....	465,398	397,315	26,592	8,007	24,516	15,968
NORTH CAROLINA .....	190,397	122,701	32,926	9,666	16,311	8,793
SOUTH CAROLINA .....	53,169	24,040	10,558	3,661	12,635	2,275
VIRGINIA .....	125,057	81,758	16,064	11,351	10,473	5,411
WEST VIRGINIA .....	11,246	6,440	578	307	3,446	475
EAST SOUTH CENTRAL .....	261,290	134,585	47,070	20,442	41,319	17,794
ALABAMA .....	83,087	48,668	9,916	7,356	7,526	9,621
KENTUCKY .....	52,647	19,317	12,510	4,378	15,729	713
MISSISSIPPI .....	49,156	17,635	16,386	2,173	10,275	2,687
TENNESSEE .....	76,400	48,965	8,258	6,535	7,869	4,773
WEST SOUTH CENTRAL .....	738,503	342,395	108,497	39,954	172,348	75,309
ARKANSAS .....	26,616	10,004	6,600	1,593	6,233	2,186
LOUISIANA .....	101,968	34,172	30,322	6,828	24,141	6,505
OKLAHOMA .....	90,833	25,701	3,381	5,980	53,426	2,345
TEXAS .....	519,086	272,518	68,194	25,553	88,548	64,273
MOUNTAIN .....	528,810	320,283	46,835	43,909	91,466	26,317
ARIZONA .....	118,818	57,183	6,192	9,635	39,619	6,189
COLORADO .....	153,730	102,826	9,351	13,294	19,474	8,775
IDAHO .....	19,626	12,987	2,093	2,584	1,236	726
MONTANA .....	24,262	7,391	8,499	2,235	6,137	0
NEVADA .....	17,513	10,706	319	2,710	2,432	1,337
NEM MEXICO .....	429	57,154	10,537	6,956	4,916	4,866
UTAH .....	7,697	64,336	9,509	4,752	12,150	3,950
WYOMING .....	15,735	7,700	325	1,734	5,502	474
PACIFIC .....	1,456,081	1,021,255	74,104	34,267	211,364	111,091
ALASKA .....	28,182	11,752	2,102	1,344	12,016	968
CALIFORNIA .....	1,092,084	778,811	15,903	18,415	187,199	91,756
HAWAII .....	51,051	32,701	15,715	380	1,444	811
OREGON .....	102,833	65,298	15,551	5,746	7,745	8,493
WASHINGTON .....	181,931	132,693	24,833	8,382	2,960	13,063
OUTLYING AREAS .....	27,247	12,647	7,469	38	6,962	131

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 4. -- TOTAL AND FEDERALLY FINANCED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1981-84

(DOLLARS IN THOUSANDS)

INSTITUTIONS RANKED BY TOTAL R&D EXPENDITURES (1984)	TOTAL				FEDERALLY FINANCED			
	1984	1983	1982	1981	1984	1983	1982	1981
TOTAL, ALL INSTITUTIONS	8,472,749	7,781,471	7,287,645	6,818,595	5,386,578	4,955,082	4,752,219	4,561,812
1 JOHNS HOPKINS UNIVERSITY 1/	390,891	303,119E	289,940	270,490	331,859	282,386E	271,223	266,595
2 MASS INST OF TECHNOLOGY 2/	222,134	200,349	192,462	184,328	174,938	167,801	167,191	152,372
3 UNIV OF WIS-MADISON	184,190	168,282	157,520	147,255	110,704	100,026	101,019	96,240
4 STANFORD UNIVERSITY 2/	174,473	163,031	147,941	129,822	149,920	139,172	120,059	116,683
5 CORNELL UNIVERSITY 2/	169,460	153,223	149,769	129,822	100,767	90,189	90,538	81,903
6 UNIVERSITY OF MINNESOTA	158,223	151,441	148,466	135,057	79,489	79,637	83,044	77,850
7 UNIVERSITY OF MICHIGAN	155,987	132,864	119,973	123,085	99,341	84,120	74,694	84,342
8 UNIVERSITY OF WASHINGTON	146,947	133,523	133,115	124,822	119,785	108,512	109,058	103,986
9 UNIV OF CAL SAN DIEGO 3/	140,987	147,008	138,894	137,835	115,949	123,433	116,200	119,306
10 UNIV OF CAL BERKELEY 2/3/	133,811	118,951	102,369	98,898	87,653	76,957	67,208	65,877
TOTAL, 1ST 10 INSTS.	1,837,295	1,671,887	1,574,449	1,483,164	1,369,405	1,243,189	1,190,236	1,155,091
11 UNIV OF CAL LOS ANGELES 3/	132,134	112,266	103,294	97,314	96,524	83,699	78,222	74,178
12 COLUMBIA UNIV MAIN DIV	124,292	113,867	115,734	100,746	107,874	100,574	101,974	85,407
13 HARVARD UNIVERSITY	123,363E	118,602E	114,941E	111,697E	93,430	89,824	87,051	84,594
14 UNIV OF PENNSYLVANIA	121,963	113,499	112,836	104,430	89,831	80,516	81,014	80,373
15 TEXAS A & M UNIVERSITY	121,227	103,219	91,780	84,285	53,201	43,813	33,221	38,452
16 UNIV OF ILL URBANA	119,198	99,135	95,869	93,299	71,182	59,806	57,247	56,416
17 UNIV OF TEXAS AT AUSTIN	114,664	110,570	92,069	82,401	56,482	58,231	55,606	49,477
18 UNIV OF CAL SAN FRANC 3/	113,404	89,247	95,282	89,209	82,822	47,035	75,536	72,522
19 UNIV OF CAL DAVIS 3/	105,791	98,118	89,784	83,945	45,436	43,439	43,535	39,289
20 YALE UNIVERSITY	103,711	100,269	91,232	84,444	85,909	85,205	76,217	74,000
TOTAL, 1ST 20 INSTS.	3,017,042	2,731,659	2,577,270	2,414,934	2,152,094	1,955,331	1,879,859	1,809,999
21 PENNSYLVANIA STATE UNIV	95,061	89,767	82,034	80,194	60,444	56,875	53,023	49,737
22 UNIVERSITY OF ARIZONA	94,946	89,192	88,247	80,726	47,411	44,741	44,113	42,412
23 GEORGIA INSTITUTE OF TECH	88,507	82,924	71,402	65,078	51,241	49,533	38,632	36,090
24 OHIO STATE UNIVERSITY	87,402	74,144E	82,614	78,492	46,060	41,438E	45,990	45,929
25 UNIV OF SOUTHERN CAL	87,278	84,395	87,140	76,834	64,239	57,976	55,101	48,243
26 UNIVERSITY OF COLORADO	85,433	75,798	66,377E	64,109E	59,080	55,023	53,985E	52,727E
27 MICHIGAN STATE UNIVERSITY	85,426	79,043	71,922	68,222	44,133	43,067	38,320	33,224
28 UNIVERSITY OF FLORIDA	85,057	73,467	68,370	60,073	39,946	33,708	33,178	29,215
29 UNIV OF MD COLLEGE PARK	84,442	81,504E	60,717E	45,230	33,033	31,094	27,521	26,394
30 PURDUE UNIVERSITY	83,478	75,510	67,299	73,723	43,524	42,147	41,949	42,757
TOTAL, 1ST 30 INSTS.	3,894,072	3,537,405	3,323,392	3,109,615	2,641,207	2,410,938	2,311,671	2,226,727
31 UNIVERSITY OF GEORGIA	78,812	70,665	65,161	60,523	26,581	22,434	21,703	20,729
32 WASHINGTON UNIVERSITY	77,392	69,357	68,049	62,383	57,537	54,350	55,608	51,712
33 UNIVERSITY OF CHICAGO 2/	77,022	75,314	69,018	64,822	64,010	61,982	57,600	56,338
34 UNIVERSITY OF ROCHESTER 2/	73,970	65,305	65,547	66,146	55,015	48,744	50,233	45,845
35 NEH /ORR UNIVERSITY	73,688	68,544	66,139	62,226	54,298	49,860	48,503	47,180
36 LOUISIANA STATE UNIV	72,870	68,383	66,814	60,293	19,981	18,044	18,220	19,165
37 UNIVERSITY OF CONNECTICUT	69,167	58,902	55,109	50,054	44,592	34,960	33,229	31,160
38 NORTHWESTERN UNIVERSITY	68,246	51,075	45,810	43,019	40,709	36,519	32,728	32,345
39 OREGON STATE UNIVERSITY	67,320	62,723	56,769	53,077	40,482	35,530	32,308	29,045
40 N C STATE UNIV AT RALEIGH 4/	64,837	59,909	55,781	50,283	20,083	23,286	21,217	18,420
TOTAL, 1ST 40 INSTS.	4,617,396	4,187,582	3,937,589	3,682,443	3,064,495	2,796,650	2,683,020	2,568,666
41 IOWA ST U OF SCI & TECH 2/	62,472	64,861	55,294	52,313	20,755	21,050	18,659	17,916
42 DUKE UNIVERSITY	61,025	55,040	49,655E	46,407	50,793	46,808	47,238E	41,408
43 YESHIVA UNIVERSITY	58,893	53,812	52,235	45,400	51,494	46,102	44,759	40,700
44 UNIVERSITY OF IOWA	56,770	54,771	55,406	50,601	41,468	40,460	38,271	36,279
45 BAYLOR COL OF MEDICINE	56,746	54,986	48,661	44,733	37,378	36,772	35,852	34,054
46 ROCKEFELLER UNIVERSITY	55,353	52,000	46,172	41,619	26,713	23,625	21,213	20,026
47 UNIV OF NC AT CHAPEL HILL	53,960	50,892	47,711	49,109	44,430	43,384	39,235	39,011
48 CARNEGIE-MELLON UNIV	53,787	43,174	37,316	36,810	33,419	30,546	27,178	26,583
49 UNIVERSITY OF PITTSBURGH	53,540	47,313	46,548	39,165	40,668	36,334	34,772	29,108
50 SUNY AT BUFFALO 5/	52,711	50,129	27,500	28,029	39,417	38,415	18,375	18,651
TOTAL, 1ST 50 INSTS.	5,152,653	4,714,560	4,404,387	4,116,629	3,451,030	3,160,146	3,008,572	2,872,402

SEE FOOTNOTES AT END OF TABLE.

TABLE 4. -- TOTAL AND FEDERALLY FINANCED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1981-84

- CONTINUED

(DOLLARS IN THOUSANDS)

INSTITUTIONS RANKED BY TOTAL R&D EXPENDITURES (1984)	TOTAL				FEDERALLY FINANCED			
	1984	1983	1982	1981	1984	1983	1982	1981
51 RUTGERS THE ST UNIV OF NJ	51,568	49,729	42,938	40,279	19,984	18,894	18,643	18,943
52 UNIVERSITY OF MIAMI	51,057	48,283	51,899	55,512	30,644	32,236	34,090	39,005
53 UNIV OF HAWAII-MANDA	51,051	45,401	43,439	42,997	32,701	27,633	26,616	25,153
54 UNIVERSITY OF UTAH	50,416	46,830	43,765	42,632	41,606	37,981	35,019	35,319
55 CALIFORNIA INST OF TECH 2/	50,409	49,824	44,048	47,255	43,390	43,340	39,382	41,915
56 U TEXAS SYSTEM CANCER CTR	49,317	44,509	40,369	39,205	16,379	15,112	17,560	19,075
57 OKLAHOMA STATE UNIVERSITY	48,727	42,503I	39,472	33,782	9,170	11,544I	10,991	7,672
58 INDIANA UNIVERSITY	47,645	44,331	42,558	34,125	32,565	29,882	28,663	25,644
59 CASE WESTERN RESERVE UNIV	47,217	42,691	43,129	42,791	39,337	34,963	34,047	32,864
60 UNIV OF MISSOURI COLUMBIA	46,075	44,231	40,978	40,703	17,325	16,143	15,604	15,934
TOTAL, 1ST 60 INSTS.	5,676,135	5,172,892	4,836,982	4,535,910	3,734,131	3,427,874	3,269,187	3,133,926
61 UNIVERSITY OF KENTUCKY	45,058	40,829	38,907	35,755	15,922	13,786	15,010	13,965
62 UNIV OF ILL CHICAGO 6/	44,544	44,497	30,147I	25,681	24,829	24,549	20,484I	18,329
63 VA POLYTECH INST & ST U	44,417	40,420	39,909	37,933	21,655	19,037	17,967	18,490
64 MOODS HOLE OCNORPHEIC INST	43,454	42,070	33,725	33,902	37,765	35,997	29,002	28,740
65 UNIV OF NEBRASKA-LINCOLN	42,920	44,597	44,172	38,824	14,195	12,750	13,890	11,303
66 COLORADO STATE UNIVERSITY	42,876	41,572	46,641	45,567	26,479	25,321	29,961	30,796
67 U TEX HLTH SCI CTR DALLAS	42,461	36,456	32,058	29,868	29,175	26,561	25,121	23,890
68 UNIVERSITY OF VIRGINIA	41,815	37,620	33,661	30,924	31,947	28,564	26,892	26,119
69 NEM MEXICO STATE UNIV	41,646	41,579	34,650	32,999	29,159	30,750	26,066	25,122
70 PRINCETON UNIVERSITY	40,877	37,017	36,641	33,069	27,747	25,027	26,542	25,464
TOTAL, 1ST 70 INSTS.	6,106,203	5,579,549	5,267,493	4,880,432	3,993,004	3,670,216	3,500,122	3,356,144
71 UNIV ALABAMA BIRMINGHAM	40,407	31,311	35,792	33,904	32,383	25,509	30,234	29,118
72 UNIV OF CAL RIVERSIDE 3/	40,233	37,236	35,539	34,416	13,127	11,602	11,217	11,133
73 UNIVERSITY OF OKLAHOMA	40,129	40,987	29,785	32,006	16,003	14,206	13,523	14,206
74 SUNY AT STONY BROOK	40,124	36,941	36,468	32,216	28,047	25,639	24,904	23,756
75 BOSTON UNIVERSITY	39,272	32,421	30,603	28,917	34,276	27,906	27,374	26,036
76 MISSISSIPPI STATE UNIV	38,410	35,714	36,582	33,684	10,310	7,775	9,560	9,833
77 UNIV OF CAL IRVINE 3/	37,023	33,293	31,456	29,917	29,929	27,484	26,234	24,570
78 UTAH STATE UNIVERSITY	36,642	36,711	33,822	28,149	19,983	19,058	19,123	16,328
79 KANS ST U - AG & APP SCI	35,598	35,130	34,806	32,048	10,766	10,268	10,928	9,884
80 WASHINGTON STATE UNIV	34,984	33,583	34,257	31,831	12,908	12,563	12,961	11,298
TOTAL, 1ST 80 INSTS.	6,489,025	5,932,876	5,546,603	5,197,521	4,200,736	3,852,226	3,686,120	3,531,806
81 UNIV OF MASS AT AMHERST	33,199	29,696	28,887	24,477	18,773	17,072	16,053	14,418
82 UNIVERSITY OF NEM MEXICO	33,161	33,356I	30,977	25,271	23,342	23,073I	21,968	18,862
83 UNIVERSITY OF CINCINNATI	32,708	29,008	28,573	31,262	22,350	20,074	20,060	17,900
84 CUNY MT SINAI SCH OF MED	31,273	28,561	29,797	28,794	21,411	20,587	21,496	23,358
85 AUBURN UNIVERSITY	29,977	26,176	23,256	22,711	8,448	8,083	7,473	7,476
86 VANDERBILT UNIVERSITY	29,760	26,322	24,993	23,919	21,649	19,889	19,649	19,290
87 UNIV OF ALASKA FAIRBANKS	29,182	37,325	38,218	36,652	11,752	13,859	19,055	18,995
88 EMORY UNIVERSITY	27,522	24,284	21,427	18,784	22,896	20,163	18,015	15,843
89 UNIV OF CAL STA BARBARA 3/	27,404	22,884	13,102	12,220	21,552	17,863	10,633	10,596
90 MAYNE STATE UNIVERSITY	26,386	23,990	21,542	22,569	14,965	12,713	12,903	13,192
TOTAL, 1ST 90 INSTS.	6,788,597	6,214,478	5,807,371	5,444,180	4,387,874	4,025,602	3,853,485	3,691,736
91 U TEX HLTH SCI CTR S ANTO	25,911	24,743	19,341	17,251	16,550	16,005	13,319	11,887
92 BRDMN UNIVERSITY	25,771	22,805	21,331	19,255	21,294	19,728	18,345	17,062
93 VIRGINIA COMMONMLTH UNIV	25,761	26,235	22,385	20,286	20,658	21,998E	18,852	16,894
94 FLORIDA STATE UNIVERSITY	25,734	22,767	22,877	22,703	12,054	10,810	10,385	9,682
95 TEMPLE UNIVERSITY	25,601	24,632	21,503	18,283	18,680	18,567	15,541	14,102
96 GEORGETOWN UNIVERSITY	24,187	19,885	18,888	19,681	14,626	11,630	12,004	11,185
97 TULANE UNIVERSITY	23,919	22,440	19,271	18,984	12,294	11,221	10,678	10,332
98 UNIVERSITY OF DAYTON	23,556	19,936	18,512	20,357	20,216	16,984	16,226	19,027
99 CLEMSON UNIVERSITY	23,543	21,766	23,552	19,559E	6,668	7,822	9,196	6,290
100 UNIV OF RHODE ISLAND	23,481	24,766I	23,000E	21,968	21,081	19,326I	18,400E	19,428
TOTAL, 1ST 100 INSTS.	7,036,061	6,444,447	6,018,131	5,642,507	4,551,995	4,179,693	3,996,431	3,827,625
TOTAL, ALL OTHER INSTS.	1,436,688	1,337,024	1,269,514	1,176,088	834,583	776,389	755,788	734,187

- 1/ INCLUDES APPLIED PHYSICS LABORATORY WITH \$248 MILLION IN TOTAL AND \$243 MILLION IN FEDERALLY FINANCED R&D EXPENDITURES IN FY 1984.
  - 2/ DOES NOT INCLUDE R&D EXPENDITURES AT UNIVERSITY ASSOCIATED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S). SEE TABLE B-76.
  - 3/ THE UNIVERSITY OF CALIFORNIA SYSTEM REPORTED SIGNIFICANT CHANGES IN FY 1983 COMPARED TO PREVIOUS YEARS, AS THE RESULT OF RECLASSIFYING SCIENCE AND ENGINEERING (S/E) AWARDS AND RESTRUCTURING SOME S/E DEPARTMENTS.
  - 4/ NORTH CAROLINA STATE UNIVERSITY AT RALEIGH REPORTED SIGNIFICANT CHANGES IN FY 1984 COMPARED TO PREVIOUS YEARS, AS THE RESULT OF RECLASSIFYING SCIENCE AND ENGINEERING (S/E) AWARDS AND RESTRUCTURING SOME S/E DEPARTMENTS.
  - 5/ BEGINNING IN FY 1983, INCLUDES DATA FOR ROSMELL PARK MEMORIAL INSTITUTE, FORMERLY CLASSIFIED AS A NONPROFIT INSTITUTION.
  - 6/ DATA REPRESENT COMBINED TOTALS FOR THE UNIVERSITY OF ILLINOIS CHICAGO CIRCLE AND THE UNIVERSITY OF ILLINOIS MEDICAL CENTER.
- NOTE: NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED; NUMBERS FOLLOWED BY "I" ARE IMPUTED. DASHES INDICATE THAT DATA ARE NOT AVAILABLE.
- SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 5. -- INDUSTRY-SPONSORED R&D EXPENDITURES AT  
UNIVERSITIES AND COLLEGES: FISCAL YEARS 1979-84

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	1984	1983	1982	1981	1980	1979
TOTAL, ALL INSTITUTIONS	457,227	377,762	333,905	291,150	237,025	194,186
1 MASS INST OF TECHNOLOGY	26,458	17,944	17,195	14,964	11,402	6,550
2 GEORGIA INSTITUTE OF TECH	18,131	13,255	11,359	8,581	6,243	4,892
3 CORNELL UNIVERSITY	13,229	9,206	7,495	5,879	5,153	4,462
4 PENNSYLVANIA STATE UNIV	12,995	12,445	10,581	10,056	7,842	5,420
5 CARNEGIE-MELLON UNIV	12,603	7,922	4,844	5,258	5,010	5,429
6 PURDUE UNIVERSITY	9,232	9,269	7,405	6,849	4,756	3,822
7 STANFORD UNIVERSITY	9,043	6,430	8,969	5,713	3,217	3,222
8 WASHINGTON UNIVERSITY	8,339	5,601	2,383	1,060	1,071	820
9 UNIVERSITY OF MINNESOTA	8,053	5,962	4,720	4,559	4,312	3,629
10 UNIVERSITY OF ARIZONA	7,837	7,956	8,554	7,567	5,123	4,894
TOTAL, 1ST 10 INSTS.	125,920	95,990	83,510	70,486	54,125	43,140
11 UNIV OF MD COLLEGE PARK	7,691E	7,539E	4,964E	2,817	2,163	1,173
12 UNIVERSITY OF MICHIGAN	7,559	5,984	7,400	6,712	6,145	6,155
13 UNIVERSITY OF ROCHESTER	7,134	6,481	4,561	7,336	7,169	7,950
14 UNIVERSITY OF WASHINGTON	6,801	6,176	5,140	4,943	3,830	3,157
15 COLORADO STATE UNIVERSITY	6,750	6,426	5,130	3,878	2,505	1,107
16 OHIO STATE UNIVERSITY	6,559	6,014E	4,260	3,752	3,699	3,080
17 VA POLYTECH INST & ST U	5,806	6,110	6,513	5,658	3,692	3,319
18 TEXAS A & M UNIVERSITY	5,601	6,483	4,933	6,219	4,281	0
19 UNIVERSITY OF MIAMI	5,600	4,384	4,605	1,690	1,895	1,732
20 UNIV OF WIS-MADISON	5,451	4,502	3,446	2,880	2,615	2,243
TOTAL, 1ST 20 INSTS.	190,872	156,089	134,472	116,371	93,729	73,056
21 UNIVERSITY OF FLORIDA	5,000	4,345	3,650	2,388	3,045E	2,083
22 UNIV OF ILL URBANA	4,922	3,448	1,598	4,103	3,404	2,463
23 HARVARD UNIVERSITY	4,883E	4,615E	4,550E	4,422E	3,995E	3,524E
24 UNIV OF SOUTHERN CAL	4,800	2,012	5,223	5,853	7,462	2,919
25 RENSSELAER POLYTECH INST	4,785	3,589	2,848	2,103	1,394	1,236
26 DUKE UNIVERSITY	4,622	3,166	5,101	1,053	779	1,479
27 UNIVERSITY OF KENTUCKY	4,378	3,007	3,337	2,763	312	922
28 UNIVERSITY OF GEORGIA	4,356	4,486	3,059	2,630	2,076	1,924
29 BAYLOR COL OF MEDICINE	3,932	4,726	3,054	2,927	2,801	1,127
30 CALIFORNIA INST OF TECH	3,798	2,445	2,025	2,174	1,993	1,266
TOTAL, 1ST 30 INSTS.	236,348	192,008	164,326	146,787	120,980	91,999
31 THOMAS JEFFERSON UNIV	3,681	4,290	2,363	2,149	355E	345
32 U TEX HLTH SCI CTR DALLAS	3,620	2,792	1,915	1,654	1,319	1,164
33 UNIVERSITY OF CONNECTICUT	3,557	1,743	1,570	1,104	959	898
34 UNIVERSITY OF NEW MEXICO	3,523	3,019I	2,645	2,381	2,822	2,909
35 OREGON STATE UNIV. SITY	3,519	3,424	2,782	2,564	1,572	1,448
36 TULANE UNIVERSITY	3,372	2,410	2,516	1,439	761	739
37 NEW YORK UNIVERSITY	3,240	2,649	2,952	1,877	2,080	2,369
38 UNIV ALABAMA BIRMINGHAM	3,117	2,265	1,509	1,189	1,585	947
39 VANDERBILT UNIVERSITY	3,040	2,403	2,146	2,013	1,890	1,442
40 N C STATE UNIV AT RALEIGH	3,026	3,246	2,712I	2,500	1,800	3,000
TOTAL, 1ST 40 INSTS.	270,023	220,249	187,436	165,657	136,143	107,160
41 UNIV OF PENNSYLVANIA	3,013	1,821	2,592	3,580	2,010	2,011
42 IOWA ST U OF SCI & TECH	2,925	2,957	2,106	2,396	1,854	1,916
43 ROCKEFELLER UNIVERSITY	2,817	2,661	1,740	1,122	678	609
44 UNIVERSITY OF PITTSBURGH	2,813	2,919	1,445	799	774	930
45 UNIVERSITY OF DELAWARE	2,752	3,075	2,445	2,246	2,138E	2,205
46 WORCESTER POLY INSTITUTE	2,664I	2,437	2,234	1,449	1,630	2,140
47 OKLAHOMA STATE UNIVERSITY	2,631	2,283I	2,100	2,445	2,224	1,154
48 UNIV OF MASS AT AMHERST	2,627	1,018	1,601	964	413	606
49 AUBURN UNIVERSITY	2,604	1,904	1,560	1,266	530	0
50 DESERT RESEARCH INSTITUTE	2,585	2,375	2,196	2,726	1,814	1,358
TOTAL, 1ST 50 INSTS.	297,454	244,699	207,452	184,651	150,208	120,149

SEE FOOTNOTES AT END OF TABLE.

