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ABSTRACT

This summary presents data derived from the Survey of Federal Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 1989. The 15 federal agencies surveyed for the report provide virtually all funding for science and engineering (S/E) research and development (R&D) at universities and colleges, and the data presented in the tables (which make up over 50% of the report) represent all categories of direct federal obligations to institutions of higher education in the United States. Amounts for tuition support programs such as Pell grants and Supplemental Educational Opportunity Grants are included in the figures. Totals exclude loans to individuals, however, such as those related to federally guaranteed student loan programs sponsored by the Department of Education and federal employee training and development activities. Tables present data on federal obligations to universities and colleges: (1) by type of activity--fiscal years 1963-89; (2) by field of research and development--fiscal years 1982-89; (3) by geographic division and state--fiscal years 1982-89; (4) for the 100 schools receiving the largest amounts by agency--fiscal year 1989; (5) by agency and type of activity--fiscal year 1989; and (6) for the 100 universities and colleges receiving the largest amounts by type of activity--fiscal year 1989. (GLR)

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Science and Engineering Activities Program
Division of Science Resources Studies
National Science Foundation

HE 024 780

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Project Officer: Richard Bennof

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Introduction

The data presented in this summary are derived from the Survey of Federal Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 1989, and are being released in advance of the Detailed Statistical Tables publication that contains more comprehensive data.

Survey Coverage

The 15 Federal agencies surveyed in this report provided virtually all funding for science and engineering (S/E) research and development (R&D) at universities and colleges. The data presented in these tables represent all categories of direct Federal obligations to institutions of higher education in the United States. Therefore, amounts that may be subcontracted to other institutions are included, but funds that may be received by academic institutions via subcontract arrangements from prime contractors are excluded. Amounts for tuition support programs such as Pell grants and Supplemental Educational Opportunity Grants (SEOGs) are included in these figures. Totals exclude loans to individuals, however, such as those related to federally guaranteed student loan programs sponsored by the Department of Education and Federal employee training and development activities.

Obligations represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when future payment of money is required. Obligations differ from expenditures in that funds allocated by Federal agencies during one fiscal year may be expended by the recipient institution either partially or entirely during one or more subsequent years.

Data Limitations and Relationship of this Survey to the Survey of Federal Funds for Research and Development

Data presented in this report on R&D and R&D plant by agency sometimes conflict significantly with such data presented in the annual NSF survey, Federal Funds for Research and Development, referred to hereafter as the Federal Funds survey. The treatment of interagency transfers explains much of the difference in the totals. Interagency transfers of funds obligated to an academic or nonprofit institution are reported in the Federal Support survey by the agency that actually obligates the funds to the receiving institution. In the Federal Funds reports, however, obligations are reported by the initiating agency. Each of several agencies utilizes personnel from separate internal offices to respond to the two individual surveys, and they frequently collect data from different sources. Data for the Federal Support survey, for example, are generally processed from award files, whereas Federal Funds data are usually derived from agency budget documents.

Respondents from the separate internal offices that participate in the two surveys also frequently differ in their interpretation of the survey questions. The National Institutes of Health, for example, reports its Biomedical Research Support Grants under "general support for science/engineering" in the Federal Support survey but under "research and development" in the Federal Funds survey. Regarding the structure of the surveys themselves, the data presented in this report differ in several ways from those presented in the report on the Federal Funds survey:

1. The two surveys differ in number of agencies involved. In the Federal Support survey, the 15 Federal agencies that obligate virtually all of Federal support to academic R&D collect data on all Federal obligations to institutions of higher education. For the Federal Funds survey, data are gathered on budgets for R&D and R&D plant from all 33 Federal agencies that conduct such programs.

2. The scope of information gathered differs between the two surveys: data collected in the Federal Support survey are on individual academic institutions, whereas those collected in the Federal Funds survey relate to all types of performers and to character of work (basic and applied research and development).

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In the Federal Support survey, FY 1989, information was collected on all institutions of higher education in the United States (about 2,800 institutions, their system offices, and their associated Federally Funded Research and Development Centers (FFRDCs), as well as nonprofit organizations and their associated FFRDCs). For further information, contact Richard Bennof, Science and Engineering Activities Program, National Science Foundation (202) 634-4673.

Table B-1. -- Federal obligations to universities and colleges by type of activity: fiscal years 1963-89 1/

[Dollars in thousands]