TABLE 5. -- INDUSTRY-SPONSORED R&D EXPENDITURES AT  
UNIVERSITIES AND COLLEGES: FISCAL YEARS 1979-84

- CONTINUED

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	1984	1983	1982	1981	1980	1979
51 UNIVERSITY OF IDAHO	2,567	2,260	1,622	1,001	301	246
52 GEORGETOWN UNIVERSITY	2,531	1,234	1,570	1,758	1,535	1,112
53 U TEX HLTH SCI CTR S AMTO	2,497	2,237	1,495	1,077	722	485
54 LOUISIANA STATE UNIV	2,487	1,834	1,720	1,501	1,267	365
55 MICHIGAN STATE UNIVERSITY	2,446	619	2,200	2,411	2,543	2,368
56 UNIVERSITY OF VIRGINIA	2,399	2,342	1,877	1,455	984	663
57 EMORY UNIVERSITY	2,395	1,957	1,271	1,042	867	746
58 UNIVERSITY OF DENVER	2,379I	2,132I	1,995	2,187I	1,697	1,610
59 INDIANA UNIVERSITY	2,361	2,402	1,463	1,258	831	672
60 COLORADO SCHOOL OF MINES	2,356	1,609	900	1,175	497	494I
TOTAL, 1ST 60 INSTS.	321,872	267,325	223,568	199,526	161,752	128,910
61 UNIV OF MAINE ORONO	2,220	1,404	1,088	1,087	392	696
62 BROWN UNIVERSITY	2,227	1,527	2,236	1,700	650	94
63 UNIVERSITY OF DAYTON	2,226	2,108	1,793	990I	1,257	1,684
64 UNIV OF VT & ST AGRIC COL	2,130	1,465	1,369	1,013	801	945
65 UNIV OF MISSOURI COLUMBIA	2,128	1,492	983	1,224	509	618
66 TEXAS TECH UNIVERSITY	2,077I	1,910	1,953	1,961	1,969	1,616
67 UNIVERSITY OF OKLAHOMA	2,075	2,260	1,642	1,470	647	261
68 CLEMSON UNIVERSITY	2,009	2,223	2,319	2,093	1,126	790
69 UNIV OF TEXAS AT AUSTIN	1,932	1,750	1,624	1,340	1,237	1,122
70 MICHIGAN TECH UNIVERSITY	1,901	1,453	1,673	1,642	2,064	1,394
TOTAL, 1ST 70 INSTS.	342,897	281,117	240,248	214,051	172,104	138,130
71 UNIVERSITY OF NOTRE DAME	1,874	1,237	1,076	805	683	684
72 LEHIGH UNIVERSITY	1,865	1,488	1,294	1,167	1,076	708
73 MONTANA STATE UNIVERSITY	1,818	1,054	860	1,097	1,070	617
74 RUTGERS THE ST UNIV OF NJ	1,817	1,694	1,264	979	1,008	807
75 UNIVERSITY OF COLORADO	1,809	1,542	2,860E	2,794I	2,674	1,052
76 CASE WESTERN RESERVE UNIV	1,802	1,720	1,896	1,729	1,790	1,419
77 CUNY MT SINAI SCH OF MED	1,795	1,145	849	728	554	263
78 UNIVERSITY OF IOWA	1,788	1,490	1,600	1,197	1,095	818
79 BRIGHAM YOUNG UNIVERSITY	1,787	1,207	1,328	2,446I	2,198E	2,035
80 N MEX INST MINING & TECH	1,739	879I	784	1,034	786	395
TOTAL, 1ST 80 INSTS.	360,991	294,573	254,059	228,027	185,038	146,928
81 UNIVERSITY OF WYOMING	1,734	1,740	1,312	1,302	1,104	738
82 OREGON GRADUATE CENTER	1,732	1,108I	1,042I	922	878	972
83 NEW MEXICO STATE UNIV	1,694	0	0	0	0	0
84 UNIVERSITY OF UTAH	1,659	1,888	1,432	929	851	932
85 YALE UNIVERSITY	1,637	1,316	905	629	582	1,629E
86 ARIZONA STATE UNIVERSITY	1,588	1,373	750	285	124	173
87 WASHINGTON STATE UNIV	1,581	1,517	2,865	1,320	795	1,031
88 SOUTHERN ILL U-CARONDALE	1,575	2,519	2,220	2,157	967	0
89 DREXEL UNIVERSITY	1,562	611	542	487	348	592
90 UNIVERSITY OF LOWELL	1,519	1,360	445I	402	374	280
TOTAL, 1ST 90 INSTS.	377,272	308,005	266,042	236,460	191,061	153,275
91 U OF HOUSTON UNIV PARK	1,500	1,239	1,472	2,286	602	1,236
92 VIRGINIA COMMONWLTN UNIV	1,412	350E	299	44	143	300
93 UNIV OF ARK FAYETTEVILLE	1,391	1,514	1,402	1,048	1,186	807
94 UNIVERSITY OF CINCINNATI	1,388	1,262	1,133	1,589	1,237	877
95 UNIV OF ALASKA FAIRBANKS	1,344	3,143	2,882	2,279	830	855
96 UTAH STATE UNIVERSITY	1,306	1,141	703	497	533	466
97 UNIV OF NEBRASKA-LINCOLN	1,285	1,203	1,037	762	995	638
98 UNIVERSITY OF TULSA	1,274E	702	717	1,230	800	562
99 STEVENS INSTITUTE OF TECH	1,256	0	1,290	1,411	1,198	1,153
100 MISSISSIPPI STATE UNIV	1,250	1,229	1,536	628	448	372
TOTAL, 1ST 100 INSTS.	390,678	319,788	278,513	248,237	199,044	160,711
TOTAL, ALL OTHER INSTS.	66,549	57,974	55,392	42,913	37,981	33,645

NOTE: NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED; NUMBERS FOLLOWED BY "I" ARE IMPUTED. DASHES INDICATE THAT DATA ARE NOT AVAILABLE.

SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 6. -- CURRENT FUND EXPENDITURES FOR RESEARCH EQUIPMENT AT UNIVERSITIES AND COLLEGES BY SCIENCE/ENGINEERING FIELD AND SOURCE OF FUNDS: FISCAL YEARS 1981 AND 1983-84

(DOLLARS IN THOUSANDS)

FIELD	TOTAL			FEDERAL			NON-FEDERAL		
	1981	1983	1984	1981	1983	1984	1981	1983	1984
TOTAL .....	413,972	435,178	518,063	265,048	272,819	335,486	148,924	162,359	182,583
ENGINEERING, TOTAL .....	69,008	75,018	90,610	42,396	48,958	59,278	26,612	26,060	31,332
AERONAUTICAL AND									
ASTRONAUTICAL .....	2,870	2,892	5,353	2,097	2,091	4,036	773	801	1,317
CHEMICAL .....	7,019	6,243	7,438	4,436	3,614	4,019	2,583	2,629	3,419
CIVIL .....	5,036	6,148	6,641	2,772	3,438	4,164	2,264	2,710	2,477
ELECTRICAL .....	18,372	20,758	23,106	13,262	14,519	15,777	5,110	6,239	7,329
MECHANICAL .....	9,690	10,018	14,272	5,695	6,581	10,021	3,995	3,437	4,251
OTHER, N.E.C. ....	26,021	28,959	33,799	14,134	18,715	21,261	11,887	10,244	12,538
ALL SCIENCES, TOTAL .....	344,964	360,160	427,459	222,652	223,861	276,207	122,312	136,299	151,251
PHYSICAL SCIENCES .....	76,141	79,375	107,439	58,475	62,055	86,738	17,666	17,320	20,702
ASTRONOMY .....	4,582	4,243	5,761	3,232	3,465	4,278	1,350	778	1,483
CHEMISTRY .....	35,383	32,814	43,456	25,918	23,551	33,100	9,465	9,263	10,355
PHYSICS .....	32,476	35,708	47,606	26,320	29,587	40,474	6,156	6,121	7,132
OTHER, N.E.C. ....	3,700	6,610	10,617	3,005	5,452	8,886	695	1,158	1,731
ENVIRONMENTAL SCIENCES .....	31,479	31,521	40,806	19,165	19,649	29,477	12,314	11,872	11,329
ATMOSPHERIC .....	5,717	5,106	6,710	3,499	3,615	4,928	2,218	1,491	1,782
EARTH SCIENCES .....	11,726	11,891	16,012	6,924	6,621	10,032	4,802	5,270	5,980
OCEANOGRAPHY .....	8,860	10,958	13,674	6,023	6,840	11,336	2,837	4,118	2,338
OTHER, N.E.C. ....	5,176	3,566	4,410	2,719	2,573	3,181	2,457	993	1,229
MATHEMATICAL SCIENCES .....	1,902	2,668	4,539	1,127	1,476	3,212	775	1,192	1,327
COMPUTER SCIENCES .....	10,899	15,615	19,056	5,436	10,229	14,056	5,463	5,386	4,999
LIFE SCIENCES .....	202,184	205,680	225,572	126,175	117,039	128,837	76,009	88,641	96,734
AGRICULTURAL SCIENCES .....	36,892	37,985	37,233	12,316	10,281	12,028	24,576	27,704	25,205
BIOLOGICAL SCIENCES .....	76,861	75,271	84,634	54,481	51,078	55,011	22,380	24,193	26,623
MEDICAL SCIENCES .....	81,501	85,829	95,855	54,929	51,745	54,194	26,572	34,084	41,661
OTHER, N.E.C. ....	6,930	6,595	7,849	4,449	3,935	4,604	2,481	2,660	3,245
PSYCHOLOGY .....	6,022	6,629	7,066	4,466	4,749	5,016	1,556	1,880	2,050
SOCIAL SCIENCES .....	9,179	8,961	12,724	3,999	2,917	3,484	5,180	6,044	9,240
ECONOMICS .....	1,861	1,911	2,414	525	728	1,014	1,336	1,183	1,400
POLITICAL SCIENCE .....	1,523	767	734	756	319	297	767	448	537
SOCIOLOGY .....	2,558	1,472	7	1,478	944	963	1,080	528	604
OTHER, N.E.C. ....	3,237	4,811	79	1,240	926	1,210	1,997	3,885	6,699
OTHER SCIENCES, N.E.C. ....	7,158	9,711	10,257	3,809	5,747	5,387	3,349	3,964	4,870

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 7. -- CAPITAL EXPENDITURES AT UNIVERSITIES AND COLLEGES  
 BY SCIENCE/ENGINEERING FIELD AND SOURCE OF FUNDS: FISCAL YEARS 1977 AND 1979-84 1/  
 (DOLLARS IN THOUSANDS)

FIELD	1977	1979	1980	1981	1982	1983	1984
TOTAL .....	960,014	696,218	794,512	952,672	969,147	1,099,846	1,216,513
ENGINEERING .....	87,718	87,128	89,297	103,329	144,457	135,206	143,108
ALL SCIENCES, TOTAL .....	872,296	609,090	705,215	849,343	824,690	964,640	1,073,404
PHYSICAL SCIENCES .....	65,216	64,685	77,154	87,813	82,100	97,594	116,483
ENVIRONMENTAL SCIENCES ...	28,351	25,153	36,208	35,025	42,365	41,114	36,826
MATHEMATICAL/COMPUTER SCIENCES .....	25,136	27,282	32,318	30,517	34,328	53,152	49,976
LIFE SCIENCES .....	642,493	428,293	459,057	597,635	590,353	678,959	741,674
PSYCHOLOGY .....	12,702	7,060	17,982	10,991	12,798	17,039	35,237
SOCIAL SCIENCES .....	31,798	21,358	35,073	45,138	30,797	40,977	52,062
OTHER SCIENCES, N.E.C. ...	66,600	35,259	47,423	42,224	31,949	35,805	41,146
FEDERAL SOURCES, TOTAL .....	195,519	164,460	149,563	153,800	116,651	132,422	142,970
ENGINEERING .....	17,219	20,927	20,438	17,601	18,136	16,389	24,227
ALL SCIENCES, TOTAL .....	178,300	143,533	129,125	136,199	98,515	116,033	118,743
PHYSICAL SCIENCES .....	21,834	32,186	22,463	25,529	20,154	18,706	19,321
ENVIRONMENTAL SCIENCES ...	9,307	8,220	8,033	6,866	4,404	3,646	3,502
MATHEMATICAL/COMPUTER SCIENCES .....	1,882	2,983	5,653	4,944	3,798	4,512	5,301
LIFE SCIENCES .....	137,369	90,796	86,105	89,410	66,004	81,197	85,658
PSYCHOLOGY .....	2,398	1,740	2,002	1,580	1,023	1,392	1,040
SOCIAL SCIENCES .....	2,109	2,076	1,528	6,376	1,374	5,066	3,061
OTHER SCIENCES, N.E.C. ...	3,341	5,532	3,341	1,494	1,758	1,514	860
OTHER SOURCES, TOTAL .....	764,495	531,758	644,949	798,872	852,496	967,424	1,073,542
ENGINEERING .....	70,499	66,201	68,859	85,728	126,321	118,817	118,881
ALL SCIENCES, TOTAL .....	693,996	465,557	576,090	713,144	726,175	848,607	954,661
PHYSICAL SCIENCES .....	43,322	32,499	54,691	62,284	61,946	78,888	97,163
ENVIRONMENTAL SCIENCES ...	19,044	16,933	28,175	28,159	37,961	37,468	33,324
MATHEMATICAL/COMPUTER SCIENCES .....	23,254	24,299	26,665	25,573	30,530	48,640	44,675
LIFE SCIENCES .....	505,124	337,497	372,952	508,225	524,349	597,762	656,016
PSYCHOLOGY .....	10,304	5,320	15,980	9,411	11,775	15,647	34,197
SOCIAL SCIENCES .....	29,689	19,282	33,545	38,762	29,423	35,911	49,001
OTHER SCIENCES, N.E.C. ...	63,259	29,727	44,082	40,730	30,191	34,291	40,286

1/ INCLUDES EXPENDITURES FOR FACILITIES AND EQUIPMENT FOR RESEARCH, DEVELOPMENT, AND INSTRUCTION.  
 SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 8. -- FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS: FY 1977-84 1/

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED FOR FY 1984)	1977	1978	1979	1980	1981	1982	1983	1984
TOTAL, ALL INSTITUTIONS		2,803,017	3,385,770	3,873,514	4,159,857	4,410,195	4,553,755	5,023,677	5,622,768
1	JOHNS HOPKINS UNIVERSITY	51,100	196,881	274,463	240,096	363,429	312,979	318,374	467,050
2	MASS INST OF TECHNOLOGY	91,952	114,705	110,681	142,094	146,035	148,837	178,706	178,706
3	STANFORD UNIVERSITY	73,683	80,805	94,030	104,610	106,073	124,289	140,090	160,274
4	UNIVERSITY OF WASHINGTON	69,882	76,499	88,332	100,577	99,965	97,650	114,294	136,803
5	COLUMBIA UNIV MAIN DIV	60,518	63,264	74,183	81,511	83,659	88,879	101,006	110,089
6	UNIV OF CAL LOS ANGELES	63,573	69,878	87,167	87,284	94,945	89,661	108,450	110,057
7	CORNELL UNIVERSITY	50,319	58,729	69,257	79,166	72,671	83,936	93,644	105,338
8	UNIV OF CAL SAN DIEGO	70,897	77,249	85,987	91,427	91,403	90,896	104,871	104,083
9	UNIV OF WIS-MADISON	58,639	65,530	75,982	80,828	86,918	82,417	93,568	99,831
10	HARVARD UNIVERSITY	58,250	69,089	75,943	84,554	87,830	89,757	89,457	98,972
TOTAL 1ST 10 INSTITUTIONS		648,813	874,629	1,036,025	1,088,147	1,232,920	1,202,341	1,342,460	1,571,203
11	YALE UNIVERSITY	47,485	54,033	63,217	68,937	73,526	78,920	88,335	97,905
12	UNIVERSITY OF MICHIGAN	52,895	58,739	63,186	71,935	73,999	79,794	81,248	95,307
13	UNIV OF PENNSYLVANIA	48,378	56,948	66,121	71,084	76,136	76,907	83,251	94,154
14	UNIV OF CAL BERKELEY	45,094	50,477	54,701	50,426	64,065	69,555	75,293	85,852
15	UNIV OF CAL SAN FRANCISCO	38,103	46,528	59,475	62,771	64,814	66,752	75,718	85,449
16	UNIV OF SOUTHERN CAL	37,738	42,908	50,179	48,343	49,221	50,402	62,837	79,617
17	UNIVERSITY OF MINNESOTA	50,160	59,935	64,742	76,068	72,001	78,714	74,102	72,494
18	UNIV OF ILL URBANA	38,824	43,495	45,084	50,800	53,583	63,923	66,055	68,911
19	UNIVERSITY OF CHICAGO	46,046	49,239	50,924	50,592	53,992	54,182	62,318	68,703
20	PENNSYLVANIA STATE UNIV	23,019	42,106	44,257	48,163	47,099	50,809	61,798	64,372
TOTAL 1ST 20 INSTITUTIONS		1,076,555	1,379,037	1,597,911	1,687,566	1,861,364	1,871,299	2,073,415	2,383,967
21	UNIVERSITY OF COLORADO	30,059	32,198	36,049	44,823	46,146	43,786	50,626	62,708
22	UNIV OF TEXAS AT AUSTIN	29,142	37,352	37,913	40,434	43,756	44,767	56,300	62,316
23	DUKE UNIVERSITY	30,059	34,790	41,873	42,685	44,287	50,397	59,619	62,074
24	WASHINGTON UNIVERSITY	37,861	42,260	48,364	52,529	54,170	52,839	55,754	61,341
25	UNIVERSITY OF ROCHESTER	26,491	33,813	35,427	41,324	42,983	46,427	53,358	60,157
26	NEW YORK UNIVERSITY	35,726	38,283	38,987	39,494	40,636	43,643	51,975	55,028
27	YESHIVA UNIVERSITY	26,244	28,710	35,401	40,275	42,590	44,237	51,279	53,077
28	UNIVERSITY OF PITTSBURGH	21,576	26,086	31,522	33,246	38,512	39,397	45,805	50,557
29	CALIFORNIA INST OF TECH	25,085	28,235	31,680	35,552	32,959	36,672	44,076	48,589
30	UNIV OF NC AT CHAPEL HILL	21,348	26,774	40,433	35,795	38,447	41,890	47,228	48,491
TOTAL 1ST 30 INSTITUTIONS		1,360,146	1,707,538	1,975,560	2,093,723	2,285,850	2,315,354	2,585,435	2,948,305
31	UNIVERSITY OF IOWA	21,537	24,551	33,284	34,677	35,300	36,971	41,121	48,378
32	OHIO STATE UNIVERSITY	25,304	34,177	33,672	37,312	42,899	41,073	45,543	48,339
33	UNIVERSITY OF UTAH	24,998	29,867	35,924	31,966	38,163	39,886	40,853	45,427
34	CASE WESTERN RESERVE UNIV	20,175	24,853	29,606	31,420	33,744	34,834	38,438	43,931
35	UNIVERSITY OF ARIZONA	25,296	26,450	30,375	33,887	36,308	35,688	40,110	43,380
36	NORTHWESTERN UNIVERSITY	23,468	26,958	31,520	31,982	32,446	33,117	37,284	42,864
37	PURDUE UNIVERSITY	23,945	29,863	31,117	36,724	36,549	38,142	37,346	41,892
38	MICHIGAN STATE UNIVERSITY	20,179	21,921	27,394	28,836	34,000	35,667	41,935	41,205
39	UNIVERSITY OF FLORIDA	18,670	21,690	22,129	25,467	30,845	35,106	35,549	40,847
40	WOODS HOLE OCEANOGRPHIC INST	15,988	19,625	19,131	23,427	27,633	32,877	31,039	39,705
TOTAL 1ST 40 INSTITUTIONS		1,579,706	1,967,193	2,269,312	2,409,421	2,633,737	2,678,715	2,974,653	3,384,273
41	BAYLOR COL OF MEDICINE	20,338	26,476	29,806	31,784	35,062	36,972	35,551	39,340
42	BOSTON UNIVERSITY	17,212	19,763	20,925	24,943	27,019	30,397	38,406	39,306
43	GEORGIA INSTITUTE OF TECH	15,242	22,253	24,146	27,868	33,616	43,530	45,835	38,460
44	UNIV OF MD COLLEGE PARK	18,535	19,401	21,049	26,463	27,313	28,355	35,514	38,260
45	UNIV ALABAMA BIRMINGHAM	18,862	21,511	26,847	26,995	29,970	28,731	32,627	37,839
46	UNIV OF CAL DAVIS	22,413	27,827	33,615	42,245	31,757	32,700	35,729	27,586
47	OREGON STATE UNIVERSITY	19,221	18,646	23,158	29,690	27,669	33,245	31,030	37,499
48	VANDERBILT UNIVERSITY	16,876	20,151	21,747	25,978	27,426	28,739	31,996	35,338
49	INDIANA UNIVERSITY	18,771	19,158	20,730	26,770	29,276	30,056	30,559	35,123
50	UNIVERSITY OF NEW MEXICO	14,196	18,440	20,139	17,952	18,976	24,724	22,189	33,842
TOTAL 1ST 50 INSTITUTIONS		1,765,372	2,180,819	2,511,474	2,690,109	2,921,821	2,996,164	3,314,089	3,756,866

SEE FOOTNOTES AT END OF TABLE.

TABLE 8. -- FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS: FY 1977-84 1/

- CONTINUED

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED FOR FY 1984)	1977	1978	1979	1980	1981	1982	1983	1984
51	U TEX HLTH SCI CTR DALLAS	15,688	16,084	20,270	22,172	23,911	23,966	27,787	32,949
52	TEXAS A & M UNIVERSITY	14,594	20,262	26,426	26,979	34,398	33,144	35,407	31,072
53	UNIVERSITY OF VIRGINIA	17,436	19,151	22,686	23,583	24,333	25,688	27,984	30,279
54	SUNY AT STONY BROOK	11,648	12,651	14,817	18,449	19,602	22,221	24,941	29,770
55	ROCKEFELLER UNIVERSITY	15,371	17,473	17,163	19,686	19,952	20,807	25,245	29,484
56	PRINCETON UNIVERSITY	16,685	17,410	19,410	21,492	23,888	23,668	26,782	28,783
57	UNIVERSITY OF CONNECTICUT	12,922	15,072	19,011	19,171	22,196	24,972	26,397	28,060
58	TUFTS UNIVERSITY	6,749	7,742	9,798	9,853	15,642	16,808	24,604	27,995
59	UNIVERSITY OF MIAMI	24,123	25,761	27,360	27,986	28,956	27,070	28,936	27,880
60	CARNEGIE-MELLON UNIV	13,449	13,972	16,562	22,081	21,915	25,463	36,345	27,650
TOTAL 1ST 60 INSTITUTIONS		1,914,037	2,346,397	2,704,977	2,901,561	3,156,614	3,239,971	3,598,517	4,050,788
61	UNIV OF CAL IRVINE	10,329	11,922	13,847	18,605	20,614	22,003	23,874	26,798
62	CUNY MT SINAI SCH OF MED	16,707	18,868	21,131	21,799	19,874	19,433	22,595	26,796
63	NEW MEXICO STATE UNIV	12,268	16,260	11,272	12,284	11,759	21,068	27,452	26,660
64	LOUISIANA STATE UNIV	10,085	13,886	14,719	19,214	19,323	22,141	21,186	25,944
65	COLORADO STATE UNIVERSITY	18,990	20,920	21,429	22,762	21,487	22,614	25,022	25,002
66	UNIV OF HAWAII-MANOA	19,200	17,406	23,943	23,697	20,629	20,000	24,226	23,925
67	UNIVERSITY OF CINCINNATI	9,657	13,430	16,635	19,486	18,766	20,126	20,403	23,860
68	RUTGERS THE ST UNIV OF NJ	10,272	13,697	14,638	16,316	18,011	17,482	19,647	23,827
69	ENDRY UNIVERSITY	12,457	12,921	14,304	16,028	17,374	18,574	20,569	23,621
70	UNIVERSITY OF GEORGIA	10,762	14,258	14,115	17,056	17,045	16,991	22,538	23,165
TOTAL 1ST 70 INSTITUTIONS		2,044,564	2,499,965	2,871,010	3,088,808	3,341,496	3,440,403	3,826,029	4,300,386
71	BROWN UNIVERSITY	9,988	11,789	13,758	15,680	16,020	18,031	19,790	22,996
72	N C STATE UNIV AT RALEIGH	11,488	11,606	15,696	22,378	16,758	18,158	20,604	22,639
73	UNIV OF ILL CHICAGO	11,525	12,300	16,872	19,519	21,394	20,977	22,460	22,531
74	VIRGINIA COMMONWLTN UNIV	9,415	11,368	14,339	15,605	16,713	16,485	19,856	21,684
75	VA POLYTECH INST & ST U	9,966	14,507	16,204	16,823	16,449	18,680	20,602	21,214
76	UNIV OF MD BALT PROF SCH	15,312	16,592	18,374	17,186	20,414	22,355	18,679	19,943
77	UNIV OF MASS AT AMHERST	10,010	10,975	12,268	14,415	15,131	18,034	18,236	19,563
78	SUNY AT BUFFALO	12,488	13,208	14,576	18,677	16,224	16,123	17,175	19,270
79	UNIV OF CAL SANTA BARBARA	6,728	8,372	8,764	10,946	12,688	13,329	16,895	18,738
80	U TEX HLTH SCI CTR S ANTO	5,781	7,384	9,586	11,153	13,314	14,456	14,392	18,562
TOTAL 1ST 80 INSTITUTIONS		2,147,273	2,618,066	3,011,447	3,250,990	3,506,601	3,617,031	4,014,718	4,507,526
81	UNIV OF VT & ST AGRIC COL	9,574	12,059	11,869	12,035	11,950	13,000	13,309	18,249
82	UNIVERSITY OF DAYTON	10,690	12,222	14,795	15,314	15,049	17,094	18,175	17,938
83	UNIV OF MISSOURI COLUMBIA	12,519	13,676	16,508	16,467	14,477	15,139	16,939	17,810
84	U TEXAS SYSTEM CANCER CTR	17,060	21,213	17,467	20,345	17,789	15,346	14,693	17,708
85	UTAH STATE UNIVERSITY	7,187	8,015	10,585	9,807	15,412	16,047	16,093	17,416
86	TEMPLE UNIVERSITY	12,434	12,559	12,851	15,368	14,678	14,816	16,100	17,281
87	WASHINGTON STATE UNIV	7,870	8,959	10,154	13,162	12,896	15,262	15,559	16,772
88	UNIVERSITY OF KENTUCKY	10,210	12,067	13,421	13,982	12,875	14,764	14,317	16,268
89	U TEX HLTH SCI CTR HOUSTN	5,584	8,768	12,422	11,282	12,987	13,896	13,703	16,206
90	UNIVERSITY OF KANSAS	14,473	16,227	18,973	21,803	17,205	15,450	15,368	15,869
TOTAL 1ST 90 INSTITUTIONS		2,254,874	2,743,831	3,150,892	3,400,555	3,651,919	3,767,845	4,168,974	4,679,043
91	UNIVERSITY OF IDAHO	3,034	3,682	3,870	4,507	5,583	4,832	4,987	15,595
92	UNIVERSITY OF WYOMING	5,499	4,930	8,208	5,623	7,541	7,069	11,418	15,349
93	GEORGE WASHINGTON UNIV	13,512	13,028	15,314	13,608	14,503	16,279	17,791	15,122
94	U TENNESSEE KNOXVILLE	13,375	18,545	18,729	20,710	19,933	18,202	14,415	14,949
95	U MASS MED SCHL WORCESTER	2,253	3,599	4,569	5,083	6,529	7,878	10,606	14,767
96	MAKЕ FOREST UNIVERSITY	5,171	6,042	7,039	8,069	8,528	10,116	10,017	14,660
97	GEORGETOWN UNIVERSITY	12,270	11,609	9,412	13,579	10,327	12,259	20,865	14,463
98	UNIV OF MED & DENT OF N J	6,347	7,658	9,081	8,970	11,115	10,933	11,870	14,349
99	MAYNE STATE UNIVERSITY	10,342	10,495	12,199	11,926	12,582	12,280	15,304	14,282
100	IOWA ST U DF SCI & TECH	7,610	9,079	11,455	10,077	10,396	10,869	11,908	13,384
TOTAL 1ST 100 INSTITUTIONS		2,334,287	2,832,498	3,250,768	3,502,707	3,758,956	3,878,562	4,298,155	4,825,963

1/ DOES NOT INCLUDE R&D OBLIGATIONS TO UNIVERSITY-ASSOCIATED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S).

NOTE: DATA FOR EACH YEAR REFLECT SUPPORT FROM THE AGENCIES INCLUDED IN THE SURVEY SYSTEM FOR THAT YEAR.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 9. -- FEDERAL OBLIGATIONS FOR RESEARCH & DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY AGENCY: FY 1984 1/

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED)	TOTAL	USDA	COM	DDO	ED	DOE	EPA	HHS	INT	NASA	NSF	OTHER 2/
	<b>TOTAL, ALL INSTITUTIONS</b>	<b>5,622,768</b>	<b>272,977</b>	<b>73,988</b>	<b>1014,312</b>	<b>43,613</b>	<b>317,065</b>	<b>47,329</b>	<b>2,681,424</b>	<b>32,197</b>	<b>203,846</b>	<b>858,860</b>	<b>77,157</b>
1	JOHNS HOPKINS UNIVERSITY	467,050	188	210	356,048	1,322	2,980	153	90,657	122	7,767	7,588	15
2	MASS INST OF TECHNOLOGY	178,706	520	7,375	34,692	0	44,988	648	39,251	747	11,587	32,459	6,442
3	STANFORD UNIVERSITY	160,274	168	95	37,494	1,178	12,625	480	72,282	212	12,782	22,961	0
4	UNIVERSITY OF WASHINGTON	136,803	773	8,476	21,460	451	6,083	837	73,867	814	2,694	21,190	498
5	COLUMBIA UNIV MAIN DIV	110,089	0	409	9,456	0	4,616	4	67,795	895	2,172	23,274	1,468
6	UNIV OF CAL LOS ANGELES	110,057	427	0	8,470	1,360	9,138	516	71,876	0	3,739	14,531	0
7	CORNELL UNIVERSITY	109,338	7,323	155	7,600	0	2,763	1,226	42,576	677	2,196	40,822	0
8	UNIV OF CAL SAN DIEGO	104,083	185	3,307	17,788	0	2,140	90	45,474	0	9,437	29,662	0
9	UNIV OF WIS-MADISON	92,831	6,929	0	6,684	1,996	9,541	447	50,183	108	5,564	18,379	0
10	HARVARD UNIVERSITY	98,972	50	149	4,461	1,457	3,743	1,414	71,953	72	2,934	12,582	157
	<b>TOTAL 1ST 10 INSTITUTIONS</b>	<b>1,571,203</b>	<b>16,563</b>	<b>20,176</b>	<b>504,153</b>	<b>7,761</b>	<b>98,617</b>	<b>5,812</b>	<b>625,614</b>	<b>3,647</b>	<b>60,872</b>	<b>219,448</b>	<b>8,540</b>
11	YALE UNIVERSITY	97,905	98	0	6,230	0	6,576	106	75,957	0	188	8,750	0
12	UNIVERSITY OF MICHIGAN	95,307	322	2,273	5,670	322	4,588	385	57,476	262	4,862	16,336	2,821
13	UNIV OF PENNSYLVANIA	94,154	313	72	6,579	156	4,956	0	67,186	9	303	14,429	111
14	UNIV OF CAL BERKELEY	85,852	8,514	53	17,847	158	2,094	256	26,399	157	4,861	22,689	2,824
15	UNIV OF CAL SAN FRANCISCO	85,449	0	0	1,539	254	2,036	55	79,371	0	801	1,303	90
16	UNIV OF SOUTHERN CAL	79,617	80	2,044	28,252	0	1,158	347	37,427	159	878	9,272	0
17	UNIVERSITY OF MINNESOTA	72,494	6,399	33	2,767	816	4,305	1,098	53,035	237	1,853	1,951	0
18	UNIV OF ILL URBANA	68,911	5,694	0	9,905	1,824	6,852	1,619	12,966	0	1,798	24,411	3,842
19	UNIVERSITY OF CHICAGO	68,703	170	0	960	0	4,970	0	42,502	0	6,259	13,842	0
20	PENNSYLVANIA STATE UNIV	64,372	6,993	522	20,879	331	2,587	286	18,707	2,414	1,804	8,934	915
	<b>TOTAL 1ST 20 INSTITUTIONS</b>	<b>2,383,967</b>	<b>45,146</b>	<b>25,173</b>	<b>604,781</b>	<b>11,622</b>	<b>138,739</b>	<b>9,964</b>	<b>1,096,640</b>	<b>6,885</b>	<b>84,479</b>	<b>341,395</b>	<b>19,143</b>
21	UNIVERSITY OF COLORADO	62,708	110	4,164	3,692	0	4,307	560	35,052	295	4,219	10,257	52
22	UNIV OF TEXAS AT AUSTIN	62,316	150	0	30,554	1,477	7,759	315	8,682	333	3,185	9,858	3
23	DUKE UNIVERSITY	62,074	171	273	2,001	0	2,234	728	49,081	0	474	7,112	0
24	WASHINGTON UNIVERSITY	61,341	107	0	769	0	945	203	53,119	0	1,952	4,246	0
25	UNIVERSITY OF ROCHESTER	60,157	100	0	3,648	0	9,609	176	39,117	0	144	7,363	0
26	NEW YDRK UNIVERSITY	55,028	0	70	3,195	2	6,414	112	39,861	2	407	4,965	0
27	YESHIVA UNIVERSITY	53,077	0	0	87	409	100	0	51,748	0	0	733	0
28	UNIVERSITY OF PITTSBURGH	50,557	0	199	3,732	3,105	1,666	496	34,149	0	1,289	5,921	0
29	CALIFORNIA INST OF TECH	48,589	0	160	6,825	0	5,847	0	9,595	905	6,498	18,759	0
30	UNIV OF NC AT CHAPEL HILL	48,491	86	0	2,356	647	702	2,252	36,550	0	86	5,562	250
	<b>TOTAL 1ST 30 INSTITUTIONS</b>	<b>2,948,305</b>	<b>45,870</b>	<b>30,039</b>	<b>661,640</b>	<b>17,262</b>	<b>178,322</b>	<b>14,806</b>	<b>1,453,594</b>	<b>8,420</b>	<b>102,733</b>	<b>416,171</b>	<b>19,448</b>
31	UNIVERSITY OF IOWA	48,378	191	0	2,718	49	73	351	37,810	0	4,264	2,848	74
32	OHIO STATE UNIVERSITY	48,339	6,083	1,641	5,961	2,144	2,318	555	15,202	468	1,775	8,125	4,067
33	UNIVERSITY OF UTAH	45,427	52	0	4,087	91	3,758	406	28,102	1,425	522	6,984	0
34	CASE WESTERN RESERVE UNIV	43,931	0	0	4,232	86	335	0	30,656	144	2,829	5,649	0
35	UNIVERSITY OF ARIZONA	43,380	2,980	0	4,067	236	1,273	521	17,744	326	4,881	10,062	1,290
36	NORTHWESTERN UNIVERSITY	42,864	0	0	3,690	495	2,198	0	22,815	0	245	10,432	2,989
37	PURDUE UNIVERSITY	41,892	5,582	96	5,292	0	4,236	322	10,740	150	1,869	11,223	2,382
38	MICHIGAN STATE UNIVERSITY	41,205	6,551	99	1,908	1,629	2,605	152	11,711	0	595	14,980	975
39	UNIVERSITY OF FLORIDA	40,847	6,739	61	5,535	48	907	1,212	17,407	344	705	6,449	1,440
40	WOODS HOLE OCEANOGRAPHIC INST	39,705	0	3,120	17,003	0	254	0	0	0	956	18,342	0
	<b>TOTAL 1ST 40 INSTITUTIONS</b>	<b>3,384,273</b>	<b>74,048</b>	<b>35,056</b>	<b>716,133</b>	<b>22,040</b>	<b>196,279</b>	<b>18,325</b>	<b>1,645,781</b>	<b>11,277</b>	<b>121,374</b>	<b>511,295</b>	<b>32,665</b>
41	BAYLOR COL OF MEDICINE	39,340	3,867	0	321	392	0	262	33,613	0	510	375	0
42	BOSTON UNIVERSITY	39,306	0	0	4,206	292	200	0	31,493	13	395	2,707	0
43	GEORGIA INSTITUTE OF TECH	38,460	11	0	29,797	0	991	30	1,408	247	1,252	3,356	1,408
44	UNIV OF MD COLLEGE PARK	38,260	4,243	354	7,742	373	5,433	643	2,832	22	5,025	11,412	181
45	UNIV ALABAMA BIRMINGHAM	37,839	122	0	500	392	0	0	36,233	0	127	465	0
46	UNIV OF CAL DAVIS	37,586	2,788	0	949	284	3,755	126	18,493	183	297	6,066	4,645
47	OREGON STATE UNIVERSITY	37,499	7,046	5,059	6,338	0	280	921	4,991	800	412	10,482	1,170
48	VANDERBILT UNIVERSITY	35,338	0	0	923	603	390	53	30,382	39	209	2,209	30
49	INDIANA UNIVERSITY	35,123	110	77	836	0	2,048	193	19,984	0	280	11,484	111
50	UNIVERSITY OF NEW MEXICO	33,842	46	75	21,310	12	1,975	0	8,112	7	576	1,729	0
	<b>TOTAL 1ST 50 INSTITUTIONS</b>	<b>3,756,866</b>	<b>92,281</b>	<b>40,621</b>	<b>789,015</b>	<b>24,388</b>	<b>211,351</b>	<b>20,553</b>	<b>1,833,822</b>	<b>12,588</b>	<b>130,457</b>	<b>561,580</b>	<b>40,210</b>

SEE FOOTNOTES AT END OF TABLE.

TABLE 9. -- FEDERAL OBLIGATIONS FOR RESEARCH & DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY AGENCY: FY 1984 1/

- CONTINUED

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED)	TOTAL	USDA	CDM	DDO	ED	DOE	EPA	HHS	INT	NASA	NSF	OTHER 2/
51	U TEX HLTH SCI CTR DALLAS	32,949	0	0	0	0	0	0	31,507	0	987	455	0
52	TEXAS A & M UNIVERSITY	31,072	11,156	25	4,085	0	2,599	442	4,214	145	1,824	5,765	817
53	UNIVERSITY OF VIRGINIA	30,279	197	278	1,465	991	2,887	0	19,275	47	891	4,213	35
54	SUNY AT STONY BROOK	29,770	0	0	956	10	2,675	0	15,331	20	597	10,181	0
55	ROCKEFELLER UNIVERSITY	29,484	0	0	642	0	1,018	185	25,400	0	141	2,098	0
56	PRINCETON UNIVERSITY	28,783	0	689	4,034	0	3,349	0	6,136	0	1,920	12,470	185
57	UNIVERSITY OF CONNECTICUT	28,060	1,156	898	851	66	724	52	21,359	111	342	2,501	0
58	TUFTS UNIVERSITY	27,995	7,896	0	335	0	835	2,069	16,120	0	108	632	0
59	UNIVERSITY OF MIAMI	27,880	0	52	3,975	49	220	31	17,090	0	551	5,912	0
60	CARNEGIE-MELLON UNIV	27,650	0	140	11,483	58	3,411	0	3,960	504	656	7,338	100
TOTAL 1ST 60 INSTITUTIONS		4,050,788	112,686	42,703	816,841	25,562	229,069	23,332	1,994,214	13,415	138,474	613,145	41,347
61	UNIV OF CAL IRVINE	26,796	147	0	3,187	0	3,188	106	14,441	0	643	4,893	193
62	CUNY MT SINAI SCH OF MED	26,796	0	0	0	0	73	93	26,128	0	0	502	0
63	NEM MEXICO STATE UNIV	26,660	1,630	0	20,226	294	200	0	424	124	2,575	1,187	0
64	LOUISIANA STATE UNIV	25,944	3,716	50	2,031	0	1,220	1,010	14,472	846	164	2,435	0
65	COLORADO STATE UNIVERSITY	25,002	4,669	2,188	2,673	0	1,100	502	5,137	1,082	940	6,684	27
66	UNIV OF HAWAII-MANOA	23,925	2,431	1,374	2,336	0	1,449	350	5,354	0	3,932	4,649	2,050
67	UNIVERSITY OF CINCINNATI	23,860	0	0	1,680	0	273	745	18,392	0	675	2,095	0
68	RUTGERS THE ST UNIV OF NJ	23,827	2,816	169	5,510	0	319	0	7,708	627	120	6,558	0
69	EMORY UNIVERSITY	23,621	0	0	258	403	80	95	21,258	0	312	1,215	0
70	UNIVERSITY OF GEORGIA	23,165	5,464	2,193	900	10	5,361	257	3,986	81	54	4,843	16
TOTAL 1ST 70 INSTITUTIONS		4,300,386	133,559	48,677	855,642	26,269	242,332	26,490	2,111,514	16,175	147,889	648,206	43,633
71	BROWN UNIVERSITY	22,996	0	204	3,145	0	2,711	0	6,904	80	883	9,006	63
72	N C STATE UNIV AT RALEIGH	22,639	7,303	25	3,338	0	690	962	3,202	24	1,033	3,734	2,328
73	UNIV OF ILL CHICAGO	22,531	47	188	2,319	15	1,428	90	16,771	0	75	1,598	0
74	VIRGINIA COMMONWLTN UNIV	21,684	0	0	578	357	0	49	19,464	0	791	445	0
75	VA POLYTECH INST & ST U	21,214	4,743	0	4,156	4	2,516	165	1,753	1,174	2,221	4,034	448
76	UNIV OF MD BALT PROF SCH	19,943	62	0	1,879	0	298	256	16,596	0	12	840	0
77	UNIV OF MASS AT AMHERST	19,563	2,620	60	4,250	0	651	0	3,852	102	466	7,562	0
78	SUNY AT BUFFALO	19,270	0	0	964	0	145	0	14,428	0	521	3,212	0
79	UNIV OF CAL SANTA BARBARA	18,738	85	0	2,587	276	1,806	25	3,770	17	1,146	9,026	0
80	U TEX HLTH SCI CTR S ANTO	18,562	0	0	0	0	0	75	17,888	0	84	515	0
TOTAL 1ST 80 INSTITUTIONS		4,507,526	148,419	49,154	878,858	26,921	252,577	28,112	2,216,142	17,572	155,121	688,178	46,472
81	UNIV OF VT & ST AGRIC COL	18,249	1,654	0	319	603	0	0	14,837	0	146	690	0
82	UNIVERSITY OF DAYTON	17,938	0	45	17,070	0	0	359	0	0	378	76	0
83	UNIV OF MISSOURI COLUMBIA	17,810	6,183	0	1,019	23	409	223	8,284	366	224	1,079	0
84	U TEXAS SYSTEH CANCER CTR	17,708	0	0	0	0	0	0	17,708	0	0	0	0
85	UTAH STATE UNIVERSITY	17,416	2,276	0	9,694	706	70	525	262	300	2,019	1,564	0
86	TEMPLE UNIVERSITY	17,281	0	3	290	0	424	141	14,759	0	15	1,649	0
87	MASHINGTON STATE UNIV	16,772	6,400	276	1,584	0	558	75	3,750	75	22	3,147	885
88	UNIVERSITY OF KENTUCKY	16,268	5,532	50	712	0	788	472	6,183	733	12	1,754	31
89	U TEX HLTH SCI CTR HOUSTN	16,206	0	0	464	0	349	89	14,455	0	186	663	0
90	UNIVERSITY OF KANSAS	15,869	0	203	909	826	465	0	10,523	91	1,080	1,630	142
TOTAL 1ST 90 INSTITUTIONS		4,679,043	170,464	49,731	910,920	29,079	255,640	30,006	2,306,903	19,137	159,203	700,430	47,530
91	UNIVERSITY OF IDAHO	15,595	3,915	21	133	124	73	142	336	727	86	338	9,700
92	UNIVERSITY OF WYOMING	15,349	1,571	0	455	0	9,408	74	941	941	433	1,526	0
93	GEORGE WASHINGTON UNIV	15,122	295	141	2,703	734	316	0	7,828	19	1,876	1,150	60
94	U TENNESSEE KNOXVILLE	14,949	5,089	0	1,306	58	1,646	204	3,390	308	880	2,068	0
95	U MASS MED SCHL WORCESTER	14,767	0	0	395	0	104	0	13,755	0	0	513	0
96	MAKE FOREST UNIVERSITY	14,660	0	0	0	0	0	92	13,806	0	275	487	0
97	GEORGETOWN UNIVERSITY	14,463	837	54	2,231	0	0	18	10,397	0	0	903	23
98	UNIV OF MED & DENT OF N J	14,349	0	0	232	0	0	135	13,444	0	0	538	0
99	MAYNE STATE UNIVERSITY	14,282	0	0	835	0	233	0	10,747	0	33	2,161	273
100	IOWA ST U OF SCI & TECH	13,384	6,397	65	1,112	0	240	33	1,936	452	238	2,489	422
TOTAL 1ST 100 INSTITUTIONS		4,825,963	188,568	50,012	920,322	29,995	267,660	30,704	2,383,483	21,584	163,024	712,603	58,008

1/ DOES NOT INCLUDE R&D OBLIGATIONS TO UNIVERSITY-ASSOCIATED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S).

2/ INCLUDES DDT, AID, HUD, LABOR, AND NRC.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 10. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES FOR RESEARCH AND DEVELOPMENT  
BY GEOGRAPHIC DIVISION AND STATE: FY 1977-84

GEOGRAPHIC DIVISION AND STATE	(DOLLARS IN THOUSANDS)							
	1977	1978	1979	1980	1981	1982	1983	1984
UNITED STATES, TOTAL	2,803,017	3,385,770	3,873,514	4,159,857	4,410,199	4,553,755	5,023,677	5,622,768
NEW ENGLAND, TOTAL	326,518	390,340	420,133	486,294	514,219	546,699	614,331	666,700
CONNECTICUT	61,517	70,791	83,995	90,055	97,599	106,116	116,971	128,786
MAINE	4,342	3,809	3,837	4,749	5,316	5,409	6,476	7,999
MASSACHUSETTS	220,106	269,962	278,697	332,727	354,377	373,011	424,213	453,875
NEW HAMPSHIRE	11,384	13,254	14,917	17,780	17,283	16,958	19,436	22,409
RHODE ISLAND	19,482	20,377	25,746	28,742	27,351	32,156	33,879	39,219
VERMONT	9,687	12,147	11,941	12,221	12,093	13,049	13,356	18,412
MIDDLE ATLANTIC, TOTAL	484,946	568,481	638,048	702,123	715,602	758,311	863,889	941,678
NEW JERSEY	36,896	42,013	46,876	50,648	56,744	56,207	61,998	71,131
NEW YORK	310,355	350,086	395,221	437,185	435,024	469,860	527,872	581,251
PENNSYLVANIA	137,695	176,387	195,951	214,297	223,834	236,244	274,019	289,296
EAST NORTH CENTRAL, TOTAL	415,061	474,777	528,883	580,990	612,214	629,295	682,781	747,405
ILLINOIS	130,824	146,323	160,232	173,627	180,144	190,913	209,434	226,377
INDIANA	48,657	55,440	59,515	71,328	79,076	76,181	77,043	87,369
MICHIGAN	27,420	25,893	107,714	117,877	125,585	133,673	144,557	157,889
OHIO	75,101	94,920	107,377	117,652	124,217	129,207	138,882	148,999
MISCONSIN	73,059	82,202	94,045	100,506	103,192	99,321	112,855	126,771
WEST NORTH CENTRAL, TOTAL	179,784	204,373	247,065	260,979	256,643	261,280	267,621	297,622
IOWA	79,317	33,837	44,958	45,287	46,221	47,898	53,229	61,933
KANSAS	20,119	23,635	28,960	30,259	26,101	25,878	24,765	25,845
MINNESOTA	50,424	60,309	65,228	76,527	72,489	79,582	74,279	73,721
MISSOURI	59,655	66,014	76,908	80,172	80,979	80,978	86,389	94,072
NEBRASKA	12,274	12,423	19,909	14,863	15,871	15,372	14,714	23,854
NORTH DAKOTA	5,184	4,530	7,547	9,371	10,318	7,685	10,031	13,534
SOUTH DAKOTA	2,781	3,625	3,755	4,500	4,664	4,887	4,214	4,701
SOUTH ATLANTIC, TOTAL	365,991	556,726	687,809	684,057	833,984	816,790	884,122	1,053,157
DELAWARE	7,047	7,521	9,137	8,938	8,602	8,191	9,230	10,123
DISTRICT OF COLUMBIA	37,165	36,483	34,539	38,844	37,183	42,472	54,379	46,096
FLORIDA	57,642	65,639	67,213	69,501	78,868	84,924	90,328	91,555
GEORGIA	47,328	55,914	61,638	70,763	78,265	90,891	101,043	98,665
MARYLAND	87,044	236,258	317,361	286,887	414,547	366,789	377,480	532,841
NORTH CAROLINA	71,261	82,672	111,071	115,678	121,701	125,749	141,393	155,208
SOUTH CAROLINA	11,877	14,549	18,341	21,341	22,387	21,801	23,900	24,474
VIRGINIA	41,077	50,476	60,050	63,167	64,336	67,678	77,653	83,170
WEST VIRGINIA	5,550	7,214	8,459	8,938	8,095	8,295	8,716	11,075
EAST SOUTH CENTRAL, TOTAL	96,630	111,405	131,785	135,498	140,092	142,906	158,205	165,738
ALABAMA	30,601	34,695	41,257	44,264	46,269	45,746	53,565	60,489
KENTUCKY	14,389	16,518	18,755	19,409	18,679	20,526	19,211	21,281
MISSISSIPPI	10,700	11,633	19,056	14,570	15,842	18,207	18,659	18,103
TENNESSEE	40,940	48,559	52,717	57,255	59,302	58,427	66,770	65,865
WEST SOUTH CENTRAL, TOTAL	187,302	235,470	252,257	277,213	287,594	300,567	318,708	356,507
ARKANSAS	7,114	11,774	8,569	8,878	9,213	11,112	10,411	11,935
LOUISIANA	20,945	24,648	27,064	31,182	31,015	34,475	36,213	40,098
OKLAHOMA	14,830	16,933	16,155	21,902	18,606	22,795	21,429	24,010
TEXAS	144,413	182,115	200,469	215,251	228,760	232,185	250,655	280,464
MOUNTAIN, TOTAL	164,765	191,002	210,529	218,781	234,379	253,635	276,696	328,684
ARIZONA	28,641	30,832	35,947	41,648	42,873	43,431	49,004	54,295
COLORADO	55,678	63,233	67,030	77,876	76,974	77,139	83,570	97,761
IDAH0	3,165	4,119	4,178	4,725	5,746	4,834	5,211	15,765
MONTANA	5,731	6,280	6,595	6,609	5,947	7,445	6,823	7,014
NEVADA	3,061	3,660	4,852	4,880	6,643	7,644	7,875	7,299
NEW MEXICO	29,354	38,880	34,460	33,632	33,661	47,944	53,631	65,427
UTAH	33,636	39,063	49,250	43,788	54,993	58,129	59,164	65,774
WYOMING	5,499	4,935	8,217	5,623	7,542	7,069	11,418	15,349
PACIFIC, TOTAL	572,537	643,817	747,212	803,885	804,596	832,685	945,486	1,055,013
ALASKA	18,439	22,727	22,036	18,734	14,902	11,206	8,196	10,611
CALIFORNIA	416,613	471,492	553,577	588,448	602,891	627,600	723,896	792,770
HAWAII	19,442	25,037	28,070	29,990	24,048	24,493	25,860	24,691
OREGON	39,328	37,660	43,768	51,372	49,092	55,685	56,810	72,618
WASHINGTON	78,715	86,901	99,761	115,341	113,663	113,701	130,724	154,323
OUTLYING AREAS, TOTAL	9,483	9,378	9,793	10,037	10,876	11,587	11,838	10,264
GUAM	599	557	628	679	738	987	1,080	1,038
PUERTO RICO	8,250	8,118	8,377	8,708	9,260	8,576	8,496	8,337
AMERICAN SAMOA	55	0	0	0	0	555	584	200
VIRGIN ISLANDS	579	703	758	650	878	890	1,067	599
TRUST TERRITORY PAC ISL	0	0	30	0	0	579	611	90

NOTE: DATA FOR EACH YEAR REFLECT SUPPORT FROM THE AGENCIES INCLUDED IN THE SURVEY SYSTEM FOR THAT YEAR.

SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 11. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES FOR RESEARCH AND DEVELOPMENT  
BY DETAILED FIELD: FY 1977-84

(DOLLARS IN THOUSANDS)

FIELD OF SCIENCE/ENGINEERING	1977	1978	1979	1980	1981	1982	1983	1984
TOTAL, ALL FIELDS .....	2,803,017	3,385,770	3,873,514	4,159,857	4,410,199	4,553,755	5,023,677	5,622,768
ENGINEERING, TOTAL .....	265,840	503,686	574,747	612,456	792,223	804,054	913,604	1,032,698
AERONAUTICAL .....	13,053	20,840	24,883	28,044	31,056	35,530	39,765	40,678
ASTRONAUTICAL .....	1,674	849	3,720	4,634	4,875	8,569	16,373	12,405
CHEMICAL .....	31,065	41,624	20,866	22,210	27,667	30,274	37,685	50,177
CIVIL .....	25,018	37,227	37,521	48,130	58,300	38,745	52,231	55,820
ELECTRICAL .....	45,449	76,337	82,158	86,916	115,011	139,442	170,381	161,092
MECHANICAL .....	22,109	25,156	26,013	42,593	37,354	37,836	42,577	45,588
METALLURGY & MATERIALS .....	35,577	40,681	36,899	63,057	52,815	63,998	66,146	74,997
ENGINEERING, NEC .....	91,895	260,972	342,687	316,872	464,545	449,660	488,446	591,941
ALL SCIENCES, TOTAL .....	2,537,177	2,882,084	3,298,767	3,547,401	3,617,976	3,749,701	4,110,073	4,590,070
PHYSICAL SCIENCES, TOTAL .....	401,211	445,482	462,867	507,884	500,657	563,440	621,410	714,146
ASTRONOMY .....	32,427	37,864	45,036	52,735	54,835	54,001	62,278	77,965
CHEMISTRY .....	123,744	139,507	155,806	170,048	165,189	183,231	192,171	229,391
PHYSICS .....	198,591	231,405	224,197	249,661	250,342	284,711	325,998	359,412
PHYSICAL SCIENCES, NEC .....	46,449	36,706	37,828	35,439	30,291	41,497	40,963	47,378
MATHEMATICAL SCIENCES .....	48,872	42,781	42,518	55,432	56,300	57,687	64,813	74,489
COMPUTER SCIENCES .....	26,671	34,856	29,091	36,140	34,861	44,844	52,727	58,075
ENVIRONMENTAL SCIENCES, TOTAL .....	302,645	301,116	339,821	379,453	330,079	344,313	372,236	397,016
ATMOSPHERIC SCIENCES .....	88,304	85,496	91,222	86,486	95,112	94,463	103,851	113,976
GEOLOGICAL SCIENCES .....	107,031	116,077	118,176	103,523	101,207	101,005	101,570	100,387
OCEANOGRAPHY .....	55,908	57,279	74,789	92,079	91,863	102,340	120,448	135,662
ENVIRONMENTAL SCIENCES, NEC .....	51,402	45,264	55,634	91,365	41,897	46,505	46,367	46,991
LIFE SCIENCES, TOTAL .....	N/A	N/A	2,016,524	2,137,751	2,290,587	2,380,991	2,617,274	2,931,805
BIOLOGICAL (EXCL. ENV. BIO.) .....	N/A	N/A	1,054,787	1,085,602	1,192,756	1,201,934	1,339,982	1,578,345
ENVIRONMENTAL BIOLOGY .....	N/A	N/A	15,564	13,137	14,636	6,448	8,073	0,540
AGRICULTURAL .....	231,926	0	102,251	111,739	134,460	162,192	170,180	158,169
MEDICAL .....	779,667	711,002	801,172	885,898	904,463	969,253	1,050,458	1,120,032
LIFE SCIENCES, NEC .....	32,398	30,934	42,750	41,375	43,379	41,164	48,581	24,719
PSYCHOLOGY, TOTAL .....	57,235	71,891	91,357	86,459	87,734	84,406	73,849	109,582
BIOLOGICAL ASPECTS .....	19,715	22,816	25,164	28,269	26,273	24,735	24,760	33,538
SOCIAL ASPECTS .....	21,318	27,457	30,600	31,129	28,846	25,166	27,787	30,163
PSYCHOLOGY, NEC .....	16,202	21,618	35,593	27,061	32,615	34,505	41,302	45,876
SOCIAL SCIENCES, TOTAL .....	134,020	184,729	207,258	203,948	197,695	134,323	175,127	162,205
ANTHROPOLOGY .....	5,882	7,432	7,115	7,757	5,543	11,994	12,678	5,503
ECONOMICS .....	21,581	52,748	52,239	51,414	56,704	52,382	52,756	37,485
HISTORY .....	1,017	1,426	1,451	1,688	1,069	3,200	4,623	963
LINGUISTICS .....	2,300	2,261	2,462	2,997	2,745	3,629	3,419	2,967
POLITICAL SCIENCE .....	3,837	4,861	8,063	5,890	5,122	10,681	17,149	7,839
SOCIOLOGY .....	27,457	39,731	32,217	34,903	38,136	21,142	29,890	33,362
SOCIAL SCIENCES, NEC .....	71,946	76,050	103,711	99,299	88,376	31,295	54,612	74,086
OTHER SCIENCES, NEC .....	78,368	79,126	109,331	140,334	120,063	139,697	112,637	142,752

NOTE: DATA FOR EACH YEAR REFLECT SUPPORT FROM THE AGENCIES INCLUDED IN THE SURVEY SYSTEM FOR THAT YEAR.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 12. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES  
BY AGENCY AND TYPE OF ACTIVITY: FY 1984

(DOLLARS IN THOUSANDS)