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Fiscal year	Total obligations	Academic science/engineering							Non-science/engineering activities
		Total academic science/engineering	Research and development	R&D plant	Facilities for instruction in science & engineering	Fellowships, traineeships, & training grants	General support for science/engineering	Other science/engineering activities	
1953	1,413,015	1,320,511	829,524	105,896	(2)	(2)	(2)	393,091	84,504
1964	1,624,963	1,528,604	975,597	100,837	(2)	(2)	(2)	452,170	96,359
1965	2,305,455	1,816,171	1,094,963	126,196	(2)	(2)	(2)	595,012	489,284
1966	3,009,950	2,163,504	1,252,146	114,767	(2)	365,560	(2)	431,031	846,446
1967	3,317,709	2,323,795	1,301,242	111,309	(2)	447,236	(2)	464,008	993,914
1968	3,386,637	2,349,817	1,398,305	96,148	(2)	440,895	(2)	414,469	1,036,820
1969	3,462,370	2,361,399	1,474,681	54,516	(2)	436,270	(2)	395,932	1,100,971
1970	3,236,612	2,187,579	1,446,618	44,778	(2)	429,498	(2)	266,775	1,049,033
1971	3,498,596	2,343,129	1,551,391	29,942	28,729	421,029	99,669	212,369	1,155,467
1972	4,144,692	2,599,111	1,853,085	36,917	26,341	387,888	83,288	211,592	1,545,581
1973	3,839,102	2,464,362	1,870,690	43,338	13,372	287,210	38,964	210,788	1,374,740
1974	4,480,372	2,736,984	2,085,204	29,009	3,506	326,600	86,974	205,691	1,743,388
1975	4,547,191	2,805,783	2,246,088	44,787	5,026	201,273	46,353	262,256	1,741,408
1976	5,402,764	2,959,656	2,430,970	23,899	3,210	174,871	74,483	252,223	2,443,108
1977	6,489,735	3,351,337	2,803,017	36,471	3,282	184,671	75,928	247,958	3,138,398
1978	7,471,843	3,959,832	3,385,770	34,328	4,906	205,925	74,398	254,505	3,512,011
1979 3/	7,603,908	4,472,659	3,873,514	32,068	6,743	204,866	92,483	262,985	3,131,249
1980	8,298,804	4,790,972	4,160,543	37,780	3,776	210,121	91,541	287,211	3,507,832
1981 3/	8,640,925	5,062,856	4,410,931	27,694	4,563	205,448	92,721	321,499	3,578,069
1982 3/	8,776,978	5,179,613	4,554,475	31,200	829	176,582	80,137	336,387	3,597,368
1983 3/	9,344,618	5,680,631	5,024,330	37,547	2,522	189,616	94,847	331,769	3,663,987
1984	10,039,468	6,308,014	5,448,821	49,764	1,889	194,895	112,588	500,057	3,731,454
1985	10,971,593	7,257,862	6,246,181	113,932	4,947	253,082	119,171	520,549	3,713,731
1986	11,619,243	7,430,872	6,456,743	105,827	4,990	246,196	111,130	505,986	4,188,371
1987	13,433,460	8,565,441	7,241,001	229,875	13,722	290,942	236,933	552,968	4,868,019
1988	14,066,032	9,133,458	7,719,162	202,907	13,374	3,7348	171,826	716,841	4,932,574
1989	15,657,609	10,073,144	8,516,849	237,010	16,911	340,985	200,605	760,784	5,584,465

1/ Note that some trend shifts are related to institutional reclassification. As of 1978, two laboratories that were formerly considered academically administered Federally Funded Research and Development Centers (FFRDCs) became part of their respective institutions: Applied Physics Laboratory (Johns Hopkins University) and Applied Research Laboratory (Pennsylvania State University). Data for these laboratories are thus included in the academic figures for 1978-89, but excluded for prior years. Similarly, Draper Laboratories separated from the Massachusetts Institute of Technology as of fiscal year 1974 to become an independent nonprofit institution; academic data shown for 1963-73 include Draper Laboratories, whereas those for 1974-89 do not.

2/ Not separately identified but included under "other science/engineering activities".

3/ Total and non-science/engineering obligations were estimated based on revised data from the Department of Education.

SOURCE: National Science Foundation/SRS, Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1989

Table B-3. -- Federal obligations to universities and colleges for research and development by detailed field: fiscal years 1982-89

[Dollars in thousands]

(Page 1 of 1)