AGENCY	TOTAL OBLIGATIONS	ACADEMIC SCIENCE/ENGINEERING						NON-SCIENCE/ENGINEERING ACTIVITIES	
		TOTAL ACADEMIC SCI/ENG	RESEARCH AND DEVELOPMENT	R&D PLANT	FACIL FOR INSTR IN SCI & ENG	FELLOW-SHIPS TRAINEE-SHIPS TRAINING GRANTS	GENERAL SUPPORT SCI/ENG		OTHER SCI/ENG ACTIVITIES
TOTAL .....	10,103,067	6,441,266	5,622,768	49,764	1,889	259,037	112,588	395,220	3,661,801
DEPARTMENT OF AGRICULTURE .....	611,624	607,432	272,977	9,599	0	158	0	324,698	4,192
DEPARTMENT OF COMMERCE .....	104,426	104,214	73,988	0	1,559	141	20,289	8,237	212
DEPARTMENT OF DEFENSE, TOTAL .....	1,047,376	1,036,245	1,014,312	0	330	0	3,685	18	11,131
ARMY .....	143,104	139,154	126,833	0	330	0	3,340	7,651	4,950
NAVY .....	649,665	645,177	640,958	0	0	0	236	3,983	4,488
AIR FORCE .....	204,998	203,714	198,012	0	0	0	108	5,593	1,284
OTHER DOD .....	49,609	49,200	48,509	0	0	0	0	691	409
DEPARTMENT OF EDUCATION .....	3,517,059	108,686	43,613	0	0	65,073	0	0	3,408,373
DEPARTMENT OF ENERGY .....	354,627	348,463	317,045	29,453	0	613	553	719	6,224
ENVIRONMENTAL PROTECTION AGENCY .....	52,397	51,897	47,329	66	0	1,834	2,658	10	1,000
DEPARTMENT OF HEALTH & HUMAN SERVICES ....	3,148,355	2,934,093	2,681,424	700	0	164,634	83,878	3,457	214,262
NATIONAL INSTITUTES OF HEALTH .....	2,716,008	2,716,008	2,479,368	700	0	148,605	83,878	3,457	0
HEALTH RESOURCES AND SERVICES ADMINISTRATION .....	193,033	10,443	10,443	0	0	0	0	0	182,590
ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION .....	186,360	170,922	155,305	0	0	15,617	0	0	15,438
CENTER FOR DISEASE CONTROL .....	20,117	7,534	7,534	0	0	0	0	0	12,583
FOOD AND DRUG ADMINISTRATION .....	5,465	5,465	5,465	0	0	0	0	0	0
OFFICE OF HUMAN DEVELOPMENT SERVICES ..	6,472	6,472	6,060	0	0	412	0	0	0
HEALTH CARE FINANCING ADMINISTRATION ..	7,803	7,803	7,803	0	0	0	0	0	0
SOCIAL SECURITY ADMINISTRATION .....	1,017	783	783	0	0	0	0	0	234
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH .....	11,036	7,619	7,619	0	0	0	0	0	3,417
OTHER DHHS .....	1,044	1,044	1,044	0	0	0	0	0	0
DEPARTMENT OF HOUSING AND URBAN DEV .....	429	209	209	0	0	0	0	0	220
DEPARTMENT OF THE INTERIOR .....	45,741	32,197	32,197	0	0	0	0	0	13,544
AGENCY FOR INTERNATIONAL DEVELOPMENT .....	56,113	56,113	56,113	0	0	0	0	0	0
DEPARTMENT OF LABOR .....	4,222	3,132	3,112	0	0	0	0	20	1,090
NATIONAL AERONAUTICS AND SPACE ADMIN .....	216,575	216,575	203,846	250	0	5,342	0	7,137	0
NATIONAL SCIENCE FOUNDATION .....	923,937	923,937	858,860	9,596	0	20,832	1,525	3,024	0
NUCLEAR REGULATORY COMMISSION .....	4,680	4,560	4,560	0	0	0	0	0	320
DEPARTMENT OF TRANSPORTATION .....	16,606	13,573	13,163	0	0	410	0	0	1,233

SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 13. -- FEDERAL OBLIGATIONS TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY TYPE OF ACTIVITY: FY 1984

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY TOTAL FEDERAL OBLIGATIONS)	TOTAL, ALL ACTIVITIES	TOTAL ACADEMIC SCI/ENG							NON-SCI/ENG
			TOTAL ACAD. SCI/ENG	RESEARCH AND DEVELOPMENT	ACADEMIC R&D PLANT	SCIENCE/ENGINEERING FACIL FOR INSTR IN S&E	FELLOWSHIPS TRNG GRANTS	GENERAL SUPPRT SCI/ENG	OTHER SCI/ENG	
	TOTAL, ALL INSTITUTIONS	10,103,067	6,441,266	5,622,768	49,764	1,889	259,037	112,588	395,220	3,661,801
1	JOHNS HOPKINS UNIVERSITY	483,149	475,978	467,050	68	0	7,563	1,174	123	7,171
2	MASS INST OF TECHNOLOGY	195,255	190,765	178,706	5,023	0	6,118	619	299	4,490
3	HOWARD UNIVERSITY	180,733	12,637	8,807	0	0	1,584	2,226	20	168,096
4	STANFORD UNIVERSITY	173,149	172,927	160,274	3,994	0	8,542	496	421	6,222
5	UNIVERSITY OF WASHINGTON	171,963	153,457	136,803	4,314	0	6,623	3,430	2,287	18,506
6	CORNELL UNIVERSITY	132,886	122,833	105,338	428	0	3,764	1,211	12,092	10,053
7	UNIV OF CAL LOS ANGELES	132,382	117,548	110,057	866	330	4,745	1,550	0	14,834
8	COLUMBIA UNIV MAIN DIV	129,054	117,325	110,089	796	0	4,997	1,071	377	11,729
9	UNIV OF WIS-MADISON	122,577	118,203	99,831	1,204	2	4,557	786	11,825	4,374
10	HARVARD UNIVERSITY	120,891	111,667	98,972	725	0	10,029	1,639	302	9,224
	TOTAL 1ST 10 INSTITUTIONS	1,848,039	1,593,340	1,475,927	15,618	330	58,522	14,202	27,741	254,699
11	YALE UNIVERSITY	118,641	111,830	97,905	4,380	0	7,851	1,161	533	6,811
12	UNIV OF CAL SAN DIEGO	116,587	110,887	104,083	324	0	4,452	1,567	461	5,700
13	UNIVERSITY OF MICHIGAN	116,566	102,247	95,327	605	0	4,704	975	656	14,319
14	UNIV OF PENNSYLVANIA	114,865	101,791	94,154	364	0	5,697	1,302	274	13,074
15	UNIVERSITY OF MINNESOTA	106,239	85,692	72,494	0	0	3,741	605	8,852	20,547
16	UNIV OF CAL BERKELEY	104,528	91,996	85,852	48	0	5,141	463	492	12,524
17	PENNSYLVANIA STATE UNIV	100,189	78,295	64,372	0	0	1,195	637	12,091	21,894
18	UNIV OF CAL SAN FRANCISCO	97,959	92,387	85,449	150	0	5,375	959	454	5,572
19	UNIV OF SOUTHERN CAL	97,476	85,601	79,617	104	0	1,125	419	4,336	11,875
20	UNIV OF ILL URBANA	84,873	84,347	68,911	426	0	1,636	1,069	12,305	526
	TOTAL 1ST 20 INSTITUTIONS	2,905,952	2,538,413	2,324,071	23,019	330	99,439	23,359	68,195	367,539
21	UNIVERSITY OF COLORADO	80,075	68,070	62,708	0	0	2,991	748	1,623	12,005
22	OHIO STATE UNIVERSITY	79,524	62,476	48,339	100	0	1,171	600	12,266	17,048
23	UNIVERSITY OF CHICAGO	79,112	75,204	68,703	0	0	5,504	501	496	3,908
24	DUKE UNIVERSITY	72,234	67,795	62,074	185	0	4,454	476	606	4,439
25	WASHINGTON UNIVERSITY	71,421	67,220	61,341	0	0	4,840	963	76	4,201
26	UNIVERSITY OF ROCHESTER	70,238	64,114	60,157	2,483	0	2,598	777	99	4,124
27	NEW YORK UNIVERSITY	69,904	59,071	55,028	300	0	2,961	472	310	10,833
28	UNIV OF TEXAS AT AUSTIN	69,028	65,071	62,316	509	0	1,135	478	633	3,957
29	MICHIGAN STATE UNIVERSITY	68,541	52,838	41,205	250	0	1,288	453	9,642	15,703
30	PURDUE UNIVERSITY	65,750	54,655	41,892	2,110	0	929	550	9,174	11,095
	TOTAL 1ST 30 INSTITUTIONS	3,631,779	3,176,927	2,887,834	28,956	330	127,310	29,377	103,120	454,852
31	UNIVERSITY OF PITTSBURGH	65,019	54,167	50,557	233	0	2,477	850	50	10,852
32	UNIVERSITY OF FLORIDA	64,490	50,122	40,847	0	0	1,490	362	7,423	14,368
33	UNIV OF NC AT CHAPEL HILL	64,344	55,248	48,491	66	0	5,074	1,582	35	9,096
34	UNIVERSITY OF IOWA	61,244	51,946	48,378	0	0	2,365	554	649	9,298
35	INDIANA UNIVERSITY	60,298	38,803	35,123	2,000	0	1,021	568	91	21,495
36	YESHIVA UNIVERSITY	60,096	56,889	53,077	0	0	3,427	385	0	3,207
37	UNIVERSITY OF ARIZONA	59,849	48,543	43,380	200	0	1,570	328	3,065	11,306
38	GALLAUDET COLLEGE	57,378	2,492	2,492	0	0	0	0	0	54,886
39	UNIVERSITY OF UTAH	56,451	47,300	45,427	0	0	1,344	437	92	9,151
40	NORTHWESTERN UNIVERSITY	54,960	45,551	42,864	0	0	2,083	604	0	9,409
	TOTAL 1ST 40 INSTITUTIONS	4,235,908	3,627,988	3,298,470	31,455	330	148,161	35,047	114,525	607,920
1	TEXAS A & M UNIVERSITY	54,488	50,126	31,072	56	0	202	1,878	16,318	4,362
42	BOSTON UNIVERSITY	53,038	41,779	39,306	0	0	1,681	529	263	11,259
43	CALIFORNIA INST OF TECH	51,893	51,893	48,589	266	0	2,080	227	731	0
44	UNIV OF MD COLLEGE PARK	51,517	45,075	38,260	812	0	1,032	61	4,910	6,442
45	CASE WESTERN RESERVE UNIV	51,442	47,243	43,931	75	0	2,542	616	79	4,199
46	INTER AM U PR-SAN GERMAN	51,348	99	0	0	0	99	0	0	51,249
47	UNIV ALABAMA BIRMINGHAM	50,131	40,416	37,839	0	0	1,853	724	0	9,715
48	OREGON STATE UNIVERSITY	49,249	42,484	37,499	302	0	352	220	4,111	6,765
49	UNIV OF CAL DAVIS	47,593	39,459	37,586	175	0	1,077	390	231	8,134
50	GEORGIA INSTITUTE OF TECH	47,356	43,142	38,460	0	0	182	155	4,345	4,214
	TOTAL 1ST 50 INSTITUTIONS	4,743,963	4,029,704	3,651,012	33,141	330	159,261	39,847	146,113	714,259

SEE FOOTNOTES AT END OF TABLE.

TABLE 13. -- FEDERAL OBLIGATIONS TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY TYPE OF ACTIVITY: FY 1984

- CONTINUED

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY TOTAL FEDERAL OBLIGATIONS)	TOTAL, ALL ACTIVITIES	ACADEMIC SCIENCE/ENGINEERING							NON-SCI/ENG
			TOTAL ACADEMIC SCI/ENG	RESEARCH AND DEVELOPMENT	ACADEMIC R&D PLANT	SCIENCE/ENGINEERING FACIL FOR INSTR IN S&E	FELLOWSHIPS TRNG	GENERAL SUPPORT SCI/ENG	OTHER SCI/ENG	
51	UNIVERSITY OF NEW MEXICO	45,055	36,566	33,842	0	0	899	1,189	636	8,449
52	BAYLOR COL OF MEDICINE	42,454	41,272	39,340	0	0	2,289	587	56	1,182
53	LOUISIANA STATE UNIV	42,092	34,418	25,944	0	0	626	430	7,418	1,674
54	RUTGERS THE ST UNIV OF NJ	42,092	28,285	23,827	0	0	349	408	3,701	13,807
55	VANDERBILT UNIVERSITY	41,307	39,150	35,338	0	0	3,366	418	28	2,157
56	WOODS HOLE OCEANOGRAPHIC INST	41,182	41,182	39,700	1,023	0	18	0	436	0
57	N C STATE UNIV AT RALEIGH	40,740	36,434	22,639	16	0	411	154	13,214	4,306
58	NEW MEXICO STATE UNIV	39,921	31,723	26,660	0	0	444	452	4,167	8,178
59	UNIVERSITY OF GEORGIA	39,723	34,626	23,165	350	0	567	206	10,338	5,097
60	UNIVERSITY OF KENTUCKY	39,429	26,624	16,268	0	0	362	175	9,819	12,805
TOTAL 1ST 60 INSTITUTIONS		5,157,938	4,379,984	3,937,740	34,530	330	167,592	43,866	195,926	777,954
61	UNIVERSITY OF MIAMI	39,423	30,440	27,880	594	0	1,217	407	349	8,983
62	UNIVERSITY OF VIRGINIA	39,256	33,437	30,279	63	0	2,413	682	0	5,819
63	U TEX HLTH SCI CTR DALLAS	38,425	35,294	32,949	0	0	1,537	537	271	3,131
64	UNIVERSITY OF CONNECTICUT	38,136	32,673	28,060	100	0	1,240	619	2,454	5,663
65	UNIVERSITY OF CINCINNATI	37,599	26,726	23,860	0	0	882	1,907	77	10,873
66	UNIV OF MISSOURI COLUMBIA	35,263	27,958	17,810	0	0	587	244	9,317	7,305
67	PRINCETON UNIVERSITY	34,503	31,195	28,783	283	0	1,933	136	60	3,308
68	COLORADO STATE UNIVERSITY	34,473	29,563	25,002	0	0	659	552	3,350	4,910
69	SUNY AT STONY BROOK	34,340	31,821	29,770	0	0	883	661	507	2,519
70	UNIV OF ILL. CHICAGO	34,275	23,893	22,531	0	0	1,021	341	0	10,382
TOTAL 1ST 70 INSTITUTIONS		5,523,631	4,682,784	4,204,664	35,570	330	179,964	49,945	212,311	840,847
71	VA POLYTECH INST & ST U	34,107	30,356	21,214	90	0	359	96	8,597	3,751
72	UNIV OF CAL IRVINE	34,000	29,636	26,798	310	0	1,240	741	547	4,364
73	CARNEGIE-MELLON UNIV	33,786	29,189	27,650	124	0	621	304	490	4,597
74	U TENNESSEE KNOXVILLE	33,193	25,790	14,949	123	0	810	113	9,795	7,403
75	ROCHESTER INST TECHNOLOGY	33,173	1,575	1,575	0	0	0	0	0	31,598
76	TUFTS UNIVERSITY	31,568	28,799	27,995	0	0	451	353	0	2,769
77	ROCKEFELLER UNIVERSITY	31,549	31,501	29,484	50	0	1,464	503	0	48
78	IOWA ST U OF SCI & TECH	31,030	22,744	13,384	60	0	287	97	8,916	8,286
79	UNIV OF HAWAII-MANOA	30,748	28,504	23,925	167	0	228	2,083	2,101	2,244
80	EMORY UNIVERSITY	29,951	24,479	23,621	0	0	493	341	24	5,472
TOTAL 1ST 80 INSTITUTIONS		5,846,736	4,935,357	4,415,259	36,494	330	185,917	54,576	242,781	911,379
81	VIRGINIA COMMONWLTM UNIV	29,798	23,663	21,624	0	0	1,489	490	0	6,135
82	SUNY MT SIMAI SCH OF MED	29,331	28,054	26,796	0	0	1,007	251	0	1,277
83	TEMPLE UNIVERSITY	29,296	18,659	17,281	0	0	1,094	250	34	10,637
84	BROWN UNIVERSITY	28,134	24,347	22,996	0	0	814	385	152	3,787
85	WASHINGTON STATE UNIV	27,364	21,790	16,772	0	0	282	112	4,534	5,664
86	UNIV OF VT & ST AGRIC COL	27,264	20,956	18,249	0	0	808	200	1,699	6,308
87	UTAH STATE UNIVERSITY	26,867	20,458	17,416	0	0	980	26	2,036	6,409
88	PUERTO RICD JR COL	26,728	173	0	0	0	173	0	0	26,555
89	UNIVERSITY OF OREGON MAIN	26,587	17,508	12,803	0	0	1,266	163	3,276	9,079
90	UNIVERSITY OF KANSAS	26,342	18,312	15,869	0	0	1,515	753	175	8,030
TOTAL 1ST 90 INSTITUTIONS		6,124,447	5,129,187	4,585,125	36,494	330	195,345	57,206	254,687	995,260
91	UNIV OF MASS AT AMHERST	25,880	25,528	19,563	1,914	0	498	96	3,457	352
92	MAYNE STATE UNIVERSITY	25,297	15,944	14,282	0	0	492	1,007	163	9,353
93	UNIV OF CAL SANTA BARBARA	24,874	19,842	18,738	28	0	671	351	54	5,032
94	KANS ST U - AG & APP SCI	24,248	17,913	8,895	0	0	132	60	8,826	6,335
95	UNIV OF MD BALT PROF SCH	23,861	21,216	19,943	0	0	386	421	466	2,645
96	TUSKEGEE INSTITUTE	23,242	6,650	3,021	1,400	0	406	862	961	16,592
97	UNIV OF NEBRASKA-LINCOLN	23,230	15,310	9,605	0	0	546	57	5,102	7,920
98	SUNY AT BUFFALO	23,069	20,585	19,270	0	0	587	728	0	2,484
99	WEST VIRGINIA UNIVERSITY	22,984	15,373	10,120	41	0	590	76	4,546	7,611
100	GEORGETOWN UNIVERSITY	22,859	15,386	14,463	0	0	686	164	73	7,473
TOTAL 1ST 100 INSTITUTIONS		6,363,991	5,302,934	4,723,025	39,877	330	200,339	61,028	278,335	1,061,057

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 14. -- SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES  
BY FIELD: JANUARY 1978 AND JANUARY 1980-85 1/

FIELD	1978	1980	1981	1982	1983	1984	1985
TOTAL .....	307,757	324,249	334,580	349,090	358,929	370,479	380,359
ENGINEERS, TOTAL .....	30,997	33,737	34,905	36,376	37,737	38,744	39,861
AERONAUTICAL AND ASTRONAUTICAL ENGINEERS .....	1,132	1,407	1,262	1,323	1,327	1,436	1,530
CHEMICAL ENGINEERS .....	1,999	2,352	2,283	2,269	2,410	2,476	2,628
CIVIL ENGINEERS .....	5,366	5,529	5,781	6,128	6,421	6,389	6,655
ELECTRICAL ENGINEERS .....	7,199	8,154	8,583	9,057	9,614	10,228	10,798
MECHANICAL ENGINEERS .....	5,651	6,074	6,323	6,626	6,728	7,090	7,221
OTHER ENGINEERS .....	9,650	10,221	10,673	10,973	11,237	11,125	11,030
ALL SCIENTISTS, TOTAL .....	276,760	290,512	299,675	312,714	321,192	331,735	340,498
PHYSICAL SCIENTISTS .....	32,839	33,554	34,069	34,500	34,778	35,868	36,504
ASTRONOMERS 2/.....	-	955	1,065	1,199	1,095	1,193	1,339
CHEMISTS .....	17,664	17,614	18,087	18,062	18,328	18,843	19,051
PHYSICISTS .....	12,778	13,007	12,914	13,274	13,588	13,939	14,141
OTHER PHYSICAL SCIENTISTS .....	2,397	1,978	2,003	1,965	1,769	1,893	1,972
ENVIRONMENTAL SCIENTISTS .....	9,618	9,960	10,183	10,200	10,153	10,603	10,696
ATMOSPHERIC SCIENTISTS .....	962	943	918	886	1,064	1,033	1,030
EARTH SCIENTISTS .....	6,987	6,569	6,634	6,677	6,532	6,699	6,675
OCEANOGRAPHERS .....	1,669	1,663	1,731	1,652	1,687	1,768	1,713
OTHER ENVIRONMENTAL SCIENTISTS 2/.....	-	785	900	985	870	1,103	1,278
MATHEMATICAL SCIENTISTS .....	25,993	27,079	28,578	29,882	31,320	32,608	33,069
COMPUTER SCIENTISTS .....	7,041	8,872	10,408	12,352	14,346	16,273	18,042
LIFE SCIENTISTS .....	122,956	133,702	137,773	146,264	151,440	156,351	161,730
AGRICULTURAL SCIENTISTS .....	15,022	15,899	16,128	16,413	16,732	17,095	17,528
BIOLOGICAL SCIENTISTS .....	43,597	44,803	46,351	46,784	48,084	49,326	50,546
MEDICAL SCIENTISTS .....	64,337	67,116	68,625	72,839	74,386	76,130	78,674
OTHER LIFE SCIENTISTS 2/.....	-	5,884	6,669	10,228	12,238	13,800	14,982
PSYCHOLOGISTS .....	23,752	23,257	23,386	23,711	23,772	23,829	23,784
SOCIAL SCIENTISTS .....	54,561	54,082	55,278	55,805	55,383	56,203	56,673
ECONOMISTS .....	14,087	14,672	15,077	15,459	15,571	15,663	15,790
POLITICAL SCIENTISTS .....	11,352	11,194	11,574	11,836	11,770	11,727	11,754
SOCIOLOGISTS .....	15,409	14,501	14,688	14,630	14,068	13,874	13,664
OTHER SOCIAL SCIENTISTS .....	13,713	13,715	13,939	13,880	13,974	14,940	15,465

1/ DATA HERE NOT COLLECTED IN 1979.  
2/ DATA NOT AVAILABLE PRIOR TO 1980.  
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 15. — SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES  
BY TYPE OF INSTITUTION AND STATUS: SELECTED YEARS

TYPE OF INSTITUTION AND STATUS	1967	1969	1971	1973	1975	1978	1980	1982	1983	1984	1985
ALL INSTITUTIONS .....	212,625	231,756	257,904	264,887	278,919	307,757	324,249	349,090	358,929	370,479	380,999
FULL TIME .....	170,357	187,082	209,416	216,324	223,235	242,170	254,990	268,550	274,092	280,647	287,595
PART TIME .....	42,298	44,674	48,488	48,463	55,683	65,587	69,259	80,540	84,837	89,833	92,764
INSTITUTIONS GRANTING:											
DOCTORATE IN S&E .....	142,676	154,426	171,238	174,474	180,330	200,266	218,021	231,711	236,545	243,314	252,237
FULL TIME .....	114,446	124,604	140,339	143,393	148,092	164,732	179,715	189,420	192,756	197,278	203,471
PART TIME .....	28,230	29,820	30,899	31,081	32,238	35,534	38,306	42,291	43,789	46,036	48,766
MASTER'S IN S&E .....	24,729	29,441	30,080	28,703	34,075	38,628	57,362	39,030	40,615	43,356	44,800
FULL TIME .....	20,748	25,212	25,597	24,851	27,911	29,395	27,915	28,721	29,730	31,885	32,898
PART TIME .....	3,981	4,229	4,483	3,852	6,164	9,233	9,447	10,309	10,935	11,480	11,902
BACHELOR'S IN S&E .....	23,025	21,690	23,198	28,363	27,113	26,222	26,830	28,815	29,469	30,604	29,790
FULL TIME .....	19,328	17,927	19,623	23,620	22,406	21,165	20,784	21,646	22,219	22,652	22,306
PART TIME .....	3,697	3,763	3,575	4,743	4,707	5,057	6,046	7,169	7,250	7,952	7,484
OTHER DEGREES 1/ .....	22,425	26,201	33,388	33,347	37,401	42,541	42,036	49,534	52,250	53,194	53,931
FULL TIME .....	16,055	19,339	23,857	24,560	25,323	26,878	26,916	28,763	29,387	29,831	29,920
PART TIME .....	6,390	6,862	9,531	8,787	12,078	15,663	15,120	20,771	22,863	24,364	24,612

1/ DATA INCLUDE 2-YEAR INSTITUTIONS AS WELL AS INSTITUTIONS AWARDING DEGREES IN NON-SCIENCE/ENGINEERING FIELDS.  
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 16. -- MALE SCIENTISTS AND ENGINEERS EMPLOYED AT DOCTORATE-GRANTING INSTITUTIONS  
BY STATUS: JANUARY 1980, 1984, AND 1985

FIELD	TOTAL			FULL TIME			PART TIME		
	1980	1984	1985	1980	1984	1985	1980	1984	1985
TOTAL .....	179,168	193,211	197,572	149,792	158,941	162,013	29,376	34,270	35,559
ENGINEERS, TOTAL .....	23,642	25,762	26,487	19,862	21,471	21,831	3,780	4,291	4,656
AERONAUTICAL AND ASTRONAUTICAL ENGINEERS .....	1,082	1,021	1,117	924	870	943	158	151	174
CHEMICAL ENGINEERS .....	1,992	2,098	2,214	1,633	1,776	1,848	359	322	366
CIVIL ENGINEERS .....	3,675	4,252	4,429	3,083	3,525	3,564	592	727	865
ELECTRICAL ENGINEERS .....	5,360	6,164	6,561	4,573	5,118	5,357	787	1,046	1,204
MECHANICAL ENGINEERS .....	3,902	4,337	4,456	3,332	3,639	3,772	570	698	684
OTHER ENGINEERS .....	7,631	7,890	7,710	6,317	6,543	6,347	1,314	1,347	1,363
ALL SCIENTISTS, TOTAL .....	155,526	167,449	171,085	129,930	137,470	140,182	25,596	29,979	30,903
PHYSICAL SCIENTISTS .....	17,407	17,994	18,542	15,490	15,997	16,193	1,917	1,997	2,349
ASTRONOMERS .....	663	825	918	629	723	796	39	92	122
CHEMISTS .....	7,984	8,304	8,472	6,958	7,301	7,309	1,026	1,003	1,163
PHYSICISTS .....	7,624	7,976	8,130	6,978	7,245	7,262	646	731	868
OTHER PHYSICAL SCIENTISTS .....	1,131	889	1,022	925	718	826	206	171	196
ENVIRONMENTAL SCIENTISTS .....	6,185	6,463	6,483	5,532	5,763	5,747	653	700	736
ATMOSPHERIC SCIENTISTS .....	750	817	799	661	706	708	89	111	91
EARTH SCIENTISTS .....	3,730	3,709	3,779	3,309	3,340	3,396	421	369	383
OCEANOGRAPHERS .....	1,301	1,303	1,270	1,221	1,208	1,175	80	95	95
OTHER ENVIRONMENTAL SCIENTISTS .....	404	634	635	341	509	468	63	125	167
MATHEMATICAL SCIENTISTS .....	9,383	10,258	10,347	8,072	8,452	8,428	1,311	1,806	1,919
COMPUTER SCIENTISTS .....	3,903	5,803	6,266	3,124	4,473	4,832	779	1,330	1,434
LIFE SCIENTISTS .....	89,251	97,038	98,930	73,086	77,765	79,851	16,165	19,273	19,079
AGRICULTURAL SCIENTISTS .....	12,121	12,800	12,931	11,358	12,054	12,067	763	746	864
BIOLOGICAL SCIENTISTS .....	24,259	25,817	26,396	22,221	23,570	23,925	2,038	2,247	2,471
MEDICAL SCIENTISTS .....	50,797	55,632	56,727	37,896	40,087	41,652	12,901	15,545	15,075
OTHER LIFE SCIENTISTS .....	2,074	2,789	2,876	1,611	2,054	2,207	463	735	669
PSYCHOLOGISTS .....	7,343	7,461	7,630	6,107	6,071	6,120	1,236	1,390	1,510
SOCIAL SCIENTISTS .....	22,054	22,432	22,887	18,519	18,949	19,011	3,535	3,483	3,876
ECONOMISTS .....	7,269	7,217	7,374	6,091	6,237	6,271	1,178	980	1,103
POLITICAL SCIENTISTS .....	4,628	4,685	4,722	3,810	3,912	3,918	818	773	804
SOCIOLOGISTS .....	4,459	4,080	4,173	3,839	3,538	3,561	620	542	612
OTHER SOCIAL SCIENTISTS .....	5,698	6,450	6,618	4,779	5,262	5,261	919	1,188	1,357

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 17. -- FEMALE SCIENTISTS AND ENGINEERS EMPLOYED AT DOCTORATE-GRANTING INSTITUTIONS  
BY STATUS: JANUARY 1980, 1984, AND 1985

FIELD	TOTAL			FULL TIME			PART TIME		
	1980	1984	1985	1980	1984	1985	1980	1984	1985
TOTAL .....	38,853	50,103	54,665	29,983	38,237	41,458	8,870	11,766	13,207
ENGINEERS, TOTAL .....	630	1,320	1,442	606	948	1,054	234	372	388
AERONAUTICAL AND ASTRONAUTICAL ENGINEERS .....	31	22	28	21	14	18	10	8	10
CHEMICAL ENGINEERS .....	78	128	146	57	98	115	21	20	31
CIVIL ENGINEERS .....	122	258	281	93	178	196	29	80	85
ELECTRICAL ENGINEERS .....	121	221	264	98	158	192	23	53	72
MECHANICAL ENGINEERS .....	99	104	124	77	68	84	22	36	40
OTHER ENGINEERS .....	389	587	559	260	432	449	129	155	150
ALL SCIENTISTS, TOTAL .....	38,019	48,783	53,223	29,377	37,389	40,404	8,636	11,394	12,819
PHYSICAL SCIENTISTS .....	1,832	1,945	2,157	1,283	1,438	1,569	549	507	588
ASTRONOMERS .....	68	73	85	56	56	62	12	17	23
CHEMISTS .....	1,248	1,313	1,432	821	949	1,027	427	364	405
PHYSICISTS .....	364	441	476	293	393	369	71	88	107
OTHER PHYSICAL SCIENTISTS .....	152	118	164	113	80	111	39	38	53
ENVIRONMENTAL SCIENTISTS .....	710	894	970	509	638	693	201	256	277
ATMOSPHERIC SCIENTISTS .....	54	85	87	40	55	58	14	30	29
EARTH SCIENTISTS .....	360	437	468	261	298	337	99	139	131
OCEANOGRAPHERS .....	186	269	269	139	226	225	47	43	44
OTHER ENVIRONMENTAL SCIENTISTS .....	110	103	146	69	59	73	41	44	73
MATHEMATICAL SCIENTISTS .....	1,700	2,000	2,118	1,084	1,235	1,337	616	765	781
COMPUTER SCIENTISTS .....	658	1,299	1,567	543	1,022	1,245	115	277	322
LIFE SCIENTISTS .....	24,337	33,537	36,472	19,634	26,420	28,438	4,703	7,117	8,034
AGRICULTURAL SCIENTISTS .....	1,377	1,962	2,266	1,191	1,458	1,902	186	304	364
BIOLOGICAL SCIENTISTS .....	7,126	9,136	9,741	5,937	7,588	7,973	1,189	1,548	1,768
MEDICAL SCIENTISTS .....	13,390	17,173	18,694	10,517	12,938	14,006	2,873	4,235	4,688
OTHER LIFE SCIENTISTS .....	2,444	5,266	5,771	1,989	4,236	4,557	455	1,030	1,214
PSYCHOLOGISTS .....	2,886	3,018	3,383	1,942	2,099	2,292	944	919	1,091
SOCIAL SCIENTISTS .....	5,890	6,090	6,556	4,382	4,537	4,830	1,508	1,553	1,726
ECONOMISTS .....	342	900	941	614	707	714	226	193	227
POLITICAL SCIENTISTS .....	732	866	978	566	647	726	216	210	249
SOCIOLOGISTS .....	1,904	1,692	1,711	1,381	1,212	1,233	523	480	478
OTHER SOCIAL SCIENTISTS .....	2,362	2,632	2,929	1,819	1,971	2,157	543	661	772

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 18. -- SCIENTISTS AND ENGINEERS EMPLOYED AT DOCTORATE-GRANTING INSTITUTIONS  
BY GEOGRAPHIC DIVISION AND FIELD: JANUARY 1985

DIVISION AND STATE	TOTAL	ENGINEERS	PHYSICAL SCIENTISTS	ENVIRONMENTAL SCIENTISTS	MATH. & COMPUTER SCIENTISTS	LIFE SCIENTISTS	PSYCHOLOGISTS	SOCIAL SCIENTISTS
TOTAL .....	252,237	27,929	20,699	7,453	20,298	135,402	11,013	29,443
NEM ENGLAND .....	23,646	2,158	2,055	657	1,636	13,745	863	2,532
CONNECTICUT .....	3,671	195	235	81	196	2,313	200	451
MAINE .....	476	93	43	49	40	166	24	61
MASSACHUSETTS .....	16,830	1,617	1,542	378	1,152	9,970	498	1,673
NEW HAMPSHIRE .....	1,125	97	80	73	90	623	55	107
RHODE ISLAND .....	924	127	124	69	115	248	54	187
VERMONT .....	620	29	31	7	43	425	32	53
MIDDLE ATLANTIC .....	41,477	4,441	3,588	843	3,896	21,263	2,330	5,116
NEW JERSEY .....	4,660	629	511	128	533	1,789	316	754
NEW YORK .....	24,787	2,290	2,191	556	2,201	12,975	1,517	3,057
PENNSYLVANIA .....	12,030	1,522	886	159	1,162	6,499	497	1,305
EAST NORTH CENTRAL .....	42,263	4,911	3,737	1,196	3,851	21,074	2,218	5,276
ILLINOIS .....	10,911	1,081	940	303	999	5,492	669	1,427
INDIANA .....	5,783	797	677	208	673	2,324	374	730
MICHIGAN .....	8,335	954	771	178	617	4,077	488	1,250
OHIO .....	11,418	1,485	921	212	1,228	5,816	442	1,314
WISCONSIN .....	5,816	594	428	295	334	3,365	245	555
WEST NORTH CENTRAL .....	20,571	2,074	1,122	401	1,334	12,617	810	2,213
IOWA .....	3,933	484	244	50	312	2,284	112	447
KANSAS .....	3,241	382	147	86	209	1,770	258	385
MINNESOTA .....	4,256	307	158	42	177	2,873	124	575
MISSOURI .....	5,436	463	332	81	347	3,610	158	445
NEBRASKA .....	1,949	146	113	52	128	1,266	90	154
NORTH DAKOTA .....	986	163	65	67	103	430	39	119
SOUTH DAKOTA .....	770	129	63	23	58	384	29	84
SOUTH ATLANTIC .....	40,145	4,819	3,024	1,059	3,365	21,561	1,322	4,995
DELAWARE .....	573	100	95	73	64	109	24	108
DISTRICT OF COLUMBIA .....	4,924	323	247	21	372	3,115	153	693
FLORIDA .....	6,942	734	359	261	627	3,794	255	912
GEORGIA .....	4,927	890	414	118	488	2,301	182	534
MARYLAND .....	7,614	1,385	896	194	553	3,780	152	654
NORTH CAROLINA .....	6,151	472	369	118	407	3,893	199	693
SOUTH CAROLINA .....	3,109	259	219	65	343	1,791	110	322
VIRGINIA .....	4,467	532	367	190	411	2,216	206	545
WEST VIRGINIA .....	1,438	124	58	19	100	562	41	534
EAST SOUTH CENTRAL .....	12,797	1,395	794	218	1,119	7,306	543	1,422
ALABAMA .....	3,650	472	208	46	338	2,042	146	398
KENTUCKY .....	2,945	275	184	67	269	1,626	148	376
MISSISSIPPI .....	1,823	179	107	30	153	1,052	64	238
TENNESSEE .....	4,379	469	295	75	359	2,586	185	410
WEST SOUTH CENTRAL .....	24,968	2,464	1,690	758	2,056	14,553	815	2,632
ARKANSAS .....	1,587	98	55	13	63	1,242	19	97
LOUISIANA .....	5,264	414	261	185	498	3,324	143	439
OKLAHOMA .....	2,688	437	226	81	227	1,255	62	394
TEXAS .....	15,429	1,515	1,148	479	1,268	8,732	585	1,702
MOUNTAIN .....	14,459	2,369	1,701	816	1,473	5,326	804	1,970
ARIZONA .....	3,312	577	391	184	279	1,071	238	572
COLORADO .....	2,722	470	514	274	269	782	198	415
IDAHO .....	774	94	48	32	75	426	30	69
MONTANA .....	911	106	109	39	95	394	28	140
NEVADA .....	417	30	38	50	24	212	23	40
NEW MEXICO .....	2,727	569	221	109	355	981	140	352
UTAH .....	2,857	450	336	90	303	1,234	124	320
WYOMING .....	539	73	44	38	73	226	23	62
PACIFIC .....	29,760	3,133	2,779	1,471	1,411	16,931	1,192	2,843
ALASKA .....	279	45	10	64	20	86	3	51
CALIFORNIA .....	21,951	2,374	2,141	905	962	12,735	940	1,894
HAWAII .....	1,384	66	114	114	66	755	42	227
OREGON .....	2,781	184	302	195	207	1,464	105	324
WASHINGTON .....	3,365	464	212	193	156	1,891	102	347
OUTLYING AREAS .....	2,151	165	209	34	157	1,026	116	444

SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 19. -- SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES: JANUARY 1984 AND 1985

INSTITUTIONAL RANKING	-----TOTAL-----		---FULL TIME---		---PART TIME---		---TOTAL FTE---	
	1985	1984	1985	1984	1985	1984	1985	1984
TOTAL, ALL INSTITUTIONS	380,359	370,479	287,595	280,647	92,764	89,833	322,879	316,846
1 HARVARD UNIVERSITY	7,485	7,085	4,989	4,716	2,496	2,369	6,467	6,193
2 UNIV OF WIS-MADISON	3,936	3,830	3,247	3,121	689	709	3,532	3,524
3 JOHNS HOPKINS UNIVERSITY	3,860	3,533	3,405	3,405	231	228	3,791	3,499
4 OHIO STATE UNIVERSITY	3,749	3,586	2,872	2,757	873	829	3,410	3,276
5 LOUISIANA STATE UNIV	3,576	3,282	2,026	2,749	550	523	3,103	2,865
6 UNIVERSITY OF MINNESOTA	3,431	3,440	2,919	2,965	512	475	2,887	2,900
7 UNIVERSITY OF MICHIGAN	3,337	3,287	2,624	2,414	703	643	2,821	2,690
8 UNIV OF CAL LOS ANGELES	2,978	2,972	2,115	2,133	863	839	2,538	2,524
9 UNIVERSITY OF FLORIDA	2,691	2,562	2,496	2,385	195	177	2,572E	2,455
10 CORNELL UNIVERSITY	2,615	2,617	2,440	2,442	175	175	2,537I	2,540
TOTAL, 1ST 10 INSTS.	37,654	36,064	30,367	29,087	7,287	6,977	33,716	32,468
11 UNIVERSITY OF WASHINGTON	2,584	2,411	1,928	1,854	656	557	2,254	2,136
12 SUNY AT BUFFALO	2,518	2,290E	1,437	1,300E	1,081	950E	1,743	1,795I
13 COLUMBIA UNIV MAIN DIV	2,504	2,385	2,048	1,955	456	430	2,199	2,098
14 UNIVERSITY OF PITTSBURGH	2,497	2,346	2,104	1,968	393	378	2,239	2,110
15 PENNSYLVANIA STATE UNIV	2,497	2,427	2,157	2,125	340	302	2,284	2,235
16 UNIV OF ILL URBANA	2,483	2,447	2,173	2,175	310	272	2,075	2,323
17 INDIANA UNIVERSITY	2,454	2,483	1,661	1,703	793	780	1,822	1,877
18 PURDUE UNIVERSITY	2,443	2,416	2,083	2,027	360	389	2,219E	2,182
19 MASS INST OF TECHNOLOGY	2,436	2,456E	2,195	2,200E	241	256E	2,315	2,330E
20 TEXAS A & M UNIVERSITY	2,430	2,418	2,430	2,418	0	0	2,430	2,418
TOTAL, 1ST 20 INSTS.	62,500	60,103	50,583	48,812	11,917	11,291	55,298	53,977
21 UNIV OF CAL BERKELEY	2,386	2,352	1,548	1,552	838	800	1,912	1,914
22 UNIV OF CAL SAN FRANCISCO	2,369	2,276	1,485	1,450	884	826	1,935	1,863
23 UNIV OF CAL DAVIS	2,316	2,197	1,702	1,674	614	523	2,002	1,937
24 UNIVERSITY OF KENTUCKY	2,286E	2,286	1,920E	1,920	366E	366	2,030E	2,030
25 NEW YORK UNIVERSITY	2,110I	2,047	1,433I	1,391	677I	656	1,641I	1,534
26 UNIVERSITY OF IOWA	2,091	2,060	1,754	1,730	337	330	1,882	1,858
27 MICHIGAN STATE UNIVERSITY	2,048	1,844I	1,904	1,738I	144	106I	1,936	1,782
28 UNIV OF SOUTHERN CAL	2,038	1,617	1,493	1,332	545	485	1,643	1,510
29 UNIV OF TEXAS AT AUSTIN	2,002	1,906	1,684	1,667	318	239	1,833	1,788
30 YALE UNIVERSITY	1,978	1,963	1,821	1,785	157	178	1,918	1,881
TOTAL, 1ST 30 INSTS.	84,124	80,851	67,327	65,051	16,797	15,800	74,033	72,076
31 HOWARD UNIVERSITY	1,951	2,093	1,073	1,154	878	939	1,254	1,378
32 N C STATE UNIV AT RALEIGH	1,890	1,869	1,760	1,739	130	130	1,808	1,787
33 UNIV OF PENNSYLVANIA	1,883	1,892	1,543	1,551	340	341	1,692	1,687
34 WASHINGTON UNIVERSITY	1,871	1,767	1,641	1,609	230	158	1,567	1,634
35 UNIVERSITY OF UTAH	1,721	1,724	1,223	1,230	498	494	1,437	1,436
36 UNIV OF MD COLLEGE PARK	1,716	1,611	1,426	1,352	290	259	1,556	1,498
37 UNIVERSITY OF ARIZONA	1,704	1,708	1,479	1,493	225	215	1,573E	1,578
38 UNIVERSITY OF KANSAS	1,700	1,639	1,420	1,452	280	187	1,596I	1,533
39 UNIV OF ILL CHICAGO	1,668	1,493	1,263	1,163	405	330	1,433	1,299
40 UNIV OF CAL SAN DIEGO	1,650	1,698	1,239	1,301	411	397	1,419	1,491
TOTAL, 1ST 40 INSTS.	101,878	98,345	81,394	79,095	20,484	19,250	89,370	87,400
41 UNIVERSITY OF CINCINNATI	1,649	1,538	1,378	1,317	271	221	1,428	1,385
42 IOWA ST U OF SCI & TECH	1,590	1,530	1,464	1,392	126	138	1,544	1,475
43 DUKE UNIVERSITY	1,590	1,608	1,464	1,503	126	105	1,402	1,555
44 RUTGERS THE ST UNIV OF NJ	1,568	1,350	1,510	1,507	58	43	1,528	1,520
45 UNIVERSITY OF CONNECTICUT	1,565	1,561	1,251	1,271	314	290	1,385	1,369
46 CASE WESTERN RESERVE UNIV	1,525	1,516	1,355	1,326	170	190	1,390	1,371
47 UNIVERSITY OF OKLAHOMA	1,508	1,213	1,282	1,082	226	131	1,381	1,152
48 UNIV OF NC AT CHAPEL HILL	1,478	1,516	1,348	1,358	130	158	1,413	1,437
49 UNIVERSITY OF MIAMI	1,472	1,387E	1,344	1,287E	128	100I	1,388	1,319I
50 NORTHWESTERN UNIVERSITY	1,470	1,460	1,246	1,220	224	210	1,247	1,304
TOTAL, 1ST 50 INSTS.	117,293	113,224	95,036	92,388	22,257	20,836	103,478	101,291

SEE FOOTNOTES AT END OF TABLE.

TABLE 19. -- SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES: JANUARY 1984 AND 1985

- CONTINUED INSTITUTIONAL RANKING	---TOTAL---		---FULL TIME---		---PART TIME---		---TOTAL FTE---	
	1985	1984	1985	1984	1985	1984	1985	1984
51 CMTY COL ALLEGHENY COUNTY	1,459I	1,410I	108I	104I	1,351I	1,306I	1,108I	1,070
52 BOSTON UNIVERSITY	1,451	1,379	897	869	554	510	1,075	1,032
53 U TEX HLTH SCI CTR DALLAS	1,430	1,358	991	979	439	379	1,164	1,128
54 NEW MEXICO STATE UNIV	1,425	1,362	1,259	1,214	166	148	1,318	1,271
55 ARIZONA STATE UNIVERSITY	1,405	1,208	1,039	967	366	241	1,198	1,070
56 UNIV OF HAWAII-MANOA	1,384	1,355	1,041	1,045	343	310	1,183	1,169
57 WAYNE STATE UNIVERSITY	1,373E	1,373E	1,050E	1,050E	323E	323E	1,164E	1,164E
58 NORTHEASTERN UNIVERSITY	1,373	1,432	672	689E	701	743E	1,030I	1,018I
59 UNIV ALABAMA BIRMINGHAM	1,365	1,302	1,197	1,133	168	169	1,246	1,185
60 UNIV OF MISSOURI COLUMBIA	1,359	1,243	1,200	1,131	159	112	1,257	1,193
TOTAL, 1ST 60 INSTS.	131,317	126,646	104,490	101,569	26,827	25,077	115,225	112,593
61 TEMPLE UNIVERSITY	1,355	1,347	1,068	1,051	287	296	1,199	1,157
62 UNIV OF MD BALT PROF SCH	1,348	1,389	972	884	376	505	1,133E	1,054
63 UNIVERSITY OF CHICAGO	1,336	1,336	1,258	1,258	78	78	1,269	1,269
64 STANFORD UNIVERSITY	1,329	1,337	1,074	1,056	255	281	1,066	1,018
65 SUNY AT STONY BROOK	1,318	1,314	1,188	1,164	130	150	1,230	1,221
66 GEORGE WASHINGTON UNIV	1,281	1,238	652	658	629	580	894	880
67 CUNY MT SINAI SCH OF MED	1,267I	1,230	992I	963	275I	267	1,088I	1,056
68 OREGON STATE UNIVERSITY	1,243	1,193	1,088	1,049	155	144	1,162	1,109
69 YESHIVA UNIVERSITY	1,218	1,198	867	860	351	338	912	949
70 UNIVERSITY OF GEORGIA	1,213	1,197	1,149	1,139	64	58	1,179E	1,168
TOTAL, 1ST 70 INSTS.	144,225	139,425	114,798	111,651	29,427	27,774	126,361	123,477
71 U TEX HLTH SCI CTR S ANTO	1,209	1,185	996	967	213	218	1,078	1,053
72 GEORGIA INSTITUTE OF TECH	1,205	1,209	1,119	1,130	86	79	1,156	1,164
73 AUBURN UNIVERSITY	1,196	1,140	1,091	1,035	105	105	1,130	1,072
74 UNIVERSITY OF COLORADO	1,195	1,062	502	607	693	455	952	852
75 UNIVERSITY OF ROCHESTER	1,181E	1,181	1,132E	1,132	49E	49	1,148E	1,148
76 WEST VIRGINIA UNIVERSITY	1,179	1,163	1,070	1,050	109	113	1,109	1,092
77 UNIVERSITY OF NEW MEXICO	1,177E	1,177	884E	884	293E	293	1,017E	1,017
78 UNIV OF SOUTH CAROLINA	1,159	1,131	1,017	979	142	152	1,035	1,014
79 KANS ST U - AG & APP SCI	1,146	1,183	1,021	1,074	125	109	1,075	1,120
80 UNIVERSITY OF VIRGINIA	1,141	1,135	1,056	1,067	85	68	1,054I	1,067
TOTAL, 1ST 80 INSTS.	156,013	150,991	124,686	121,576	31,327	29,415	137,119	134,081
81 COLORADO STATE UNIVERSITY	1,094	1,062	1,040	1,007	54	55	1,015	1,000
82 VANDERBILT UNIVERSITY	1,081	1,039	903	877	178	162	940	829
83 VA POLYTECH INST & ST U	1,071	1,086	1,045	1,062	26	24	1,061	1,076
84 UNIV OF MASS AT AMHERST	1,068	1,013	976	949	92	64	1,020	975
85 UNIV OF CAL IRVINE	1,021	973	780	772	241	201	900	871
86 U TEX HLTH SCI CTR HOUSTN	1,014I	988E	1,002I	976E	12I	12E	1,002I	976I
87 BAYLOR COL OF MEDICINE	1,000	990	866	860	134	130	838	816
88 GEORGETOWN UNIVERSITY	966	939	899	885	67	54	934	914
89 SOUTHERN ILL U-CARBONDALE	957	915	809	780	148	135	869	830
90 U TENNESSEE KNOXVILLE	954	965	851	850	103	115	888	889
TOTAL, 1ST 90 INSTS.	166,239	160,961	133,857	130,594	32,382	30,367	146,588	143,260
91 MED UNIV OF SO CAROLINA	936I	912I	819I	798I	117I	114I	825I	803I
92 VIRGINIA COMMONLTH UNIV	936	943	872	864	64	79	899	895
93 UNIV OF SOUTH FLORIDA	932	878	690	653	242	225	835	786
94 U TEXAS SYSTEM CANCER CTR	916	855	866	804	50	51	881	827
95 UNIV OF P R-MED SCI CMPUS	876	629I	572	536I	304	93I	572	537I
96 U OF ARKANSAS MED SCI CAM	865	833	782	765	83	68	819	786
97 TUFTS UNIVERSITY	855	822I	567	357I	288	465I	697	510I
98 MAYO GRAD SCHOOL OF MED	825E	-	825E	-	0	-	825I	-
99 TEXAS TECH UNIVERSITY	802I	781	692I	674	110I	107	736I	716
100 UNIVERSITY OF MISSISSIPPI	796	786	640	630	156	156	693I	673I
TOTAL, 1ST 100 INSTS.	174,978	168,400	141,182	136,675	33,796	31,725	154,373	149,797
TOTAL, ALL OTHER INSTS.	205,381	202,079	146,413	143,972	58,968	58,108	169,506	167,049

NOTE: NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED; NUMBERS FOLLOWED BY "I" ARE IMPUTED.  
DASHES INDICATE THAT DATA ARE NOT AVAILABLE; DASHES FOLLOWED BY "C" INDICATE CONFIDENTIAL DATA.  
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 20. -- FULL-TIME-EQUIVALENT SCIENTISTS AND ENGINEERS EMPLOYED IN RESEARCH AND DEVELOPMENT AT UNIVERSITIES AND COLLEGES: JANUARY 1978 AND 1983-85

INSTITUTIONAL RANKING	R&D FTE				TOTAL FTE			
	1985	1984	1983	1978	1985	1984	1983	1978
TOTAL, ALL INSTITUTIONS	65,764	62,514	60,593	55,961	323,879	316,846	306,441	271,656
1 JOHNS HOPKINS UNIVERSITY	2,801E	2,643	2,542	693I	3,751	3,499	3,395	2,086
2 UNIV OF MICH-MADISON	1,981	1,912	1,906	1,724	3,632	3,524	3,506	3,334
3 YALE UNIVERSITY	1,496	1,472	1,102	1,029	1,918	1,881	1,832	1,755I
4 UNIV OF CAL SAN FRANCISCO	1,270	1,176	1,122	315I	1,935	1,863	1,799	1,146I
5 UNIV OF CAL DAVIS	1,134	1,065	974	401I	2,002	1,937	1,799	1,356I
6 CORNELL UNIVERSITY	1,098I	1,086I	1,094I	1,236	2,537I	2,540	2,544I	2,643
7 TEXAS A & M UNIVERSITY	1,041	1,045	987	596I	2,430	2,418	2,300	2,072
8 LOUISIANA STATE UNIV	1,001	996	954	436	3,103	2,865	2,729	2,102
9 UNIV OF CAL LOS ANGELES	955	1,001	936	593I	2,538	2,524	2,578	2,182I
10 WASHINGTON UNIVERSITY	942	915	920	446	1,567	1,634	1,625	1,232
TOTAL, 1ST 10 INSTS.	13,720	13,313	12,537	7,474	25,414	24,687	24,107	19,908
11 UNIV OF CAL BERKELEY	916	919	845	493I	1,912	1,914	1,814	1,701
12 HARVARD UNIVERSITY	912	804	671	818	6,467	6,193	5,890	4,451
13 UNIV OF CAL SAN DIEGO	903	951	949	302I	1,419	1,491	1,491	1,993I
14 UNIVERSITY OF MICHIGAN	866	788	748	885	2,821	2,690	2,342	3,009
15 UNIVERSITY OF ARIZONA	864	853	823	459I	1,573E	1,578	1,544	1,569
16 UNIVERSITY OF WASHINGTON	852	778	721	786	2,254	2,136	2,115I	2,333
17 MASS INST OF TECHNOLOGY	833I	845E	845I	880I	2,315	2,330E	2,330	2,237
18 UNIV OF ILL URBANA	779	771	640	819	2,075	2,323	2,242	2,163
19 COLUMBIA UNIV MAIN DIV	769	748	763	575I	2,199	2,098	2,121	1,721
20 MICHIGAN STATE UNIVERSITY	731	518I	512	355	1,936	1,782	1,734	1,674
TOTAL, 1ST 20 INSTS.	22,147	21,290	20,057	13,820	50,388	49,224	47,733	41,638
21 UNIV OF TEXAS AT AUSTIN	720	679	668	570	1,833	1,788	1,737	1,774
22 PENNSYLVANIA STATE UNIV	714	685	651	416	2,284	2,235	2,201	1,985
23 U TEXAS SYSTEM CANCER CTR	708	635	633	624	881	827	834	801
24 SUNY AT BUFFALO	697	400I	0	285I	1,743	1,795I	1,009	1,093I
25 GEORGIA INSTITUTE OF TECH	660	635	579	567	1,156	1,164	1,125	1,024
26 DUKE UNIVERSITY	650	476	701	807	1,402	1,555	1,555	1,442
27 U TEX HLTH SCI CTR S ANTO	596	579	589	406	1,078	1,053	1,036	730
28 UNIVERSITY OF CHICAGO	594	594	604	665	1,269	1,269	1,229	1,329
29 UNIV OF PENNSYLVANIA	580	516	541	972I	1,692	1,687	1,751	2,967I
30 NEW MEXICO STATE UNIV	560	507	442	119	1,318	1,271	1,150	467
TOTAL, 1ST 30 INSTS.	28,629	27,000	25,467	19,254	65,046	63,870	61,361	55,250
31 NEW YORK UNIVERSITY	552I	521	802	732	1,641I	1,534	1,597	1,511
32 UNIVERSITY OF GEORGIA	533	555	552	519	1,179E	1,168	1,168	1,166
33 OREGON STATE UNIVERSITY	522	496	545	598	1,162	1,109	1,104	1,113
34 STANFORD UNIVERSITY	514	509	525	1,045	1,066	1,018	1,050I	1,723
35 ROCKEFELLER UNIVERSITY	504	432	401	347	533	478	443	384
36 UNIV OF MD COLLEGE PARK	498	487	383	149	1,550	1,498	1,355	1,322
37 UNIVERSITY OF MINNESOTA	496	449	524	613	2,883	2,900	2,791	3,146
38 KANS ST U - AG & APP SCI	494	450	501	217	1,075	1,120	1,153	862
39 CASE WESTERN RESERVE UNIV	486	457	465	489	1,390	1,371	1,459	1,318
40 OHIO STATE UNIVERSITY	480	440	201	544	3,410	3,276	2,801	2,984
TOTAL, 1ST 40 INSTS.	33,712	31,799	30,369	24,511	80,944	79,345	76,284	70,779
41 UNIV OF CAL RIVERSIDE	474	458	457	125I	650	618	612	392I
42 N C STATE UNIV AT RALEIGH	473	450	423	315	1,808	1,787	1,775	1,599
43 UNIVERSITY OF FLORIDA	472	445	415	305I	2,572E	2,455	2,423	2,024
44 UNIVERSITY OF COLORADO	472	269	446	330I	952	852	1,476	1,281
45 SUNY AT STONY BROOK	446	434	405	256	1,230	1,221	1,143	715
46 HOWARD UNIVERSITY	445	497	439E	294I	1,254	1,378	1,261	913I
47 NORTHWESTERN UNIVERSITY	443	479	414	307I	1,247	1,304	1,330	902
48 IOWA ST U OF SCI & TECH	431	390	385	407	1,544	1,475	1,434	1,226
49 U TEX HLTH SCI CTR DALLAS	400	378	358	297	1,164	1,128	1,037	712
50 UNIVERSITY OF CONNECTICUT	388	388	376	326	1,385	1,369	1,396	1,168
TOTAL, 1ST 50 INSTS.	38,159	35,990	34,489	27,476	94,753	92,934	90,173	81,711

SEE FOOTNOTES AT END OF TABLE.