Field of science/engineering	1982	1983	1984	1985	1986	1987	1988	1989
Total, all fields	4,554,475	5,024,330	5,448,821	6,246,181	6,456,743	7,241,001	7,719,162	8,516,849
Engineering, total	804,054	913,604	847,674	944,413	998,312	988,461	1,129,303	1,152,862
Aeronautical	35,530	39,765	40,678	39,903	42,257	40,019	47,946	66,096
Astronautical	8,569	16,373	12,405	14,765	24,147	23,474	32,516	42,276
Chemical	30,274	37,685	50,677	68,602	50,379	52,273	67,647	44,349
Civil	38,745	52,231	55,843	45,368	35,402	30,166	30,947	43,026
Electrical	139,442	170,381	161,336	231,457	212,175	197,133	251,336	240,638
Mechanical	37,836	42,577	45,952	53,214	56,416	60,392	60,551	71,137
Metallurgy & materials	63,998	66,146	75,341	80,446	101,457	98,033	121,228	146,253
Engineering, n.e.c.	449,660	488,446	405,142	410,688	476,079	486,971	517,132	499,087
All sciences, total	3,750,421	4,110,726	4,601,147	5,301,768	5,458,431	6,252,540	6,589,859	7,363,987
Physical sciences, total	563,440	621,410	715,948	789,184	770,254	824,643	859,764	979,037
Astronomy	54,001	62,278	78,124	78,654	78,435	84,587	89,791	103,271
Chemistry	183,231	192,171	230,689	256,156	255,593	271,146	281,573	299,417
Physics	284,711	325,998	359,757	397,061	379,289	406,264	426,005	505,723
Physical sciences, n.e.c.	41,497	40,963	47,378	57,313	56,937	62,646	62,395	70,626
Mathematical/computer sciences, total	102,531	117,540	135,103	173,314	179,096	196,711	203,641	258,035
Mathematical sciences	55,998	63,087	75,176	94,680	96,405	116,039	119,217	134,838
Computer sciences	44,844	52,727	58,667	78,634	79,413	77,238	81,527	119,655
Mathematical/computer sci. n.e.c. 1/	1,689	1,726	1,260	0	3,278	3,434	2,897	3,542
Environmental sciences, total	344,313	372,236	398,538	453,789	468,882	496,444	474,695	554,917
Atmospheric sciences	94,463	103,851	114,183	135,562	124,657	151,294	132,379	131,959
Geological sciences	101,005	101,570	100,901	116,850	118,401	118,662	131,913	152,449
Oceanography	102,340	120,448	136,426	138,732	121,855	150,225	129,473	163,035
Environmental sciences, n.e.c.	46,505	46,367	47,028	62,645	103,969	76,263	80,930	107,474
Life sciences, total	2,380,991	2,617,274	2,932,582	3,362,712	3,463,114	4,035,516	4,348,004	4,731,546
Biological (excl. env bio)	1,201,934	1,339,982	1,548,809	1,775,397	1,849,516	2,180,542	2,343,429	2,555,864
Environmental biology	6,432	8,073	79,449	79,601	86,088	87,628	97,126	108,584
Agricultural	160,985	167,274	154,759	168,927	143,249	149,484	155,772	180,908
Medical	970,476	1,053,364	1,124,788	1,294,571	1,325,157	1,546,711	1,691,610	1,832,451
Life sciences, n.e.c.	41,164	48,581	24,777	44,216	59,104	71,151	60,067	53,739
Psychology, total	84,406	93,849	109,787	132,746	138,338	176,524	186,924	209,344
Biological aspects	24,735	24,760	33,515	39,700	39,049	46,194	53,287	66,959
Social aspects	25,166	27,787	30,261	36,205	38,589	51,557	52,113	59,502
Psychology, n.e.c.	34,505	41,302	46,011	56,841	60,700	78,773	81,524	82,883
Social sciences, total	134,323	175,127	162,492	175,909	172,148	177,427	184,539	215,404
Anthropology	11,994	12,678	5,529	6,053	6,455	6,998	5,972	7,054
Economics	52,382	52,756	37,675	45,292	43,764	51,274	48,039	51,806
History	3,200	4,623	1,038	1,494	1,508	1,634	1,527	1,665
Linguistics	3,629	3,419	2,967	3,196	2,481	2,843	3,248	3,402
Political science	10,681	17,149	7,965	6,216	5,003	5,492	5,926	6,988
Sociology	21,142	29,890	33,232	34,887	34,580	41,797	55,204	75,404
Social sciences, n.e.c.	31,295	54,612	74,086	78,771	78,357	60,389	64,623	69,085
Other sciences, n.e.c.	140,417	113,290	146,697	214,114	266,599	352,275	332,292	415,704

1/ Data not collected in FY 1985. Included under "mathematical sciences."

n.e.c. = Not elsewhere classified.

NOTE: Data for each year reflect support from the agencies included in the survey system for that year.

SOURCE: National Science Foundation/SRS, Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1989

Table B-4. -- Federal obligations to universities and colleges for research and development
by geographic division and State: fiscal years 1982-89

(Dollars in thousands)

(Page 1 of 1)

Geographic division and State	1982	1983	1984	1985	1986	1987	1988	1989
United States, total	4,554,475	5,024,330	5,448,821	6,246,181	6,456,743	7,241,001	7,719,162	8,516,849
New England, total	546,699	614,331	666,700	737,777	757,600	819,318	840,017	943,066
Connecticut	106,116	116,971	128,786	144,455	146,545	174,423	175,972	188,744
Maine	5,409	6,476	7,999	7,166	6,449	8,518	6,618	9,090
Massachusetts	373,011	424,213	453,875	496,981	508,166	536,955	545,068	629,070
New Hampshire	16,958	19,436	22,409	27,750	30,564	34,573	36,766	37,007
Rhode Island	32,156	33,879	35,219	42,131	43,646	40,731	47,349	49,525
Vermont	13,049	13,356	18,412	19,294	22,230	24,108	28,244	29,530
Middle Atlantic, total	758,311	863,889	941,878	1,108,296	1,131,083	1,268,422	1,352,552	1,448,888
New Jersey	56,207	61,998	71,331	83,023	86,000	97,785	104,853	120,772
New York	465,860	527,872	581,251	680,273	671,899	752,897	795,186	843,497
Pennsylvania	236,244	274,019	289,296	345,000	373,184	417,740	452,513	484,619
East North Central, total	629,295	682,781	747,405	862,892	873,904	982,023	1,018,935	1,139,209
Illinois	190,913	209,434	226,377	260,394	262,640	297,266	301,297	324,405
Indiana	76,181	77,043	87,369	101,734	100,144	111,184	111,779	131,315
Michigan	133,673	144,557	157,889	178,920	183,814	213,474	233,121	259,265
Ohio	129,207	137,882	148,999	171,831	179,050	199,011	210,593	238,131
Wisconsin	99,321	112,865	126,771	150,013	148,256	161,088	162,145	186,093
West North Central, total	261,280	267,621	309,033	359,097	360,139	410,069	428,857	472,065
Iowa	47,898	53,229	61,933	69,926	74,279	81,722	89,074	103,214
Kansas	24,678	24,765	25,845	31,198	33,239	35,863	37,228	39,105
Minnesota	79,582	74,279	85,132	104,471	102,293	121,588	123,621	133,439
Missouri	80,978	86,389	94,072	108,629	111,289	129,483	137,276	150,269
Nebraska	15,572	14,714	23,816	26,979	24,524	28,464	25,763	27,462
North Dakota	7,685	10,031	13,534	12,625	9,479	8,109	11,044	11,715
South Dakota	4,887	4,214	4,701	5,269	5,036	4,840	4,851	6,861
South Atlantic, total	817,109	884,524	866,760	1,005,463	1,066,480	1,217,674	1,385,893	1,476,995
Delaware	8,191	9,230	10,123	12,221	12,863	12,067	15,261	16,333
District of Columbia	42,472	54,379	46,096	56,320	49,955	61,057	72,668	69,206
Florida	84,924	90,328	91,555	113,479	121,231	148,757	185,626	196,397
Georgia	90,891	101,043	98,686	118,087	127,973	144,034	166,914	183,001
Maryland	366,789	377,480	346,321	375,086	415,943	460,057	522,341	514,747
North Carolina	125,749	141,393	155,208	184,060	194,999	228,096	246,688	287,838
South Carolina	21,801	23,900	24,424	33,198	32,726	33,516	35,595	38,927
Virginia	67,997	78,055	83,272	103,168	101,082	118,161	126,596	155,454
West Virginia	8,295	8,716	11,075	9,854	9,708	11,929	14,204	15,092
East South Central, total	142,906	158,205	165,738	205,350	219,146	270,537	290,579	311,109
Alabama	45,746	53,565	60,489	70,944	79,921	100,553	106,502	123,373
Kentucky	20,526	19,211	21,281	27,186	27,974	30,721	31,965	36,140
Mississippi	18,207	18,659	18,103	25,150	22,979	31,825	37,891	36,227
Tennessee	58,427	66,770	65,865	82,070	88,272	107,438	114,221	115,369
West South Central, total	300,567	310,708	356,507	420,655	434,494	485,424	517,088	590,849
Arkansas	11,112	10,411	11,935	15,323	14,527	15,487	15,599	19,643
Louisiana	34,475	36,213	40,098	51,373	47,715	59,619	61,456	100,418
Oklahoma	22,795	21,429	24,010	27,880	29,468	32,215	25,495	30,968
Texas	232,185	250,655	280,464	326,079	342,784	378,103	414,538	439,820
Mountain, total	253,635	276,696	328,684	345,949	366,578	392,342	412,334	478,171
Arizona	43,431	49,004	54,295	64,672	65,808	80,345	83,490	103,319
Colorado	77,139	83,570	97,761	104,640	108,473	129,826	145,900	147,301
Idaho	4,834	5,211	15,765	5,757	5,296	6,998	8,647	10,424
Montana	7,445	6,823	7,014	6,549	8,015	8,766	8,554	10,414
Nevada	7,644	7,875	7,299	10,189	10,895	14,955	13,856	14,113
New Mexico	47,544	53,631	65,427	60,630	79,466	55,058	56,163	74,134
Utah	58,129	59,164	65,774	76,557	81,627	86,950	86,648	108,117
Wyoming	7,069	11,418	15,349	16,955	6,998	9,444	9,076	10,349
Pacific, total	833,086	945,737	1,055,852	1,188,994	1,234,207	1,379,461	1,457,359	1,636,624
Alaska	11,206	8,196	10,611	12,214	14,645	15,373	15,928	15,111
California	628,001	724,147	793,609	908,141	953,989	1,057,440	1,109,851	1,258,964
Hawaii	24,493	25,860	24,691	33,656	29,196	39,410	39,651	47,913
Oregon	55,685	56,810	72,618	70,068	71,764	84,038	91,133	90,171
Washington	113,701	130,724	154,323	164,915	164,613	183,200	200,796	224,465
Outlying areas, total	11,587	11,838	10,264	11,708	13,112	15,731	15,548	19,873
Guam	937	1,080	1,038	1,138	1,165	1,107	1,096	1,193
Puerto Rico	8,576	8,496	8,337	9,045	10,268	12,678	12,354	16,561
American Samoa	555	584	200	115	290	340	365	290
Virgin Islands	890	1,067	599	931	916	1,026	1,091	1,052
Trust Territory Pec Isl	579	611	90	479	473	580	642	777

NOTE: Data for each year reflect support from the agencies included in the survey system for that year.