TABLE 20. -- FULL-TIME-EQUIVALENT SCIENTISTS AND ENGINEERS EMPLOYED IN RESEARCH AND DEVELOPMENT AT UNIVERSITIES AND COLLEGES: JANUARY 1978 AND 1983-85

- CONTINUED INSTITUTIONAL RANKING	R&D FTE				TOTAL FTE			
	1985	1984	1983	1978	1985	1984	1983	1978
51 UNIV OF HAWAII-MANOA	388	374	370	359	1,183	1,169	1,138	1,123
52 UNIVERSITY OF IOWA	384	398	445	403	1,882	1,858	1,314	1,398
53 UNIVERSITY OF NEW MEXICO	374	374	299	226	1,017E	1,017	934	713
54 UNIVERSITY OF MIAMI	372	271I	70	270	1,388	1,319I	1,198	1,040
55 UNIVERSITY OF KENTUCKY	366	366	366	375	2,030E	2,030	2,030	1,285
56 CARNEGIE-MELLON UNIV	352	244	363I	198I	551	406	587I	528I
57 UNIVERSITY OF ROCHESTER	349	349	459	594	1,148E	1,148	1,208	1,021
58 BRANDEIS UNIVERSITY	346	226	228	90I	492	346	350	255I
59 CALIFORNIA INST OF TECH	345	347	347	307I	528	530	534	722
60 CUNY MT SINAI SCH OF MED	334I	327I	416I	273I	1,088I	1,056	1,301I	802I
TOTAL, 1ST 60 INSTS.	41,773	39,269	37,854	30,577	106,063	103,816	101,269	90,598
61 BOSTON UNIVERSITY	330	312	313	226	1,075	1,032	1,044	705
62 BAYLOR COL OF MEDICINE	328	472	301	271I	838	816	769	705I
63 MISSISSIPPI STATE UNIV	315	346	280	346E	775	698	699	632
64 TUFTS UNIVERSITY	314	203I	201I	88	697	510I	503I	354
65 RUTGERS THE ST UNIV OF NJ	314	326	342	365I	1,528	1,520	1,538	1,452I
66 UNIVERSITY OF KANSAS	310I	312I	264I	347I	1,596I	1,533	1,297I	1,295I
67 UNIV ALABAMA BIRMGHAM	310	295	279	298	1,246	1,185	1,144	1,005
68 UNIVERSITY OF UTAH	307I	307I	359E	378I	1,437	1,436	1,837	1,426
69 UNIV OF NEBRASKA-LINCOLN	307	319	327	253	729	771	769	764
70 MEDICAL COLLEGE OF MIS	298I	295	81	56	646I	-C	106I	468
TOTAL, 1ST 70 INSTS.	44,910	42,460	40,532	33,209	116,632	113,947	110,979	99,404
71 MAYO GRAD SCHOOL OF MED	298I	-	-	-	825I	-	-	-
72 UNIVERSITY OF OKLAHOMA	294	208	204I	22	1,381	1,152	1,058I	313
73 UNIVERSITY OF VIRGINIA	291	298	289	229I	1,054I	1,067	1,034I	835I
74 YESHIVA UNIVERSITY	291	284	374	290	912	949	988E	1,076
75 UNIV OF MD BALT PROF SCH	290	206	149	111	1,133E	1,054	1,018	769
76 UNIVERSITY OF CINCINNATI	289	277	261	223	1,428	1,385	1,179	872
77 UNIV OF MISSOURI COLUMBIA	289	389	568	316I	1,257	1,193	1,243	1,142I
78 COLORADO STATE UNIVERSITY	281	296	298	217	1,015	1,000	1,011	875
79 UNIV OF CAL IRVINE	281	302	292	151I	900	871	857	533I
80 UNIV OF ILL CHICAGO	276	376	357	341	1,433	1,299	1,286	1,504
TOTAL, 1ST 80 INSTS.	47,794	45,100	43,328	35,112	127,974	123,920	120,656	107,323
81 VANDERBILT UNIVERSITY	270	253	264	284I	940	829	915	818I
82 PURDUE UNIVERSITY	263	264	280	260	2,219E	2,185	2,181	1,690
83 OKLAHOMA STATE UNIVERSITY	263	263	217	204	711	798	749	676
84 AUBURN UNIVERSITY	263	257	228	225	1,130	1,072	1,083	790
85 MED UNIV OF SC CAROLINA	261I	262I	204	167I	825I	803I	613	616I
86 GEORGETOWN UNIVERSITY	261	258	248	215I	934	914	884	667I
87 INDIANA UNIVERSITY	255	258	283	291I	1,822	1,877	1,967	1,579I
88 TEMPLE UNIVERSITY	239	180	236I	262I	1,199	1,157	1,301I	1,147I
89 UNIV OF NC AT CHAPEL HILL	238	225	184	288I	1,413	1,437	1,211	1,163
90 VA POLYTECH INST & ST U	223	266	293	309	1,061	1,076	1,093	978
TOTAL, 1ST 90 INSTS.	50,332	47,588	45,769	37,623	140,230	136,071	132,656	117,447
91 WASHINGTON STATE UNIV	222I	164	218I	317I	558I	541	714I	1,160I
92 HOODS HOLE OCNORPHIC INST	221I	221	228	168	221I	221	228	233E
93 SOUTHERN ILL U-CARBONDALE	218	140	144	163	869	830	849	674
94 PRINCETON UNIVERSITY	217I	214	216	402	524I	506	527	630
95 OREGON HLTH SCIENCES UNIV	208	308I	300I	319	583	635I	612I	622
96 FLORIDA STATE UNIVERSITY	205	180	153	229	708	649	682	480
97 UNIVERSITY OF DAYTON	203	206	10	203	381	371	170	372
98 MAYNE STATE UNIVERSITY	201	213	213	363I	1,164E	1,164E	1,164	1,360I
99 UNIVERSITY OF DELAWARE	200	200	210	181	559	547	574	481
100 GEORGE WASHINGTON UNIV	191	193	201	245	894	880	859	797
TOTAL, 1ST 100 INSTS.	52,421	49,631	47,665	40,216	146,695	142,417	139,037	124,256
TOTAL, ALL OTHER SAMPLED INSTS.	12,839	12,373	12,927	15,745	140,948	138,700	167,404	147,399
ESTIMATED TOTAL, NON-SAMPLED INSTS.	503	508	0	0	36,234	35,729	0	0

NOTE: NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED; NUMBERS FOLLOWED BY "I" ARE IMPUTED.  
DASHES INDICATE THAT DATA ARE NOT AVAILABLE; DASHES FOLLOWED BY "C" INDICATE CONFIDENTIAL DATA.  
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 21. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS  
BY FIELD: 1977 AND 1979-84 1/

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1977	1979	1980	1981	1982	1983	1984	1977-83	1983-84	1977-84
TOTAL, ALL FIELDS .....	358,323	373,198	383,100	391,640	398,982	413,447	415,063	2.4	0.4	2.1
ENGINEERING .....	69,142	72,262	75,084	80,479	84,594	92,711	94,886	5.0	2.3	4.6
AEROSPACE .....	1,518	1,481	1,737	1,883	1,941	2,408	2,413	8.0	.2	6.8
AGRICULTURAL .....	709	740	742	802	875	969	954	5.3	-1.5	4.3
BIOMEDICAL .....	900	1,051	1,011	1,057	1,116	1,244	1,288	5.5	3.5	5.3
CHEMICAL .....	5,201	5,605	6,015	6,496	7,189	7,563	7,510	6.4	-7	5.4
CIVIL .....	12,712	13,217	13,502	14,515	14,523	15,406	15,578	3.3	1.1	2.9
ELECTRICAL .....	17,406	17,789	19,227	20,193	22,017	24,769	26,267	6.1	6.0	6.1
ENGINEERING SCIENCE .....	1,737	1,681	1,796	1,965	2,130	2,281	2,294	4.6	.6	4.1
INDUSTRIAL .....	10,438	10,714	9,870	10,026	9,870	10,712	10,801	.4	.8	5
MECHANICAL .....	8,722	9,251	9,888	10,618	11,467	12,911	13,904	6.8	7.7	6.9
METALLURGICAL/MATERIALS .....	2,559	2,756	2,910	3,125	3,124	3,447	3,608	5.1	4.7	5.0
MINING .....	452	389	413	462	449	524	477	2.5	-3.0	.8
NUCLEAR .....	1,491	1,318	1,241	1,283	1,301	1,203	1,234	-3.5	-2.6	-2.7
PETROLEUM .....	379	424	503	521	586	737	732	11.7	-7	9.9
ENGINEERING, N.E.C. ....	4,918	5,846	6,229	7,533	8,006	8,537	7,825	9.6	-3.3	6.9
SCIENCES, TOTAL .....	289,181	300,936	308,016	311,161	314,388	320,736	320,177	1.7	-2	1.5
PHYSICAL SCIENCES .....	26,855	26,700	26,952	27,382	28,199	29,475	29,808	1.6	1.1	1.5
ASTRONOMY .....	649	652	628	597	632	618	639	-1.6	3.4	-2
CHEMISTRY .....	16,020	16,101	16,222	16,347	17,015	17,810	17,692	1.8	-7	1.4
PHYSICS .....	9,933	9,699	9,898	10,150	10,306	10,811	11,249	1.4	4.1	1.8
PHYSICAL SCIENCES, N.E.C. ....	253	248	204	288	246	236	228	-1.2	-3.4	-1.5
ENVIRONMENTAL SCIENCES .....	13,658	13,854	14,208	14,422	15,174	15,609	15,110	2.3	-3.2	1.5
ATMOSPHERIC SCIENCES .....	924	852	889	882	889	896	895	-5	-1	-5
GEOSCIENCES .....	8,071	8,532	8,668	8,808	9,621	10,321	10,150	4.2	-1.7	3.3
OCEANOGRAPHY .....	1,957	1,867	1,992	2,082	2,091	2,063	1,929	.9	-6.5	-2
ENVIRONMENTAL SCIENCES, N.E.C. ....	2,706	2,603	2,659	2,650	2,573	2,329	2,136	-2.5	-8.3	-3.3
MATHEMATICAL SCIENCES .....	16,069	15,063	15,360	15,915	17,199	17,443	16,963	1.4	-2.8	.8
COMPUTER SCIENCES .....	9,108	11,690	13,578	16,437	19,812	24,060	24,287	17.6	.9	15.0
LIFE SCIENCES .....	95,472	99,827	102,504	103,124	102,889	103,828	104,933	1.4	1.1	1.4
AGRICULTURAL SCIENCES .....	11,520	12,069	12,254	12,100	12,314	12,290	12,030	1.1	-2.1	.6
BIOLOGICAL SCIENCES .....	49,556	48,503	47,890	46,979	46,310	46,091	46,230	-1.2	.3	-1.0
ANATOMY .....	1,188	1,133	1,082	1,072	1,074	1,037	1,046	-2.2	.9	-1.8
BIOCHEMISTRY .....	3,938	4,034	4,053	4,061	4,124	4,234	4,486	1.2	5.9	1.9
BIOLOGY .....	17,005	15,754	14,992	14,203	13,397	13,322	12,397	-4.0	-6.9	-4.4
BIOMETRY/EPIDEMIOLOGY .....	1,058	1,128	1,259	1,182	1,166	1,156	1,006	1.5	-13.0	-7
BIOPHYSICS .....	570	525	485	463	440	480	433	-3.9	-3.8	-3.9
BOTANY .....	3,865	3,658	3,617	3,498	3,644	3,450	3,441	-1.9	-3	-1.6
CELL BIOLOGY .....	825	894	965	1,018	1,143	1,212	1,316	6.6	8.6	6.9
ECOLOGY .....	1,067	1,064	1,181	1,101	1,051	1,007	1,110	-1.0	10.2	1.6
ENTOMOLOGY/PARASITOLOGY .....	1,602	1,697	1,722	1,664	1,540	1,475	1,438	-1.4	-2.5	-1.5
GENETICS .....	1,030	970	964	937	990	1,035	1,012	.1	-2.2	-3
MICROBIOLOGY .....	4,480	4,163	4,178	4,070	4,130	4,224	4,612	-1.0	9.2	.4
NUTRITION .....	3,816	3,920	4,125	4,355	4,359	4,395	4,278	2.4	-2.7	1.6
PATHOLOGY .....	1,357	1,456	1,429	1,444	1,460	1,462	1,462	1.2	*	1.1
PHARMACOLOGY .....	1,794	2,004	2,015	2,024	2,084	2,069	2,083	2.4	.7	2.2
PHYSIOLOGY .....	2,122	2,192	2,104	2,144	2,058	1,994	2,175	-1.0	9.1	.4
ZOOLOGY .....	3,076	2,900	2,686	2,625	2,503	2,430	2,385	-3.9	-1.9	-3.6
BIOSCIENCES, N.E.C. ....	763	1,011	1,033	1,118	1,147	1,139	1,551	6.9	36.2	10.7
HEALTH SCIENCES .....	34,396	39,255	42,360	44,045	44,265	45,447	46,673	4.8	2.7	4.5
DENTISTRY .....	986	1,029	1,002	942	836	776	850	-3.9	9.5	-2.1
NEUROLOGY .....	233	261	249	191	204	261	303	1.9	16.1	3.8
NURSING .....	10,943	12,796	13,877	15,703	16,254	16,945	19,537	7.6	15.3	8.6
PHARMACEUTICAL SCIENCES .....	2,472	2,441	2,434	2,549	2,519	2,641	2,633	1.1	-3	.9
PREVENTIVE MEDICINE/ COMMUNITY HEALTH .....	4,555	6,428	7,103	7,226	6,816	6,192	6,137	5.3	-9	4.4
SPEECH PATHOLOGY/AUDIOLOGY ..	8,162	8,296	8,615	8,596	8,683	8,873	7,581	1.4	-14.6	-1.0
VETERINARY SCIENCES .....	487	535	511	481	471	466	557	-7	19.5	1.9
CLINICAL MEDICINE, N.E.C. ....	1,480	1,431	1,617	1,610	1,747	1,662	1,510	2.0	-9.2	.3
HEALTH RELATED, N.E.C. ....	5,078	6,038	6,952	6,747	6,735	7,631	7,565	7.0	-9	5.9
PSYCHOLOGY .....	38,628	39,786	40,636	40,691	40,098	41,124	40,657	1.1	-1.1	.7
SOCIAL SCIENCES .....	89,391	94,016	94,778	93,190	91,017	89,192	88,419	*	-9	-2
AGRICULTURAL ECONOMICS .....	2,219	2,221	2,343	2,262	2,267	2,295	2,270	.6	-1.1	.3
ANTHROPOLOGY .....	6,728	6,343	6,322	6,118	5,948	5,644	5,586	-2.9	-1.0	-2.6
ECONOMICS (EXCEPT AGRICULTURAL) .....	12,063	12,130	13,132	13,344	13,735	13,587	13,248	2.0	-2.5	1.3
GEOGRAPHY .....	3,375	3,043	3,204	3,187	3,166	3,060	3,064	-1.6	.1	-1.4
HISTORY AND PHILOSOPHY OF SCIENCE .....	300	265	280	248	256	253	274	-2.8	8.3	-1.3
LINGUISTICS .....	2,668	3,063	3,007	3,139	2,803	3,022	3,027	2.1	.2	1.8
POLITICAL SCIENCE .....	27,199	30,735	31,212	30,791	29,907	28,303	26,873	.7	-5.1	-2
SOCIOLOGY .....	8,864	8,159	8,001	7,816	7,246	6,949	6,763	-4.0	-2.7	-3.8
SOCIOLOGY/ANTHROPOLOGY .....	1,398	1,236	1,206	1,110	1,133	1,182	1,054	-2.8	-10.8	-4.0
SOCIAL SCIENCES, N.E.C. ....	24,577	26,821	26,071	25,175	24,556	24,897	26,260	.2	5.5	1.0

1/ DATA FOR 1978 ARE AVAILABLE FOR DOCTORATE-GRANTING INSTITUTIONS ONLY.  
\* LESS THAN 0.05 PERCENT CHANGE  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 22. -- MALE SCIENCE/ENGINEERING GRADUATE STUDENTS  
IN ALL INSTITUTIONS BY FIELD: 1977 AND 1979-84 1/

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1977	1979	1980	1981	1982	1983	1984	1977-83	1983-84	1977-84
TOTAL, ALL FIELDS .....	250,179	246,953	249,328	249,471	252,179	259,990	259,967	.6	*	.5
ENGINEERING .....	65,307	66,235	68,581	72,548	75,621	82,465	84,128	4.0	2.0	3.7
AEROSPACE .....	1,485	1,432	1,663	1,816	1,831	2,283	2,380	7.4	-1.1	6.3
AGRICULTURAL .....	680	708	711	758	818	896	876	4.7	-2.2	3.7
BIOMEDICAL .....	817	919	845	877	897	974	1,017	3.0	4.4	3.2
CHEMICAL .....	4,827	4,991	5,336	5,718	6,288	6,547	6,547	5.2	*	4.5
CIVIL .....	11,752	11,752	11,973	12,778	12,614	13,388	13,413	2.2	.2	1.9
ELECTRICAL .....	16,696	16,856	18,244	18,917	20,466	22,829	24,110	5.4	5.6	5.4
ENGINEERING SCIENCE .....	1,650	1,540	1,645	1,764	1,864	1,990	1,983	3.2	-4	2.7
INDUSTRIAL .....	9,683	9,463	8,520	8,466	8,216	8,769	8,713	-1.6	-6	-1.5
MECHANICAL .....	8,449	8,782	9,354	9,987	10,748	12,106	12,971	6.2	7.1	6.3
METALLURGICAL/MATERIALS .....	2,376	2,468	2,607	2,735	2,704	2,999	3,143	4.0	4.8	4.1
MINING .....	434	363	385	423	409	477	437	1.6	-8.4	.1
NUCLEAR .....	1,434	1,233	1,160	1,199	1,215	1,119	1,147	-4.0	2.5	-3.1
PETROLEUM .....	365	393	462	469	544	665	673	10.5	1.2	9.1
ENGINEERING, N.E.C. ....	4,659	5,335	5,676	6,641	7,007	7,423	6,819	8.1	-8.1	5.6
SCIENCES, TOTAL .....	184,872	180,718	180,747	176,923	176,558	177,525	175,838	-.7	-1.0	-.7
PHYSICAL SCIENCES .....	22,816	22,205	22,352	22,366	22,776	23,594	23,736	.6	.6	.6
ASTRONOMY .....	568	571	518	506	531	526	512	-1.3	3.0	-.7
CHEMISTRY .....	12,936	12,683	12,718	12,544	12,855	13,297	13,090	.9	-1.6	1.3
PHYSICS .....	9,129	8,813	8,950	9,133	9,238	9,609	9,962	.5	3.7	1.3
PHYSICAL SCIENCES, N.E.C. ....	183	138	138	183	152	162	142	-2.0	-12.2	-3.6
ENVIRONMENTAL SCIENCES .....	11,307	10,925	10,940	10,945	11,393	11,634	11,360	.5	-2.4	.1
ATMOSPHERIC SCIENCES .....	850	757	779	758	764	766	759	-1.7	-9	-1.6
GEOSCIENCES .....	6,703	6,741	6,743	6,746	7,318	7,808	7,735	2.6	-9	2.1
OCEANOGRAPHY .....	1,602	1,454	1,505	1,529	1,514	1,497	1,387	-1.1	-7.3	-2.0
ENVIRONMENTAL SCIENCES, N.E.C. ....	2,152	1,973	1,913	1,912	1,797	1,563	1,479	-5.2	-5.4	-5.2
MATHEMATICAL SCIENCES .....	11,944	11,027	11,272	11,419	12,109	12,222	11,994	.4	-1.9	.1
COMPUTER SCIENCES .....	7,549	9,367	10,491	12,228	14,366	17,296	17,911	14.8	3.6	13.1
LIFE SCIENCES .....	53,658	51,398	51,062	49,353	47,646	46,796	46,655	-2.3	-.3	-2.0
AGRICULTURAL SCIENCES .....	9,453	9,461	9,447	9,370	9,314	9,133	8,956	-.5	-2.4	-.8
BIOLOGICAL SCIENCES .....	32,712	30,499	29,492	28,210	27,021	26,576	26,706	-3.4	.5	-2.9
ANATOMY .....	801	724	673	683	669	632	615	-3.9	-2.7	-3.7
BIOCHEMISTRY .....	2,821	2,773	2,732	2,694	2,630	2,658	2,813	-1.0	5.8	*
BIOLOGY .....	11,352	9,991	9,347	8,651	7,873	7,694	7,211	-6.3	-6.3	-6.3
BIOMETRY/EPIDEMIOLOGY .....	592	593	648	656	561	547	473	-1.3	-13.5	-3.2
BIOPHYSICS .....	459	428	380	338	330	338	326	-5.0	-3.6	-4.8
BOTANY .....	2,747	2,513	2,425	2,285	2,329	2,201	2,203	-2.6	1.1	-3.1
CELL BIOLOGY .....	542	557	619	651	726	797	827	6.6	3.8	6.2
ECOLOGICAL .....	782	746	813	730	684	666	750	-2.6	12.7	-3.6
ENTOMOLOGY/PARASITOLOGY .....	1,325	1,353	1,338	1,308	1,158	1,090	1,066	-3.2	-2.2	-3.1
GENETICS .....	2,532	2,508	2,495	2,470	2,461	2,512	2,550	-1.2	7.5	-1.1
MICROBIOLOGY .....	2,432	2,478	2,443	2,309	2,318	2,358	2,512	-3.0	6.4	-1.7
NUTRITION .....	1,435	1,351	1,428	1,386	1,368	1,325	1,328	-1.3	-1.1	-1.1
PATHOLOGY .....	899	975	922	882	872	883	872	-.3	-1.3	-.4
PHARMACOLOGY .....	1,324	1,419	1,361	1,330	1,356	1,328	1,308	.1	-1.5	-.2
PHYSIOLOGY .....	1,594	1,525	1,467	1,452	1,367	1,297	1,397	-3.4	7.7	-1.9
ZOOLOGY .....	2,157	1,962	1,764	1,718	1,651	1,609	1,520	-4.8	-5.5	-4.9
BIOSCIENCES, N.E.C. ....	498	603	603	667	668	637	934	4.2	46.7	9.4
HEALTH SCIENCES .....	11,493	11,438	12,123	11,773	11,311	11,037	10,983	-.7	-.5	-.6
DENTISTRY .....	847	840	801	776	676	607	564	-5.4	9.4	-3.4
NEUROLOGY .....	164	178	175	131	140	189	194	2.4	2.6	2.4
NURSING .....	426	578	649	730	717	747	372	9.8	16.7	10.8
PHARMACEUTICAL SCIENCES .....	1,754	1,714	1,730	1,797	1,751	1,776	1,711	.2	-3.7	-.4
PREVENTIVE MEDICINE/ COMMUNITY HEALTH .....	2,469	3,090	3,415	3,385	2,986	2,581	2,503	.7	-3.0	.2
SPEECH PATHOLOGY/AUDIOLOGY .....	1,879	1,398	1,314	1,186	1,220	1,199	1,248	-7.2	4.1	-5.7
VETERINARY SCIENCES .....	360	380	332	304	297	289	346	-3.6	19.7	-.6
CLINICAL MEDICINE, N.E.C. ....	955	807	823	865	954	847	769	-2.0	-9.3	-3.0
HEALTH RELATED, N.E.C. ....	2,639	2,453	2,884	2,659	2,570	2,802	2,677	1.0	-4.5	.2
PSYCHOLOGY .....	20,520	19,427	19,036	17,902	16,980	16,709	16,130	-3.4	-3.5	-3.4
SOcial SCIENCES .....	57,078	56,369	55,594	52,710	51,288	49,274	48,053	-2.4	-2.5	-2.4
AGRICULTURAL ECONOMICS .....	1,928	1,827	1,874	1,791	1,804	1,807	1,787	-1.1	-1.1	-1.1
ANTHROPOLOGY .....	3,386	3,099	3,009	2,791	2,677	2,438	2,459	-5.3	.9	-4.5
ECONOMICS (EXCEPT AGRICULTURAL) .....	9,749	9,498	10,126	10,139	10,237	10,159	10,013	-.7	-1.4	-.4
GEOGRAPHY .....	2,516	2,146	2,267	2,198	2,195	2,051	2,020	-3.3	-1.5	-3.1
HISTORY AND PHILOSOPHY OF SCIENCE .....	215	191	189	159	167	161	187	-4.7	16.1	-2.0
LINGUISTICS .....	1,251	1,376	1,325	1,349	1,180	1,217	1,231	-.5	1.1	-.2
POLITICAL SCIENCE .....	19,795	20,540	20,340	19,255	18,631	17,431	16,567	-2.1	-5.0	-2.5
SOCIOLOGY .....	4,834	4,243	3,984	3,780	3,376	3,269	3,144	-6.3	-3.8	-6.0
SOCIOLOGY/ANTHROPOLOGY .....	900	663	648	544	553	583	526	-7.0	-9.7	-7.4
SOCIAL SCIENCES, N.E.C. ....	12,504	12,786	11,832	10,704	10,468	10,158	10,119	-3.4	-.4	-3.0

1/ DATA WERE NOT COLLECTED IN 1978.  
\* LESS THAN 0.05 PERCENT CHANGE  
SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE 23. -- FEMALE SCIENCE/ENGINEERING GRADUATE STUDENTS  
IN ALL INSTITUTIONS BY FIELD: 1977 AND 1979-84 1/