SOURCE: National Science Foundation/SRS, Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1989

Table 8-10. -- Federal obligations for research & development to the 100 universities and colleges receiving the largest amounts by agency: fiscal year 1989 1/

[Dollars in Thousands]

(Page 1 of 2)

Rank	Institution (ranked by amount received)	Total	USDA	Com	DOD	Ed	DOE	EPA	HHS	Int	NASA	NSF	Other 2/
	Total, all institutions	8,516,849	336,036	66,041	1,220,606	67,044	444,499	77,503	4,512,022	52,828	435,702	1,206,568	98,000
1	Johns Hopkins University	411,879	48	91	203,192	2,329	1,801	324	179,513	0	4,435	9,314	10,832
2	Stanford University	239,847	710	48	39,635	996	15,735	3,368	110,960	119	41,225	27,051	0
3	Mass Inst of Technology	207,157	0	50	42,287	657	49,277	381	50,676	485	19,225	41,304	2,815
4	University of Washington	203,691	2,207	1,903	27,559	1,545	6,491	930	130,242	854	3,941	27,036	983
5	Univ of Cal Los Angeles	170,839	160	53	10,709	1,336	17,667	540	115,049	75	6,084	19,078	88
6	University of Michigan	167,815	1,338	3,085	11,372	424	8,021	3,249	105,926	0	11,856	20,147	2,447
7	Univ of Cal San Diego	166,601	470	2,897	29,101	0	3,229	0	87,243	291	11,946	31,424	0
8	Univ of Cal San Francisco	159,027	0	0	2,037	0	3,306	175	150,222	0	1,283	1,943	61
9	Univ of Wis-Medison	150,474	7,320	125	8,902	0	13,446	574	83,984	272	9,218	25,656	977
10	Columbia Univ Mein Div	150,263	0	0	11,464	123	6,373	49	99,506	908	3,872	25,807	2,161
	Total 1st 10 institutions	2,027,643	12,253	8,252	386,258	7,410	125,346	9,590	1,113,321	3,004	113,085	228,760	20,364
11	Yale University	146,245	47	30	7,999	0	9,588	303	117,552	0	868	9,858	0
12	Harvard University	141,760	0	0	7,396	500	4,459	800	99,634	77	4,404	18,384	6,106
13	Cornell University	139,954	9,449	0	15,151	0	4,169	835	65,826	346	5,120	38,602	456
14	Univ of Pennsylvania	132,805	1,259	0	8,054	330	6,383	0	100,388	0	459	15,500	432
15	Univ of Cal Berkeley	131,070	8,872	734	12,701	6,923	4,206	400	38,361	446	24,219	32,522	1,686
16	University of Minnesota	128,727	6,764	30	5,068	0	5,202	561	88,985	671	2,585	18,793	68
17	Pennsylvania State Univ	119,435	8,170	353	51,102	0	4,417	644	25,943	5,670	8,208	13,385	1,543
18	Univ of Southern Cal	114,766	0	0	33,945	162	1,532	72	61,524	175	5,290	11,516	550
19	Duke University	108,611	276	0	6,031	0	3,514	2,081	86,376	0	691	9,642	0
20	Washington University	102,974	150	0	1,559	0	1,485	75	91,827	0	2,789	5,089	0
	Total 1st 20 institutions	3,293,990	47,240	9,399	535,264	15,325	170,301	15,361	1,889,737	10,389	167,718	402,051	31,205
21	University of Colorado	101,345	0	2,108	5,679	198	3,928	494	56,156	667	12,919	19,143	53
22	Univ of Ill Urbana	100,062	7,104	117	18,694	0	10,958	1,646	16,509	431	3,506	38,527	2,570
23	University of Rochester	98,553	0	0	6,720	0	17,079	0	67,445	0	195	7,111	0
24	Univ of NC at Chapel Hill	93,244	240	205	3,605	0	877	2,567	78,092	0	614	7,044	0
25	University of Pittsburgh	91,094	100	163	4,202	2,542	2,002	1,113	72,941	0	652	7,379	0
26	University of Chicago	90,611	284	67	2,346	0	4,315	24	60,473	0	5,558	17,544	0
27	Univ of Texas at Austin	84,619	260	0	33,073	0	16,367	350	12,585	458	6,294	13,943	1,289
28	University of Arizona	82,913	3,829	142	8,475	895	1,741	573	37,565	1,281	15,729	11,623	1,060
29	New York University	77,761	0	0	4,184	101	4,408	497	58,865	0	557	5,324	3,825
30	University of Iowa	76,059	100	126	2,637	298	431	598	56,148	0	12,410	3,311	0
	Total 1st 30 institutions	4,190,248	59,157	12,327	624,879	19,359	232,407	23,223	2,406,516	13,226	226,152	533,000	40,092
31	Ohio State University	72,702	7,805	654	4,942	0	3,410	420	30,021	402	5,324	12,304	7,420
32	Univ Alabama Birmingham	70,702	100	15	1,279	897	0	0	63,293	0	2,659	2,459	0
33	Case Western Reserve Univ	69,589	0	56	3,602	500	510	0	53,014	0	6,340	4,887	680
34	Baylor Col of Medicine	69,499	7,040	0	1,047	952	341	0	59,452	0	667	0	0
35	California Inst of Tech	69,335	0	86	14,423	0	9,353	274	12,633	948	7,286	24,332	0
36	Yeshiva University	68,553	0	0	176	1,209	0	0	66,774	0	0	394	0
37	Woods Hole Oceanogrphic Inst	67,289	0	3,481	38,365	0	428	0	410	0	204	24,401	0
38	University of Massachuset	67,183	2,900	66	11,894	254	1,530	323	36,356	208	1,186	12,466	0
39	Vanderbilt University	63,978	45	0	1,390	1,542	542	0	53,971	0	2,634	3,854	0
40	Purdue University	62,751	7,738	0	7,306	146	5,017	545	18,401	384	3,127	16,275	3,812
	Total 1st 40 institutions	4,871,829	84,785	16,685	709,303	24,859	253,538	24,785	2,800,841	15,168	255,579	634,372	51,914
41	University of Utah	61,361	180	0	4,426	87	4,188	110	42,840	1,056	796	7,393	285
42	Georgia Institute of Tech	60,949	15	402	43,610	0	1,264	440	3,751	288	5,404	5,690	85
43	Univ o MD College Park	60,252	3,893	872	11,738	1,795	6,510	3,430	5,205	0	9,537	16,167	1,105
44	University of Miami	60,135	0	46	1,702	490	293	0	45,610	0	1,142	7,852	0
45	Univ of Cal Davis	60,100	3,068	111	1,803	858	5,211	280	38,980	362	1,430	6,037	1,963
46	Boston University	60,029	0	39	5,689	114	1,648	90	44,966	13	1,519	5,951	0
47	University of Florida	58,696	7,077	1,945	6,939	83	3,074	599	28,099	769	1,415	7,593	1,103
48	Carnegie-Mellon Univ	57,605	0	27	26,666	0	3,765	340	6,952	446	3,543	15,866	0
49	Northwestern University	57,494	60	91	4,207	1,432	3,710	0	34,753	47	1,104	12,005	85
50	Indiana University	55,449	32	0	725	42	2,712	312	34,528	100	471	16,527	0
	Total 1st 50 institutions	5,463,899	99,110	20,218	919,808	29,760	285,913	30,386	3,086,525	18,249	281,940	735,453	56,537