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1977	1979	1980	1981	1982	1983	1984	1977-83	1983-84	1977-84
TOTAL, ALL FIELDS .....	108,144	126,245	133,772	142,169	146,303	153,457	155,096	6.0	1.1	5.3
ENGINEERING .....	3,835	6,027	6,503	7,931	8,973	10,246	10,758	17.8	5.0	15.9
AEROSPACE .....	33	49	74	67	110	125	133	24.9	6.4	22.0
AGRICULTURAL .....	29	32	31	44	57	73	78	16.6	6.8	15.2
BIOMEDICAL .....	83	132	166	180	219	270	271	21.7	.4	18.4
CHEMICAL .....	374	614	579	778	901	1,016	964	18.1	-5.1	14.5
CIVIL .....	960	1,465	1,529	1,737	1,909	2,018	2,164	13.2	7.3	12.3
ELECTRICAL .....	710	933	983	1,276	1,551	1,940	2,157	18.2	11.2	17.2
ENGINEERING SCIENCE .....	87	141	151	201	266	291	312	22.3	7.1	20.0
INDUSTRIAL .....	755	1,251	1,350	1,560	1,654	1,943	2,089	17.1	7.5	15.6
MECHANICAL .....	273	449	534	631	719	805	933	19.7	15.9	19.2
METALLURGICAL/MATERIALS .....	183	288	303	390	420	448	465	16.1	3.8	14.3
MINING .....	18	26	28	39	40	47	40	17.3	-14.9	12.1
NUCLEAR .....	57	85	81	84	86	84	87	6.7	3.6	6.2
PETROLEUM .....	14	31	41	52	42	72	59	31.4	-18.1	22.8
ENGINEERING, N.E.C. ....	259	511	553	892	999	1,114	1,007	27.5	-9.6	21.4
SCIENCES, TOTAL .....	104,309	120,218	127,269	134,238	137,830	143,211	144,339	5.4	.8	4.7
PHYSICAL SCIENCES .....	4,039	4,495	4,600	5,016	5,423	5,881	6,072	6.5	3.2	6.0
ASTRONOMY .....	81	81	82	91	101	92	97	2.1	5.4	2.6
CHEMISTRY .....	3,084	3,418	3,504	3,803	4,160	4,513	4,602	6.6	2.0	5.9
PHYSICS .....	804	886	948	1,017	1,068	1,202	1,287	6.9	7.1	7.0
PHYSICAL SCIENCES, N.E.C. ....	70	110	66	103	94	74	86	.9	15.9	3.0
ENVIRONMENTAL SCIENCES .....	2,351	2,929	3,268	3,477	3,781	3,975	3,750	9.1	-5.7	6.9
ATMOSPHERIC SCIENCES .....	74	95	110	124	125	130	136	9.8	4.6	9.1
GEOSCIENCES .....	1,368	1,751	1,925	2,062	2,303	2,513	2,414	10.7	-3.9	8.5
OCEANOGRAPHY .....	355	413	487	553	577	566	542	8.1	-4.2	6.2
ENVIRONMENTAL SCIENCES, N.E.C. ....	554	630	746	738	776	766	658	5.5	-14.1	2.5
MATHEMATICAL SCIENCES .....	4,125	4,036	4,088	4,496	5,090	5,221	4,969	4.0	-4.8	2.7
COMPUTER SCIENCES .....	1,559	2,323	3,087	4,209	5,446	6,764	6,375	27.7	-5.7	22.3
LIFE SCIENCES .....	41,814	48,429	51,442	53,771	55,243	57,032	58,278	5.3	2.2	4.9
AGRICULTURAL SCIENCES .....	2,067	2,608	2,807	2,750	3,000	3,107	3,064	7.0	-1.4	5.8
BIOLOGICAL SCIENCES .....	16,844	18,004	18,398	18,769	19,289	19,515	19,525	2.5	.1	2.1
ANATOMY .....	387	409	409	389	405	405	431	8.8	6.4	1.6
BIOCHEMISTRY .....	1,117	1,261	1,321	1,367	1,494	1,576	1,672	5.9	-7.9	5.9
BIOLOGY .....	5,653	5,763	5,645	5,552	5,524	5,628	5,186	-1.1	-7.9	-1.2
BIOMETRY/EPIDEMIOLOGY .....	466	535	611	526	605	609	533	4.6	-12.5	1.9
BIOPHYSICS .....	111	97	105	125	110	112	107	1.1	-4.5	-5.5
BOTANY .....	1,118	1,145	1,185	1,213	1,315	1,249	1,237	1.9	-1.9	1.5
CELL BIOLOGY .....	283	337	346	36	417	415	489	6.6	17.8	8.1
ECOLOG .....	285	318	368	371	367	341	360	3.0	5.5	3.4
ENTOMOLOGY/PARASITOLOGY .....	277	344	354	356	382	385	372	5.6	-3.4	4.3
GENETICS .....	478	462	469	467	529	523	462	1.5	-11.7	-5.5
MICROBIOLOGY .....	1,648	1,685	1,735	1,741	1,812	1,866	2,101	2.1	12.6	3.5
NUTRITION .....	2,381	2,569	2,697	2,969	2,991	3,055	2,950	4.3	-3.8	3.1
PATHOLOGY .....	458	481	507	562	588	579	590	4.0	1.9	3.7
PHARMACOLOGY .....	470	585	654	694	728	741	775	7.9	4.6	7.4
PHYSIOLOGY .....	528	667	637	692	691	697	778	4.7	11.6	5.7
ZOOLOGY .....	919	938	922	907	852	821	865	-1.9	5.4	-9.9
BIOSCIENCES, N.E.C. ....	265	408	430	451	479	502	616	11.2	22.8	12.8
HEALTH SCIENCES .....	22,903	27,817	30,237	32,272	32,954	34,410	35,689	7.0	3.7	6.5
DENTISTRY .....	139	185	201	226	160	169	186	3.3	10.1	4.2
NEUROLOGY .....	69	83	74	60	64	72	109	-7	51.4	6.8
NURSING .....	10,517	12,218	13,228	14,973	15,537	16,198	18,666	7.5	15.2	8.5
PHARMACEUTICAL SCIENCES .....	718	727	704	752	768	865	922	3.2	6.6	3.6
PREVENTIVE MEDICINE/COMMUNITY HEALTH .....	2,086	3,338	3,688	3,841	3,830	3,617	3,634	9.4	.6	8.3
SPEECH PATHOLOGY/AUDIOLOGY .....	6,283	6,898	7,301	7,410	7,463	7,674	6,332	3.4	-17.5	1.1
VETERINARY SCIENCES .....	127	155	179	177	174	211	211	5.7	19.2	7.5
CLINICAL MEDICINE, N.E.C. ....	525	624	794	745	793	815	741	7.6	-9.0	5.0
HEALTH RELATED, N.E.C. ....	2,439	3,585	4,068	4,088	4,165	4,829	4,888	12.1	1.2	10.4
PSYCHOLOGY .....	18,108	20,359	21,600	22,789	23,118	24,420	24,527	5.1	.4	4.4
SOCIAL SCIENCES .....	32,313	37,647	39,184	40,480	39,729	39,918	40,366	3.6	1.1	3.2
AGRICULTURAL ECONOMICS .....	291	304	469	471	463	488	483	9.0	-1.0	7.5
ANTHROPOLOGY .....	3,342	3,744	3,313	3,327	3,271	3,206	3,127	-7	-2.5	-9
ECONOMICS (EXCEPT AGRICULTURAL) .....	2,314	2,632	3,006	3,205	3,498	3,428	3,235	6.8	3.4	4.9
GEOGRAPHY .....	859	897	937	989	971	1,009	1,044	2.7	3.4	2.8
HISTORY AND PHILOSOPHY OF SCIENCE .....	85	74	91	89	89	92	87	1.3	-5.4	.3
LINGUISTICS .....	1,417	1,687	1,682	1,790	1,623	1,805	1,797	4.1	-5	3.5
POLITICAL SCIENCE .....	7,404	10,195	10,872	11,536	11,276	10,872	10,307	6.6	-5.2	4.8
SOCIOLOGY .....	4,030	3,916	4,017	4,036	3,870	3,680	3,619	-1.5	-1.7	-1.5
SOCIOLOGY/ANTHROPOLOGY .....	498	573	558	566	580	599	528	3.1	-11.9	.8
SOCIAL SCIENCES, N.E.C. ....	12,073	14,035	14,239	14,471	14,088	14,739	16,141	3.4	9.5	4.2

1/ DATA WERE NOT COLLECTED IN 1978.  
\* LESS THAN 0.05 PERCENT CHANGE  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 24. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS  
BY AREA, CITIZENSHIP, RACIAL/ETHNIC BACKGROUND, AND ENROLLMENT STATUS: 1980-84

AREA, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND	FULL TIME					PART TIME 1/				
	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
TOTAL, ALL AREAS: .....	249,159	252,997	255,297	263,750	264,146	133,941	138,643	143,685	149,697	150,918
TOTAL US CITIZENS .....	198,429	198,015	197,374	200,966	199,693	-	-	133,190	138,119	139,388
BLACK, NON-HISPANIC .....	6,607	6,344	7,225	7,474	7,580	5,020	4,800	6,100	7,005	7,259
AMERICAN INDIAN/ALASKAN NATIVE .....	661	516	712	774	725	254	231	464	446	399
ASIAN/PACIFIC ISLANDER .....	5,394	4,925	5,657	6,460	7,171	2,830	2,862	3,678	4,200	4,195
HISPANIC .....	4,922	4,521	5,496	6,486	6,640	2,490	2,761	3,830	4,683	4,436
WHITE, NON-HISPANIC .....	149,481	141,674	159,171	168,096	164,661	79,174	77,741	102,410	108,815	107,974
OTHER OR UNKNOWN .....	31,364	40,035	19,113	11,676	12,917	-	-	16,708	12,970	15,125
FOREIGN .....	50,730	54,982	57,923	62,784	64,452	-	-	10,495	11,578	11,530
ENGINEERING: .....	43,107	46,257	50,239	55,152	56,866	31,977	34,222	34,355	37,559	38,020
TOTAL US CITIZENS .....	25,108	26,443	28,816	32,139	32,916	-	-	30,569	32,895	33,382
BLACK, NON-HISPANIC .....	472	425	519	666	708	458	455	625	751	812
AMERICAN INDIAN/ALASKAN NATIVE .....	26	66	76	101	135	49	43	95	84	85
ASIAN/PACIFIC ISLANDER .....	1,506	1,118	1,419	1,759	2,135	1,204	1,116	1,328	1,655	1,694
HISPANIC .....	572	492	601	785	810	512	449	500	709	849
WHITE, NON-HISPANIC .....	18,603	18,411	21,677	25,194	25,601	18,371	18,858	21,699	24,589	24,638
OTHER OR UNKNOWN .....	3,929	5,931	4,524	3,634	3,528	-	-	6,322	5,107	5,304
FOREIGN .....	17,999	19,814	21,423	23,013	23,949	-	-	3,786	4,664	4,638
SCIENCES, TOTAL: .....	206,052	206,740	205,058	208,598	207,280	101,964	104,421	109,330	112,138	112,897
TOTAL US CITIZENS .....	173,321	171,572	168,558	168,827	166,777	-	-	102,621	105,224	106,006
BLACK, NON-HISPANIC .....	6,135	5,919	6,706	6,808	6,872	4,562	4,345	5,475	6,254	6,447
AMERICAN INDIAN/ALASKAN NATIVE .....	635	450	636	673	589	205	188	369	362	313
ASIAN/PACIFIC ISLANDER .....	3,888	3,807	4,238	4,701	5,036	1,626	1,746	2,350	2,545	2,501
HISPANIC .....	4,350	4,029	4,895	5,701	5,830	1,978	2,312	3,330	3,974	3,588
WHITE, NON-HISPANIC .....	130,878	123,263	137,494	142,902	139,060	60,803	58,883	80,711	84,226	83,335
OTHER OR UNKNOWN .....	27,435	34,104	14,589	8,042	9,389	-	-	10,386	7,863	9,822
FOREIGN .....	32,731	35,168	36,500	39,771	40,503	-	-	6,709	6,914	6,892
PHYSICAL SCIENCES: .....	22,918	23,308	24,040	25,213	25,666	4,034	4,074	4,159	4,262	4,142
TOTAL US CITIZENS .....	17,174	17,037	17,555	17,981	18,187	-	-	3,699	3,832	3,719
BLACK, NON-HISPANIC .....	323	328	418	412	438	96	107	135	163	154
AMERICAN INDIAN/ALASKAN NATIVE .....	13	15	32	40	63	1	4	18	5	14
ASIAN/PACIFIC ISLANDER .....	513	485	532	590	751	113	138	165	159	139
HISPANIC .....	305	324	387	449	464	65	49	109	114	75
WHITE, NON-HISPANIC .....	13,919	13,549	14,742	15,478	15,182	2,404	2,307	2,947	3,185	3,149
OTHER OR UNKNOWN .....	2,101	2,336	1,444	1,012	1,289	-	-	325	206	188
FOREIGN .....	5,744	6,271	6,485	7,232	7,479	-	-	460	430	423
ENVIRONMENTAL SCIENCES: .....	10,969	11,038	11,436	12,089	11,528	3,230	3,384	3,738	3,520	3,582
TOTAL US CITIZENS .....	9,570	9,534	9,789	10,391	9,973	-	-	3,501	3,343	3,371
BLACK, NON-HISPANIC .....	66	71	76	83	84	38	31	27	29	24
AMERICAN INDIAN/ALASKAN NATIVE .....	38	10	17	24	18	0	5	5	3	5
ASIAN/PACIFIC ISLANDER .....	143	101	136	158	134	27	25	72	85	41
HISPANIC .....	115	130	132	146	206	34	24	59	81	78
WHITE, NON-HISPANIC .....	7,523	7,114	8,388	9,348	8,546	2,230	2,069	3,005	3,023	3,004
OTHER OR UNKNOWN .....	1,685	2,108	1,040	632	985	-	-	333	122	219
FOREIGN .....	1,399	1,504	1,647	1,698	1,556	-	-	237	177	210
MATHEMATICAL SCIENCES: .....	9,902	10,154	10,823	10,971	11,223	5,458	5,761	6,376	6,472	5,740
TOTAL US CITIZENS .....	6,648	6,513	6,935	6,726	6,710	-	-	5,733	5,756	5,113
BLACK, NON-HISPANIC .....	141	138	174	164	183	159	166	183	240	213
AMERICAN INDIAN/ALASKAN NATIVE .....	29	5	20	13	4	13	2	22	21	27
ASIAN/PACIFIC ISLANDER .....	205	246	298	337	296	119	139	194	227	229
HISPANIC .....	140	162	174	205	191	50	68	116	127	104
WHITE, NON-HISPANIC .....	5,047	4,793	5,571	5,389	5,453	3,034	3,261	4,587	4,742	4,022
OTHER OR UNKNOWN .....	1,095	1,169	698	419	583	-	-	631	399	519
FOREIGN .....	3,254	3,641	3,888	4,245	4,513	-	-	643	716	628
COMPUTER SCIENCES: .....	6,587	7,445	9,171	10,288	11,448	6,991	8,992	10,641	13,332	12,839
TOTAL US CITIZENS .....	4,521	4,887	5,091	6,732	6,941	-	-	9,458	11,622	11,134
BLACK, NON-HISPANIC .....	67	103	198	207	197	126	159	330	359	344
AMERICAN INDIAN/ALASKAN NATIVE .....	7	3	15	11	36	4	2	16	11	7
ASIAN/PACIFIC ISLANDER .....	200	264	365	558	520	369	374	525	589	589
HISPANIC .....	42	54	105	105	111	58	81	144	178	141
WHITE, NON-HISPANIC .....	2,793	3,428	4,339	5,055	5,028	3,758	3,826	7,235	8,626	7,420
OTHER OR UNKNOWN .....	1,412	1,035	959	796	1,049	-	-	1,208	1,859	2,634
FOREIGN .....	2,066	2,558	3,190	3,996	4,507	-	-	1,183	1,710	1,704

CONTINUED ON NEXT PAGE.

TABLE 24. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS  
BY AREA, CITIZENSHIP, RACIAL/ETHNIC BACKGROUND, AND ENROLLMENT STATUS: 1980-84

- CONTINUED

AREA, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND	FULL TIME					PART TIME 1/				
	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
LIFE SCIENCES, TOTAL: .....	72,409	72,241	70,254	70,186	69,898	30,095	30,883	32,635	33,642	35,035
TOTAL US CITIZENS .....	63,543	62,857	60,522	59,763	59,207	-	-	31,116	32,209	33,674
BLACK, NON-HISPANIC .....	1,633	1,442	1,697	1,735	1,755	1,078	1,003	1,244	1,532	1,670
AMERICAN INDIAN/ALASKAN NATIVE .....	172	127	191	222	174	68	46	96	123	92
ASIAN/PACIFIC ISLANDER .....	1,644	1,391	1,622	1,694	1,826	457	439	603	680	700
HISPANIC .....	1,451	977	1,338	1,776	1,815	521	427	603	811	783
WHITE, NON-HISPANIC .....	50,716	47,740	51,880	52,982	51,923	20,476	19,761	26,344	27,483	28,870
OTHER OR UNKNOWN .....	7,927	11,180	3,794	1,754	1,714	-	-	2,216	1,580	1,559
FOREIGN .....	8,866	9,384	9,732	10,423	10,692	-	-	1,529	1,433	1,361
AGRICULTURAL SCIENCES: .....	9,980	10,076	9,891	9,836	9,745	2,274	2,024	2,423	2,454	2,286
TOTAL US CITIZENS .....	7,754	7,701	7,508	7,368	7,270	-	-	2,206	2,230	2,068
BLACK, NON-HISPANIC .....	91	92	123	112	111	17	34	22	21	30
AMERICAN INDIAN/ALASKAN NATIVE .....	19	9	12	20	17	0	4	13	12	4
ASIAN/PACIFIC ISLANDER .....	125	97	117	13	127	20	25	21	20	17
HISPANIC .....	221	134	164	182	215	64	34	46	41	86
WHITE, NON-HISPANIC .....	6,269	6,328	6,556	6,690	6,703	1,443	1,381	1,948	1,977	1,792
OTHER OR UNKNOWN .....	1,029	1,041	526	251	96	-	-	156	159	129
FOREIGN .....	2,226	2,375	2,383	2,468	2,475	-	-	217	224	218
BIOLOGICAL SCIENCES: .....	37,928	37,582	36,989	37,110	37,554	9,962	9,397	9,321	8,981	8,676
TOTAL US CITIZENS .....	33,340	32,727	31,950	31,586	31,658	-	-	8,742	8,426	8,031
BLACK, NON-HISPANIC .....	715	652	784	841	804	267	267	344	332	329
AMERICAN INDIAN/ALASKAN NATIVE .....	48	33	67	90	67	8	7	2	31	22
ASIAN/PACIFIC ISLANDER .....	937	805	906	1,025	1,119	178	157	215	250	196
HISPANIC .....	609	457	618	720	707	159	129	192	192	146
WHITE, NON-HISPANIC .....	27,047	25,470	27,761	28,027	28,127	6,633	5,894	7,082	7,008	6,935
OTHER OR UNKNOWN .....	3,984	5,310	1,814	883	834	-	-	674	613	403
FOREIGN .....	4,588	4,855	5,039	5,524	5,896	-	-	579	555	645
HEALTH SCIENCES: .....	24,501	24,583	23,374	23,240	22,599	17,859	19,462	20,891	22,207	24,073
TOTAL US CITIZENS .....	22,449	22,429	21,064	20,809	20,279	-	-	20,158	21,553	23,575
BLACK, NON-HISPANIC .....	827	698	790	782	840	794	702	878	1,179	1,311
AMERICAN INDIAN/ALASKAN NATIVE .....	105	85	112	112	90	60	35	58	80	66
ASIAN/PACIFIC ISLANDER .....	582	489	599	556	580	259	257	357	410	487
HISPANIC .....	621	386	556	874	892	296	264	365	578	541
WHITE, NON-HISPANIC .....	17,400	15,942	17,563	17,865	17,094	12,400	12,486	17,314	18,498	20,143
OTHER OR UNKNOWN .....	2,914	4,829	1,444	620	784	-	-	1,186	808	1,027
FOREIGN .....	2,052	2,154	2,330	2,431	2,320	-	-	733	654	498
PSYCHOLOGY: .....	26,692	26,725	25,818	26,759	25,327	13,944	13,966	14,280	14,370	15,330
TOTAL US CITIZENS .....	25,482	25,721	24,739	25,667	24,290	-	-	13,965	14,030	14,990
BLACK, NON-HISPANIC .....	1,017	983	1,021	1,145	1,129	401	467	622	771	939
AMERICAN INDIAN/ALASKAN NATIVE .....	185	48	78	92	86	48	35	61	44	37
ASIAN/PACIFIC ISLANDER .....	302	328	319	368	404	70	70	122	164	162
HISPANIC .....	971	955	1,032	1,146	1,240	327	276	439	684	583
WHITE, NON-HISPANIC .....	17,612	16,001	19,198	21,379	20,072	7,124	7,496	11,123	11,347	11,888
OTHER OR UNKNOWN .....	5,395	7,406	3,091	1,537	1,460	-	-	1,598	1,020	1,302
FOREIGN .....	1,210	1,004	1,079	1,092	1,036	-	-	315	340	340
SOCIAL SCIENCES: .....	56,575	55,829	53,516	52,652	52,190	38,203	37,361	37,501	36,540	36,230
TOTAL US CITIZENS .....	46,383	45,023	43,037	41,567	41,469	-	-	35,159	34,432	34,004
BLACK, NON-HISPANIC .....	2,888	2,854	3,122	3,062	3,085	2,664	2,412	2,934	3,160	3,104
AMERICAN INDIAN/ALASKAN NATIVE .....	195	242	283	272	208	71	84	151	155	131
ASIAN/PACIFIC ISLANDER .....	881	992	966	996	1,106	471	553	669	641	641
HISPANIC .....	1,326	1,427	1,727	1,874	1,904	923	1,387	1,860	1,979	1,824
WHITE, NON-HISPANIC .....	33,273	30,638	33,376	33,471	32,857	21,777	20,163	25,470	25,820	24,982
OTHER OR UNKNOWN .....	7,820	8,870	3,563	1,892	2,309	-	-	4,075	2,677	3,322
FOREIGN .....	10,192	10,806	10,479	11,085	10,721	-	-	2,342	2,108	2,226

1/ FOR PART-TIME STUDENTS, DISTRIBUTION BY CITIZENSHIP WAS NOT REQUESTED PRIOR TO 1982.  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 26. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS  
BY GEOGRAPHIC DISTRIBUTION: 1977-84

DIVISION AND STATE	NUMBER								AVERAGE ANNUAL PERCENT CHANGE		
	1977	1978	1979	1980	1981	1982	1983	1984	1977-83	1983-84	1977-84
TOTAL, ALL INSTITUTIONS .....	306,549	309,835	320,580	333,649	339,968	346,796	358,158	363,470	2.6	1.5	2.5
NEN ENGLAND .....	22,209	22,917	23,970	25,633	26,215	26,810	28,128	28,374	4.0	.9	3.6
CONNECTICUT .....	3,418	3,474	3,626	3,902	4,053	4,182	4,271	4,243	3.8	-7	3.1
MAINE .....	469	487	475	467	395	416	509	580	1.4	13.9	3.1
MASSACHUSETTS .....	15,444	16,087	16,704	18,285	18,730	19,056	20,063	20,249	4.5	.9	3.9
NEW HAMPSHIRE .....	723	666	701	752	733	782	800	807	1.7	.9	1.6
RHODE ISLAND .....	1,675	1,753	1,758	1,700	1,739	1,739	1,851	1,834	1.7	-9	1.3
VERMONT .....	480	450	506	527	565	635	634	661	4.7	4.3	4.7
MIDDLE ATLANTIC .....	54,373	54,340	56,764	61,005	64,822	65,222	67,368	69,339	3.6	2.9	3.5
NEW JERSEY .....	7,298	8,795	8,851	9,182	9,332	9,172	9,619	10,580	4.7	10.0	5.4
NEW YORK .....	33,111	31,868	33,764	36,071	38,564	39,108	40,185	41,146	3.3	2.4	3.2
PENNSYLVANIA .....	13,964	13,677	14,147	15,752	16,926	16,942	17,564	17,613	3.9	.3	3.4
EAST NORTH CENTRAL .....	57,075	57,016	58,440	60,007	55,761	60,533	62,796	63,204	1.6	.6	1.5
ILLINOIS .....	14,650	14,916	15,499	16,122	16,073	16,095	16,799	17,059	2.3	1.5	2.2
INDIANA .....	7,253	7,113	7,101	7,345	7,674	7,919	8,207	7,491	2.1	-3.7	.5
MICHIGAN .....	12,581	12,272	13,005	12,744	12,132	12,544	12,998	13,193	1.5	1.5	.7
OHIO .....	14,802	15,125	15,268	15,773	15,922	16,099	16,803	17,391	2.1	3.4	2.3
WISCONSIN .....	7,789	7,590	7,567	8,023	7,940	7,876	7,989	8,080	.4	1.1	.5
WEST NORTH CENTRAL .....	22,536	22,793	22,933	23,723	23,552	24,093	24,718	24,764	1.6	.2	1.4
IOWA .....	4,006	4,268	4,468	4,541	4,385	4,682	4,938	4,831	3.5	-2.2	2.7
KANSAS .....	4,178	4,400	4,272	4,356	4,234	4,216	4,492	4,402	1.2	-2.0	.7
MINNESOTA .....	4,814	4,814	4,993	5,097	5,209	5,202	5,267	5,404	1.5	2.6	1.7
MISSOURI .....	6,030	5,742	5,699	5,983	5,813	6,031	5,841	6,048	-5	3.5	.8
NEBRASKA .....	2,112	2,073	2,111	2,138	2,326	2,284	3,397	2,346	2.1	-2.1	1.5
NORTH DAKOTA .....	836	858	776	907	913	946	994	957	2.9	-3.7	1.9
SOUTH DAKOTA .....	560	638	614	701	672	732	789	776	5.9	-1.6	4.8
SOUTH ATLANTIC .....	44,006	45,528	47,568	49,519	51,214	52,065	52,818	54,226	3.1	2.7	3.0
DELAWARE .....	884	884	1,031	1,084	1,135	1,173	1,180	1,112	4.9	-5.8	3.3
DISTRICT OF COLUMBIA .....	9,050	8,714	9,059	8,830	9,641	8,649	8,245	8,669	-1.5	5.1	-6
FLORIDA .....	7,198	7,974	8,808	9,623	10,333	10,916	11,319	11,647	7.8	2.9	7.1
GEORGIA .....	4,852	5,087	5,300	5,472	5,766	5,913	5,892	6,437	3.3	9.2	4.1
MARYLAND .....	5,675	5,594	5,596	5,185	5,431	5,484	5,892	5,973	3.6	1.4	4.7
NORTH CAROLINA .....	5,886	6,329	6,651	6,725	6,464	6,116	5,363	5,449	3.8	1.2	3.4
SOUTH CAROLINA .....	2,833	2,765	2,780	2,760	2,826	2,944	3,017	3,150	1.1	4.4	1.5
VIRGINIA .....	5,686	5,875	6,107	6,931	7,011	7,153	7,273	7,906	4.2	8.7	4.8
WEST VIRGINIA .....	1,942	2,306	2,236	2,709	2,407	2,717	2,637	1,883	5.2	-28.6	-4
EAST SOUTH CENTRAL .....	12,795	13,018	13,121	13,163	12,655	12,867	13,168	13,680	.5	3.9	1.0
ALABAMA .....	3,181	3,356	3,485	3,350	3,276	3,296	3,366	3,706	.9	10.1	2.2
KENTUCKY .....	2,475	2,454	2,565	2,571	2,709	2,827	2,865	2,906	2.5	1.2	2.3
MISSISSIPPI .....	1,858	1,970	1,895	1,893	1,841	1,953	2,063	2,264	1.8	9.7	2.9
TENNESSEE .....	5,281	5,238	5,176	5,349	4,829	4,791	4,874	4,804	-1.3	-1.4	-1.3
WEST SOUTH CENTRAL .....	26,434	26,813	27,175	28,026	28,205	30,249	32,741	33,374	3.6	1.9	3.4
ARKANSAS .....	1,044	1,056	1,065	1,060	1,164	1,224	1,189	1,211	2.2	1.9	2.1
LOUISIANA .....	3,100	3,484	3,518	3,596	3,862	4,084	4,344	4,564	5.8	5.1	5.7
OKLAHOMA .....	3,726	3,757	3,715	3,855	3,475	3,721	4,066	4,029	1.5	-9	1.1
TEXAS .....	18,564	18,516	18,877	19,515	19,704	21,220	23,142	23,570	3.7	1.8	3.5
MOUNTAIN .....	19,827	20,077	20,496	21,102	21,428	22,841	23,064	22,977	2.6	-.4	2.1
ARIZONA .....	4,729	4,752	5,027	5,228	5,593	6,397	6,384	6,485	5.1	1.6	4.6
COLORADO .....	6,821	6,608	6,883	6,881	6,885	6,923	6,702	6,456	-.3	-3.7	-.8
IDAHO .....	1,192	1,191	951	968	913	937	1,004	970	-2.8	-3.4	-2.9
MONTANA .....	763	772	755	830	810	976	1,019	1,030	4.9	1.1	4.4
NEVADA .....	469	435	477	450	464	413	532	561	2.1	5.5	2.6
NEW MEXICO .....	1,809	2,059	2,086	2,203	2,296	2,372	2,551	2,464	5.9	-3.4	4.5
UTAH .....	3,369	3,582	3,666	3,882	3,737	4,021	4,037	4,232	3.1	4.8	3.3
WYOMING .....	675	678	651	660	730	802	835	779	3.6	-6.7	2.1
PACIFIC .....	45,708	45,785	48,572	49,538	50,132	50,008	50,974	50,956	1.8	.8	1.6
ALASKA .....	228	251	270	272	320	355	424	352	10.9	-17.0	6.4
CALIFORNIA .....	35,019	34,935	37,545	37,918	38,974	39,181	40,009	39,636	2.2	-.9	1.8
HAWAII .....	1,543	1,501	1,523	2,904	2,012	2,053	1,965	1,936	4.1	-1.5	3.3
OREGON .....	3,135	3,262	3,299	3,216	3,141	3,175	3,305	3,456	.9	4.6	1.4
WASHINGTON .....	5,783	5,636	6,005	6,128	5,685	5,244	5,271	5,576	-1.5	5.8	-5
OUTLYING AREAS .....	1,606	1,548	1,541	1,953	1,984	2,108	2,323	2,576	6.8	8.1	7.0