(Continued)

See explanatory material at end of table.

Table 8-10. -- Federal obligations for research & development to the 100 universities and colleges receiving the largest amounts by agency: fiscal year 1989 1/

[Dollars in Thousands]

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Rank	Institution (ranked by amount received)	Total	USDA	Com	DOD	Ed	DOE	EPA	HHS	Int	NASA	NSF	Other 2/
51	Michigan State University	54,382	10,295	85	1,620	2,007	3,524	417	15,275	200	499	18,073	2,387
52	University of Virginia	51,990	28	478	4,271	1,226	2,182	286	33,360	9	3,199	6,743	208
53	U Tex Sw Med Ctr - Dallas	48,591	0	0	190	0	0	0	46,789	0	1,080	532	0
54	Univ of Cal Irvine	47,303	296	57	4,386	0	3,729	320	29,734	0	1,249	7,532	0
55	Princeton University	47,037	0	30	9,169	0	5,311	265	12,245	360	3,500	16,157	0
56	Tulane University	46,873	0	0	26,344	0	0	90	18,115	0	102	667	1,555
57	Emory University	45,840	0	0	1,239	326	99	0	42,238	0	285	1,653	0
58	University of Georgia	45,627	7,034	1,065	632	0	15,941	1,163	11,002	443	623	6,449	1,275
59	Texas A & M University	44,928	8,735	2,043	6,478	0	4,210	143	7,617	393	3,739	11,405	165
60	New Mexico State Univ	44,210	2,534	0	18,001	0	1,136	0	757	394	19,410	1,978	0
Total 1st 60 institutions		5,940,680	128,032	23,976	892,138	33,319	322,045	33,070	3,303,657	20,048	315,626	806,642	62,127
61	N C State Univ at Raleigh	43,466	8,667	1,340	7,384	500	1,671	2,771	4,459	391	3,647	8,895	3,741
62	Univ of Ill Chicago	43,271	65	50	4,942	623	762	318	30,986	0	258	5,267	0
63	Utah State University	43,219	2,848	0	31,950	490	1,061	831	1,966	901	824	1,972	376
64	Virginia Commonwealth Univ	42,684	0	0	1,405	1,796	187	180	37,789	0	477	850	0
65	Oregon State University	42,562	8,229	2,482	6,225	0	1,271	1,392	7,291	1,325	1,988	11,487	872
66	SUNY at Stony Brook	41,251	0	0	356	0	3,429	0	23,880	54	1,182	12,350	0
67	University of Cincinnati	40,996	203	260	2,639	0	510	870	32,427	0	1,879	2,202	0
68	Mt Sinai Sch of Medicine	40,873	0	0	0	291	256	144	39,572	0	312	298	0
69	University of Connecticut	39,761	1,537	3,346	3,079	0	477	586	26,342	150	172	4,072	0
70	Louisiana State Univ	39,088	4,252	383	2,385	0	2,837	948	21,959	484	685	5,155	0
Total 1st 70 institutions		6,357,851	153,833	31,837	952,503	37,019	334,512	41,110	3,530,328	23,353	327,050	859,190	67,116
71	Tufts University	38,566	11,345	0	382	0	1,039	3,642	19,976	0	5	1,721	456
72	Univ of Cal Santa Barbara	37,444	180	122	13,247	271	3,166	406	4,082	385	1,126	13,405	1,054
73	Univ of Hawaii-Manoa	36,693	3,483	0	2,666	0	1,659	0	9,136	0	5,529	12,156	2,064
74	Rutgers the St Univ of NJ	36,241	3,965	72	2,838	1,337	637	283	14,961	156	169	11,427	396
75	Colorado State University	36,120	6,232	0	4,684	121	1,149	325	13,604	533	1,299	7,913	260
76	Rockefeller University	35,586	0	0	0	0	1,245	357	33,003	0	0	981	0
77	Univ of MD Balt Prof Sch	34,648	0	0	2,520	0	0	10	31,461	0	0	657	0
78	VA Polytech Inst & St U	34,585	5,397	50	6,363	0	7,269	1,139	2,540	2,369	3,880	5,054	524
79	SUNY at Buffalo All Cmps	33,934	0	0	1,909	0	543	0	25,888	0	1,237	4,357	0
80	Brown University	33,000	0	98	7,272	0	2,640	0	13,383	216	1,319	8,072	0
Total 1st 80 institutions		6,714,668	184,435	32,179	994,384	38,748	353,859	47,272	3,698,362	27,012	341,614	924,933	71,870
81	Univ of Med & Dent of N J	32,369	215	0	914	0	185	359	29,976	0	163	557	0
82	U Tex Hlth Sci Ctr S Anto	31,534	0	0	102	0	0	0	30,711	0	44	677	0
83	Univ of VT & St Agric Col	29,351	3,061	0	173	1,194	314	238	22,753	150	0	1,468	0
84	U Tex Hlth Sci Ctr Houstn	28,591	0	0	0	0	73	186	27,687	0	563	82	0
85	Florida State University	28,021	0	335	1,422	0	13,745	491	3,881	0	1,238	6,368	541
86	U TX MD Anderson Cntr Ctr	27,772	0	0	0	0	0	0	27,514	0	0	258	0
87	University of Kentucky	27,349	6,336	30	900	95	1,935	210	14,481	470	178	2,664	50
88	Wake Forest University	27,314	0	0	0	0	40	0	26,434	0	299	541	0
89	Wayne State University	26,945	0	0	1,314	0	283	0	22,661	105	123	2,405	54
90	Iowa St U of Sci & Tech	25,987	11,410	2,628	993	0	777	259	4,337	540	606	3,828	609
Total 1st 90 institutions		6,999,901	205,457	35,172	1,000,202	40,037	371,211	49,015	3,908,797	28,277	344,828	943,781	73,124
91	University of New Mexico	24,835	40	0	10,516	605	643	0	8,518	0	1,270	3,243	0
92	Georgetown University	24,728	367	38	891	666	300	416	19,193	0	0	1,307	1,550
93	Dartmouth College	24,065	306	0	1,753	0	557	162	18,542	10	349	2,386	0
94	University of Kansas	23,380	0	49	1,139	2,457	382	0	15,564	48	877	2,793	10
95	Oregon Hlth Sciences Univ	23,231	0	0	336	0	0	0	22,648	0	70	177	0
96	U Tex Med Brnch Galveston	23,096	0	0	669	0	0	185	21,757	0	396	89	0
97	Univ of Missouri Columbia	23,042	5,787	0	483	0	802	212	11,409	299	223	1,909	1,918
98	Temple University	22,929	230	0	675	259	610	23	19,821	0	45	1,266	0
99	George Washington Univ	22,730	6	84	1,961	50	718	0	16,395	0	2,362	1,046	108
100	University of Dayton	21,576	0	0	21,042	0	0	200	0	0	58	213	63
Total 1st 100 institutions		7,233,513	212,193	35,343	1,039,667	44,074	375,223	50,274	4,062,644	28,634	350,478	958,210	76,773

1/ Does not include R&D obligations to university-administered FFROCs.

2/ Includes DOT, AID, HUD, Labor, and NRC.