\* LESS THAN 0.05 PERCENT CHANGE  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 27. -- DOCTORATE-GRANTING INSTITUTIONS RANKED BY TOTAL SCIENCE/ENGINEERING GRADUATE ENROLLMENT: 1980-84

INSTITUTIONAL RANKING	1980	1981	1982	1983	1984
TOTAL, ALL INSTITUTIONS	332,858	339,951	346,796	358,158	363,470
1 UNIVERSITY OF SOUTHERN CALIFORNIA	7,420	7,507	7,651	8,343	7,341
2 UNIVERSITY OF CALIF AT BERKELEY	5,513	5,598	5,400	5,381	5,545
3 UNIVERSITY OF WISCONSIN - MADISON	5,320	5,405	5,346	5,247	5,411
4 UNIVERSITY OF MINNESOTA	5,097	5,209	5,202	5,249	5,372
5 OHIO STATE UNIVERSITY	4,731	4,787	4,704	4,917	4,874
6 UNIV OF TEXAS AT AUSTIN	3,784	4,032	4,286	4,755	4,744
7 UNIVERSITY OF PITTSBURGH	3,649	4,558	4,643	4,694	4,717
8 UNIVERSITY OF MICHIGAN	4,414	4,401	4,310	4,533	4,561
9 MASSACHUSETTS INSTITUTE OF TECHNOLOGY	4,091	3,950	3,886	4,466	4,472
10 UNIVERSITY OF ILLINOIS - URBANA	4,249	4,313	4,494	4,556	4,326
TOTAL, 1ST 10 INSTS.	48,268	49,760	49,922	52,131	51,363
11 RUTGERS THE STATE UNIVERSITY	4,260	4,247	4,073	4,387	4,212
12 UNIVERSITY OF WASHINGTON	4,701	4,231	3,870	3,904	4,165
13 STANFORD UNIVERSITY	3,685	3,844	4,026	4,297	4,134
14 UNIVERSITY OF CALIF AT LOS ANGELES	4,220	4,266	4,084	4,198	4,107
15 TEXAS A & M UNIVERSITY	3,266	3,365	3,679	3,907	3,929
16 GEORGE WASHINGTON UNIVERSITY	3,478	3,790	3,308	3,388	3,664
17 PENNSYLVANIA STATE UNIVERSITY	3,335	3,573	3,503	3,557	3,628
18 PURDUE UNIVERSITY	3,700	3,517	4,192	4,322	3,586
19 UNIVERSITY OF ARIZONA	3,209	3,169	3,159	3,255	3,449
20 UNIVERSITY OF MARYLAND - COLLEGE PARK	2,700	2,867	2,975	3,156	3,333
TOTAL, 1ST 20 INSTS.	84,822	87,029	86,796	90,582	89,570
21 NEW YORK UNIVERSITY	3,302	2,372	3,911	3,853	3,322
22 CORNELL UNIVERSITY	2,980	3,048	3,011	3,113	3,240
23 MICHIGAN STATE UNIVERSITY	3,311	3,050	3,079	3,201	3,125
24 UNIVERSITY OF COLORADO	3,545	3,517	3,501	3,187	3,070
25 UNIVERSITY OF FLORIDA	2,534	2,603	2,812	2,849	3,049
26 FLORIDA INSTITUTE OF TECHNOLOGY	2,120	2,715	2,720	2,904	3,049
27 SUNY - BUFFALO	2,057	2,089	2,260	2,338	3,041
28 COLUMBIA UNIVERSITY MAIN DIVISION	2,945	2,991	3,159	2,993	3,020
29 HARVARD UNIVERSITY	2,687	3,042	3,071	2,842	3,013
30 VIRGINIA POLYTECHNIC INST AND STATE UNIV	2,288	2,350	2,373	2,555	2,838
TOTAL, 1ST 30 INSTS.	112,591	115,806	116,693	120,417	120,337
31 NORTHEASTERN UNIVERSITY	3,428	3,426	3,399	3,539	2,825
32 NORTH CAROLINA STATE UNIV AT RALEIGH	2,221	2,252	2,527	2,634	2,729
33 UNIVERSITY OF ILLINOIS AT CHICAGO	2,761	2,327	2,428	2,530	2,708
34 UNIVERSITY OF TENNESSEE AT KNOXVILLE	3,003	2,828	2,826	2,770	2,669
35 UNIV OF NORTH CAROLINA AT CHAPEL HILL	2,487	2,473	2,553	2,638	2,604
36 BOSTON UNIVERSITY	2,436	2,539	2,482	2,592	2,595
37 UNIVERSITY OF CALIF AT DAVIS	2,654	2,854	2,682	2,557	2,571
38 IOWA STATE UNIVERSITY OF SCI & TECH	2,385	2,432	2,581	2,637	2,528
39 UNIVERSITY OF CONNECTICUT	2,203	2,257	2,396	2,460	2,526
40 UNIVERSITY OF CINCINNATI	2,381	2,420	2,422	2,468	2,519
TOTAL, 1ST 40 INSTS.	138,550	141,614	142,989	147,242	146,611
41 SYRACUSE UNIVERSITY	1,974	2,082	2,172	2,388	2,454
42 ARIZONA STATE UNIVERSITY	1,624	1,994	2,424	2,446	2,444
43 UNIVERSITY OF PENNSYLVANIA	2,708	2,619	2,642	2,573	2,436
44 INDIANA UNIVERSITY	2,336	2,376	2,771	2,362	2,411
45 UNIVERSITY OF MASSACHUSETTS AT AMHERST	2,084	2,006	2,170	2,317	2,407
46 LONG ISLAND UNIVERSITY	2,290	2,130	2,096	1,945	2,376
47 GEORGIA INSTITUTE OF TECHNOLOGY	1,931	1,998	2,019	2,000	2,339
48 UNIVERSITY OF OKLAHOMA	2,157	1,892	1,993	2,294	2,310
49 SUNY - STONY BROOK	2,317	2,413	2,451	2,297	2,261
50 WAYNE STATE UNIVERSITY	2,117	1,831	2,124	2,149	2,255
TOTAL, 1ST 50 INSTS.	160,088	162,955	165,161	170,013	170,304

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TABLE 27. -- DOCTORATE-GRANTING INSTITUTIONS RANKED BY TOTAL SCIENCE/ENGINEERING GRADUATE ENROLLMENT: 1980-84

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INSTITUTIONAL RANKING	1980	1981	1982	1983	1984
51 UNIVERSITY OF KANSAS	2,264	2,212	2,255	2,387	2,215
52 UNIVERSITY OF IOWA	2,090	1,877	2,031	2,226	2,204
53 UNIVERSITY OF UTAH	1,915	1,917	1,942	2,052	2,111
54 UNIV OF TEXAS AT ARLINGTON	1,670	1,723	1,862	1,901	2,100
55 UNIVERSITY OF MISSOURI - COLUMBIA	1,895	1,954	2,060	1,949	2,066
56 LOUISIANA STATE UNIVERSITY SYSTEM	1,582	1,638	1,823	1,852	2,045
57 TEXAS WOMAN'S UNIVERSITY	1,492	1,660	1,680	1,945	1,977
58 UNIVERSITY OF HAWAII AT MANOA	2,004	2,012	2,053	1,965	1,936
59 SAN DIEGO STATE UNIVERSITY	1,617	1,812	2,068	1,905	1,903
60 UNIVERSITY OF SOUTH CAROLINA	1,702	1,774	1,814	1,814	1,896
TOTAL, 1ST 60 INSTS.	178,319	181,534	184,749	190,009	190,757
61 UNIVERSITY OF WISCONSIN - MILWAUKEE	1,871	1,843	1,789	1,936	1,885
62 CASE WESTERN RESERVE UNIVERSITY	1,661	1,676	1,736	1,779	1,848
63 CUNY GRADUATE SCHOOL AND UNIV CENTER	1,733	1,812	1,830	1,815	1,835
64 RESSLAER POLYTECHNIC INSTITUTE	1,548	1,643	1,695	1,825	1,822
65 UNIVERSITY OF KENTUCKY	1,603	1,648	1,757	1,716	1,819
66 COLORADO STATE UNIVERSITY	1,675	1,803	1,831	1,813	1,757
67 STEVENS INSTITUTE OF TECHNOLOGY	1,274	1,433	1,222	1,300	1,250
68 ILLINOIS INSTITUTE OF TECHNOLOGY	1,629	1,758	1,737	1,784	1,745
69 POLYTECHNIC INSTITUTE OF NEW YORK	2,134	2,304	1,345	1,540	1,743
70 UNIVERSITY OF GEORGIA	1,756	1,779	1,869	1,731	1,740
TOTAL, 1ST 70 INSTS.	195,203	199,233	201,560	207,248	208,701
71 UNIVERSITY OF LOWELL	937	1,124	1,278	1,408	1,738
72 OREGON STATE UNIVERSITY	1,768	1,652	1,622	1,657	1,532
73 WEST VIRGINIA UNIVERSITY	2,128	2,142	2,456	2,486	1,728
74 COLUMBIA UNIVERSITY TEACHERS COLLEGE	1,271	1,733	1,690	1,400	1,713
75 NEW JERSEY INSTITUTE OF TECHNOLOGY	828	830	849	940	1,692
76 NORTHWESTERN UNIVERSITY	1,515	1,536	1,590	1,635	1,680
77 UNIVERSITY OF VIRGINIA	1,495	1,479	1,529	1,539	1,631
78 CATHOLIC UNIVERSITY OF AMERICA	1,718	1,719	1,713	1,577	1,630
79 YALE UNIVERSITY	1,604	1,685	1,686	1,707	1,612
80 NEW SCHOOL FOR SOCIAL RESEARCH	1,646	1,653	1,923	1,726	1,585
TOTAL, 1ST 80 INSTS.	210,113	214,786	217,896	223,323	225,442
81 FLORIDA STATE UNIVERSITY	1,514	1,516	1,650	1,598	1,559
82 UNIVERSITY OF HOUSTON-UNIVERSITY PARK	1,414	1,410	1,482	1,701	1,505
83 WESTERN MICHIGAN UNIVERSITY	1,363	1,365	1,491	1,381	1,482
84 TEMPLE UNIVERSITY	1,452	1,280	1,212	1,478	1,469
85 UNIVERSITY OF NEW MEXICO	1,415	1,432	1,442	1,540	1,456
86 UNIVERSITY OF CHICAGO	1,425	1,427	1,420	1,444	1,450
87 AMERICAN UNIVERSITY	1,618	1,833	1,705	1,459	1,442
88 UNIVERSITY OF NEBRASKA - LINCOLN	1,290	1,365	1,403	1,462	1,431
89 OKLAHOMA STATE UNIVERSITY	1,381	1,301	1,443	1,479	1,427
90 UNIVERSITY OF SANTA CLARA	872	957	1,165	1,310	1,422
TOTAL, 1ST 90 INSTS.	223,857	228,672	232,309	238,175	240,085
91 CUNY HUNTER COLLEGE	1,183	1,265	1,385	1,396	1,413
92 WASHINGTON STATE UNIVERSITY	1,427	1,454	1,374	1,367	1,411
93 NORTH TEXAS STATE UNIVERSITY	805	732	968	1,274	1,400
94 JOHNS HOPKINS UNIVERSITY	1,438	1,498	1,424	1,493	1,395
95 UNIVERSITY OF PUERTO RICO - RIO PIEDRAS	1,021	1,041	1,031	1,228	1,382
96 KANSAS STATE UNIV OF AGR & APPLIED SCI	1,323	1,249	1,266	1,331	1,377
97 VIRGINIA COMMONWEALTH UNIVERSITY	1,326	1,355	1,370	1,318	1,346
98 UNIVERSITY OF CALIF AT SANTA BARBARA	1,204	1,294	1,228	1,218	1,344
99 UNIVERSITY OF CALIF AT SAN DIEGO	1,100	1,159	1,210	1,241	1,303
100 SOUTHERN ILLINOIS UNIV AT CARBONDALE	1,062	1,044	1,127	1,288	1,289
TOTAL, 1ST 100 INSTS.	235,746	240,763	244,692	251,329	253,745
TOTAL, ALL OTHER INSTS.	97,112	99,188	102,104	106,829	109,725

NOTE: INCLUDES MEDICAL SCHOOLS  
SOURCE: NATIONAL SCIENCE FOUNDATION



TABLE 29. -- SCIENCE/ENGINEERING POSTDOCTORATES IN DOCTORATE-GRANTING INSTITUTIONS  
BY GEOGRAPHIC DISTRIBUTION: 1979-84

DIVISION AND STATE	NUMBER						AVERAGE ANNUAL PERCENT CHANGE		
	1979	1980	1981	1982	1983	1984	1979-83	1983-84	1979-83
TOTAL, ALL INSTITUTIONS .....	18,086	18,411	19,646	19,366	20,762	21,666	3.5	4.4	3.7
NEW ENGLAND .....	2,583	2,615	2,950	2,906	3,210	3,614	5.6	12.6	6.9
CONNECTICUT .....	543	701	699	694	743	816	8.2	9.8	8.5
MAINE .....	9	8	1	7	9	12	.0	33.3	5.9
MASSACHUSETTS .....	1,857	1,695	2,048	2,056	2,301	2,610	5.5	13.4	7.0
NEW HAMPSHIRE .....	34	46	38	35	49	42	9.6	-14.3	4.3
RHODE ISLAND .....	85	108	95	64	57	82	-9.5	43.9	-7.7
VERMONT .....	55	57	69	50	51	52	-1.9	2.0	-1.1
MIDDLE ATLANTIC .....	3,406	3,401	3,464	3,346	3,558	3,587	1.1	.8	1.0
NEW JERSEY .....	312	305	307	334	353	341	3.1	-3.4	1.8
NEW YORK .....	2,274	2,325	2,310	2,202	2,210	2,252	-2.7	1.9	-2.2
PENNSYLVANIA .....	820	771	847	810	995	994	5.0	-1	3.9
EAST NORTH CENTRAL .....	2,461	2,531	2,721	2,666	2,710	2,864	2.4	5.7	3.1
ILLINOIS .....	794	768	887	837	864	926	2.1	7.2	3.1
INDIANA .....	330	340	377	462	420	452	6.2	7.6	6.5
MICHIGAN .....	370	449	437	461	493	503	7.4	2.0	6.3
OHIO .....	493	498	514	498	485	511	-1.4	5.4	.7
WISCONSIN .....	474	476	506	408	448	472	-1.4	5.4	-1
WEST NORTH CENTRAL .....	1,241	1,294	1,340	1,316	1,321	1,310	1.6	-.8	1.1
IOWA .....	261	270	248	252	266	254	.5	-4.5	-.5
KANSAS .....	159	157	163	165	165	143	.9	-13.3	-2.1
MINNESOTA .....	309	324	359	360	363	364	4.1	.3	3.3
MISSOURI .....	424	445	459	448	442	459	1.0	3.8	1.6
NEBRASKA .....	70	70	85	63	57	66	-5.0	15.8	-1.2
NORTH DAKOTA .....	17	25	23	25	21	20	5.4	-4.8	3.3
SOUTH DAKOTA .....	1	3	3	3	7	4	62.7	-42.9	32.0
SOUTH ATLANTIC .....	2,045	2,175	2,268	2,349	2,427	2,595	4.4	6.9	4.9
DELAWARE .....	48	37	9	12	30	31	-11.1	3.3	-8.4
DISTRICT OF COLUMBIA .....	107	126	145	101	114	95	1.6	-26.7	-2.4
FLORIDA .....	247	236	283	296	313	344	6.1	9.9	6.8
GEORGIA .....	183	170	227	280	251	256	8.2	2.0	6.9
MARYLAND .....	502	546	605	641	653	755	6.8	15.6	8.5
NORTH CAROLINA .....	576	615	560	547	608	655	1.4	7.7	2.6
SOUTH CAROLINA .....	95	92	82	106	93	87	-5	-6.5	-1.7
VIRGINIA .....	253	319	323	330	333	334	7.1	.3	5.7
WEST VIRGINIA .....	34	34	34	36	32	38	-1.5	18.8	2.2
EAST SOUTH CENTRAL .....	679	590	621	570	571	605	-4.2	6.0	-2.3
ALABAMA .....	219	203	164	163	155	170	-8.3	9.7	-4.9
KENTUCKY .....	90	65	99	116	148	154	13.2	4.1	11.3
MISSISSIPPI .....	57	41	35	40	39	41	-9.1	5.1	-6.4
TENNESSEE .....	313	281	323	251	229	240	-7.5	4.8	-5.2
WEST SOUTH CENTRAL .....	1,308	1,207	1,378	1,452	1,527	1,628	3.9	6.6	4.5
ARKANSAS .....	15	10	24	21	29	30	17.9	3.4	14.9
LOUISIANA .....	142	155	114	100	173	170	5.1	-1.7	3.7
OKLAHOMA .....	76	94	86	113	118	129	11.6	9.3	11.2
TEXAS .....	1,075	948	1,154	1,218	1,207	1,299	2.9	7.6	3.9
MOUNTAIN .....	731	822	969	897	988	972	7.8	-1.6	5.9
ARIZONA .....	202	213	275	240	275	295	8.0	7.3	7.9
COLORADO .....	285	349	382	372	386	350	7.9	-9.3	4.2
IDAHO .....	12	26	13	18	17	10	9.1	-41.2	-3.6
MONTANA .....	38	24	22	26	34	23	-2.7	-32.4	-9.6
NEVADA .....	14	19	16	12	22	18	12.0	-18.2	5.2
NEW MEXICO .....	46	52	52	49	41	55	-2.8	34.1	3.6
UTAH .....	125	139	198	166	201	200	12.6	-5	9.9
WYOMING .....	9	0	11	14	12	21	7.5	75.0	18.5
PACIFIC .....	3,618	3,760	3,922	3,853	4,439	4,481	5.2	.9	4.4
ALASKA .....	3	4	3	3	3	18	.0	500.0	43.1
CALIFORNIA .....	2,990	3,166	3,262	3,176	3,684	3,703	5.4	.5	4.4
HAWAII .....	76	52	33	38	30	39	-20.7	30.0	-12.5
OREGON .....	148	124	154	128	173	172	4.0	-.6	3.1
WASHINGTON .....	401	414	470	508	549	549	8.2	.0	6.5
DUTLYING AREAS .....	14	16	13	11	11	10	-5.9	-9.1	-6.5

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 28. -- FULL-TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS  
BY TYPE AND SOURCE OF MAJOR SUPPORT: 1977 AND 1979-84 1/

TYPE AND SOURCE OF MAJOR SUPPORT	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1977 2/	1979	1980	1981	1982	1983	1984	1977-83	1983-84	1977-84
<b>TOTAL, ALL TYPES:</b>										
TOTAL, ALL SOURCES	217,453	223,409	230,535	234,194	236,939	243,596	246,848	1.9	1.3	1.8
FEDERAL, TOTAL	50,378	52,871	52,939	50,897	47,206	47,445	47,764	-1.0	-1.7	-1.8
DEPT OF DEFENSE	4,993	4,998	5,239	5,647	5,861	6,901	7,034	5.5	1.9	5.0
DEPT OF HHS, TOTAL	21,081	22,649	19,377	18,018	16,040	15,036	15,281	-5.5	1.6	-4.5
NIH	10,928	11,660	11,560	11,283	10,860	10,852	11,220	-1.1	3.4	-4.4
OTHER HHS	10,153	10,989	7,817	6,735	5,180	4,184	4,061	-13.7	-2.9	-12.3
NSF	9,023	9,275	9,243	9,084	9,207	9,476	9,813	.8	3.6	1.2
ALL OTHER FEDERAL	15,281	15,949	19,080	18,148	16,098	16,032	15,636	.8	-2.5	1.3
INSTITUTIONAL SUPPORT	80,404	82,813	86,715	90,261	93,244	96,124	99,978	3.0	4.0	3.2
OTHER OUTSIDE SUPPORT, TOTAL	18,229	20,039	21,066	22,382	23,630	24,431	24,559	5.0	.5	4.3
ALL OTHER U.S.	11,323	12,493	13,063	13,832	14,863	15,733	16,591	5.6	5.5	5.6
FOREIGN	6,906	7,546	8,003	8,550	8,767	8,698	7,968	3.9	-8.4	2.1
SELF-SUPPORT	68,442	67,686	69,815	70,654	72,859	75,596	74,547	1.7	-1.4	1.2
<b>FELLOWSHIPS:</b>										
TOTAL, ALL SOURCES	39,203	20,305	20,845	20,260	21,037	21,687	21,979	-9.4	1.3	-7.9
FEDERAL, TOTAL	19,686	4,846	4,634	4,112	4,183	4,104	4,074	-23.0	-7.7	-20.2
DEPT OF DEFENSE	472	228	255	182	201	257	238	-9.6	-7.4	-9.3
DEPT OF HHS, TOTAL	14,899	2,304	1,247	1,024	904	813	814	-38.4	1.1	-34.0
NIH	6,256	789	777	720	656	575	617	-32.8	7.3	-28.2
OTHER HHS	8,643	1,515	470	304	248	238	197	-45.0	-17.2	-41.7
NSF	1,809	1,352	1,315	1,247	1,302	1,304	1,349	-5.3	3.5	-4.1
ALL OTHER FEDERAL	2,506	962	1,817	1,659	1,776	1,730	1,673	-6.0	-3.3	-5.6
INSTITUTIONAL SUPPORT	11,741	9,847	9,635	9,363	9,528	10,203	10,608	-2.3	4.0	-1.4
OTHER OUTSIDE SUPPORT, TOTAL	7,776	5,612	6,576	6,785	7,326	7,380	7,297	-1.1	-1.4	-1.9
ALL OTHER U.S.	3,991	2,881	3,190	3,187	3,619	3,807	4,135	-1.8	8.6	5.2
FOREIGN	3,785	2,731	3,386	3,598	3,707	3,573	3,162	-1.0	-11.5	-2.5
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
<b>TRAINEESHIPS:</b>										
TOTAL, ALL SOURCES	-	18,761	18,056	17,393	14,942	13,720	13,716	**	*	**
FEDERAL, TOTAL	-	14,464	13,808	12,632	10,301	9,211	9,107	**	-1.1	**
DEPT OF DEFENSE	-	52	70	80	33	79	75	**	-5.1	**
DEPT OF HHS, TOTAL	-	13,171	11,427	10,411	8,913	7,762	7,652	**	-1.4	**
NIH	-	5,440	5,040	4,809	4,715	4,548	4,473	**	-1.6	**
OTHER HHS	-	7,731	6,387	5,602	4,198	3,214	3,179	**	-1.1	**
NSF	-	230	193	134	72	47	43	**	-8.5	**
ALL OTHER FEDERAL	-	1,011	2,118	2,007	1,283	1,323	1,337	**	1.1	**
INSTITUTIONAL SUPPORT	-	2,901	3,121	3,648	3,488	3,375	3,581	**	6.1	**
OTHER OUTSIDE SUPPORT, TOTAL	-	1,396	1,127	1,113	1,153	1,134	1,028	**	-9.3	**
ALL OTHER U.S.	-	897	808	844	856	784	766	**	-2.3	**
FOREIGN	-	499	319	269	297	350	262	**	-25.1	**
SELF-SUPPORT	-	0	0	0	0	0	0	0	0	0
<b>RESEARCH ASSISTANTSHIPS:</b>										
TOTAL, ALL SOURCES	43,896	48,410	50,781	51,946	51,828	54,162	57,039	3.6	5.3	2.8
FEDERAL, TOTAL	25,179	27,841	29,066	28,940	28,025	28,891	29,253	2.3	1.3	2.2
DEPT OF DEFENSE	2,637	2,795	2,924	3,280	3,460	3,920	4,033	6.8	6.8	6.3
DEPT OF HHS, TOTAL	5,272	6,143	5,968	6,011	5,721	5,932	6,333	2.0	2.9	2.7
NIH	4,307	4,991	5,371	5,454	5,206	5,385	5,787	3.8	7.5	4.3
OTHER HHS	965	1,152	597	557	515	547	546	-9.0	-2.2	-7.8
NSF	7,041	7,465	7,604	7,578	7,723	8,032	8,251	2.2	2.7	2.3
ALL OTHER FEDERAL	10,229	11,438	12,570	12,071	11,121	11,007	10,636	1.2	-3.4	1.6
INSTITUTIONAL SUPPORT	14,163	15,029	15,990	16,704	17,011	17,518	19,213	3.6	9.7	4.5
OTHER OUTSIDE SUPPORT, TOTAL	4,554	5,540	5,725	6,302	6,792	7,753	8,573	9.3	10.6	9.5
ALL OTHER U.S.	4,219	4,853	5,192	5,704	6,211	7,195	7,967	9.3	10.7	9.5
FOREIGN	335	687	533	598	581	558	606	8.9	8.6	8.8
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
<b>TEACHING ASSISTANTSHIPS:</b>										
TOTAL, ALL SOURCES	48,665	49,588	51,838	53,800	56,068	57,884	59,180	2.9	2.2	2.8
FEDERAL, TOTAL	586	549	603	549	382	469	383	-3.6	-18.3	-5.9
DEPT OF DEFENSE	0	0	0	0	0	0	0	0	0	0
DEPT OF HHS, TOTAL	296	241	132	118	102	111	71	-15.1	-36.0	-18.5
NIH	121	109	82	75	49	74	44	-7.9	-40.5	-13.5
OTHER HHS	175	132	50	43	53	37	27	-22.8	-27.0	-23.4
NSF	35	27	30	58	24	25	24	-5.5	-4.0	-5.2
ALL OTHER FEDERAL	255	281	441	373	256	333	288	4.5	-13.5	1.8
INSTITUTIONAL SUPPORT	47,767	48,666	50,927	52,876	55,247	57,049	58,407	3.0	2.4	2.9
OTHER OUTSIDE SUPPORT, TOTAL	312	373	308	375	439	366	390	2.7	6.6	3.2
ALL OTHER U.S.	312	373	308	375	439	366	390	2.7	6.6	3.2
FOREIGN	0	0	0	0	0	0	0	0	0	0
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
<b>OTHER TYPES OF SUPPORT:</b>										
TOTAL, ALL SOURCES	85,689	86,345	89,015	90,795	93,064	96,143	94,934	1.9	-1.3	1.5
FEDERAL, TOTAL	4,927	5,171	4,828	4,664	4,315	4,770	4,947	-5.5	3.7	1.1
DEPT OF DEFENSE	1,884	1,923	1,990	2,105	2,167	2,645	2,688	5.8	1.6	5.2
DEPT OF HHS, TOTAL	614	790	603	454	400	418	411	-6.2	-1.7	-5.6
NIH	244	331	290	225	234	270	299	1.7	10.7	2.9
OTHER HHS	370	459	313	229	166	148	112	-14.2	-24.3	-15.7
NSF	138	201	101	67	86	68	146	-11.1	114.7	1.8
ALL OTHER FEDERAL	2,291	2,257	2,134	2,038	1,662	1,639	1,702	-5.4	3.8	-4.2
INSTITUTIONAL SUPPORT	6,733	6,370	7,042	7,670	7,970	7,979	8,169	2.9	2.4	2.8
OTHER OUTSIDE SUPPORT, TOTAL	5,587	7,118	7,330	7,807	7,920	7,798	7,271	5.7	-6.8	3.8
ALL OTHER U.S.	2,801	3,489	3,565	3,722	3,738	3,581	3,333	4.2	-6.9	2.5
FOREIGN	2,786	3,629	3,765	4,085	4,182	4,217	3,938	7.2	-6.6	5.1
SELF-SUPPORT	68,442	67,686	69,815	70,654	72,859	75,596	74,547	1.7	-1.4	1.2

1/ DISTRIBUTION BY TYPE OF MAJOR SUPPORT WAS NOT REQUESTED IN 1978.

2/ INCLUDES TRAINEESHIPS; SEPARATE DATA WERE COLLECTED ON FELLOWSHIPS AND TRAINEESHIPS BEGINNING IN 1979.

\* LESS THAN 0.05 PERCENT CHANGE

SOURCE: NATIONAL SCIENCE FOUNDATION