SOURCE: National Science Foundation/SRS, Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1989

Table C-4. -- Federal obligations to universities and colleges by agency and type of activity: Fiscal Year 1989

[Dollars in thousands]

(Page 1 of 1)

Agency	Total obligations	Academic science/engineering							Non-science/engineering activities
		Total academic science/engineering	Research and development	R&D plant	Facilities for instruction in science & engineering	Fellowships, traineeships, & training grants	General support for science/engineering	Other science/engineering activities	
Total	15,657,609	10,073,144	8,516,849	237,010	16,911	340,985	200,605	760,784	5,584,465
Department of Agriculture	728,568	721,675	336,036	31,098	0	4,647	0	349,894	6,893
Department of Commerce	61,360	73,992	66,041	1,232	1,631	1,240	0	3,848	7,368
Department of Defense, Total	1,487,732	1,486,428	1,220,606	57,883	0	69	1,779	206,091	1,304
Army	230,923	230,648	194,929	27,383	0	0	1,746	6,560	305
Navy	854,978	854,410	676,526	0	0	69	33	177,782	568
Air Force	262,016	261,836	248,564	0	0	0	0	13,272	180
Other DOD	139,815	139,564	100,587	30,500	0	0	0	8,477	251
Department of Education	5,533,995	275,351	67,044	1,346	0	23,391	83,055	100,515	5,258,644
Department of Energy	565,518	561,108	444,499	115,525	0	939	0	145	4,410
Environmental Protection Agency	85,817	85,817	77,503	0	0	8,314	0	0	0
Department of Health & Human Services	5,204,634	4,916,250	4,512,022	22,017	0	256,209	109,491	16,511	288,384
National Institutes of Health	4,377,304	4,377,304	4,002,889	22,017	0	226,396	109,491	16,511	0
Health Resources and Services Administration	256,148	9,477	8,155	0	0	1,322	0	0	246,671
Alcohol, Drug Abuse, and Mental Health Administration	459,148	438,762	415,110	0	0	23,652	0	0	20,386
Centers for Disease Control	39,656	22,281	22,281	0	0	0	0	0	17,375
Food and Drug Administration	8,445	8,445	8,445	0	0	0	0	0	0
Office of Human Development Services	19,653	19,653	15,984	0	0	3,669	0	0	0
Health Care Financing Administration	14,343	14,343	14,343	0	0	0	0	0	0
Social Security Administration	3,653	3,653	3,653	0	0	0	0	0	0
Office of the Assistant Secretary for Health	22,819	18,867	17,697	0	0	1,170	0	0	3,952
Other DHHS	3,465	3,465	3,465	0	0	0	0	0	0
Department of Housing and Urban Development	20	0	0	0	0	0	0	0	20
Department of the Interior	67,759	56,160	52,828	0	0	0	3,332	0	11,599
Agency for International Development	65,309	65,309	65,309	0	0	0	0	0	0
Department of Labor	9,227	6,514	6,499	0	0	15	0	0	2,713
National Aeronautics and Space Administration	461,941	461,941	435,702	1,232	0	13,009	0	11,998	0
National Science Foundation	1,336,231	1,336,231	1,206,568	6,677	15,280	32,976	2,948	71,782	0
Nuclear Regulatory Commission	4,300	4,300	4,300	0	0	0	0	0	0
Department of Transportation	25,198	22,068	21,892	0	0	176	0	0	3,130

SOURCE: National Science Foundation/SRS, Federal Support to Universities, Colleges, and Nonprofit Institutions, Fiscal Year 1989

Table C-7. -- Federal obligations to the 100 universities and colleges receiving the largest amounts by type of activity: fiscal year 1989

[Dollars in thousands]

(Page 1 of 2)

Rank	Institution (ranked by total federal obligations)	Total, all activities	Academic science/engineering						Non-science/engineering	
			Total academic science/engineering	Research and development	R&D plant	Facilities for instruction in science/eng.	Fellowships, traineeships, and training grants	General support science/engineering		Other science/engineering
	Total, all institutions	15,657,609	10,073,144	8,516,849	237,010	16,911	340,985	200,605	760,784	5,584,465
1	Johns Hopkins University	612,128	604,567	411,879	2,031	0	11,372	2,498	176,787	7,561
2	Stanford University	275,781	265,282	239,847	9,233	0	13,715	789	1,698	10,499
3	University of Washington	246,883	222,126	203,691	952	0	10,351	3,442	3,690	24,757
4	Mass Inst of Technology	236,632	231,126	207,157	13,270	0	8,307	715	1,677	5,506
5	University of Minnesota	203,183	174,043	128,727	27,383	44	5,066	2,536	10,287	29,140
6	Univ of Cal Los Angeles	200,090	182,282	170,839	232	0	7,662	1,730	1,819	17,808
7	University of Michigan	198,199	182,243	167,865	1,156	199	10,607	1,922	494	15,956
8	Cornell University	192,077	181,492	139,954	2,877	0	6,200	1,483	30,978	10,585
9	Univ of Cal San Diego	184,633	176,478	166,601	1,167	0	6,876	1,789	45	8,155
10	Univ of Wis-Madison	178,913	171,168	150,474	1,726	7	6,277	1,977	10,707	7,745
	Total 1st 10 institutions	2,528,519	2,390,807	1,987,034	60,027	250	86,433	18,881	238,182	137,712
11	Columbia Univ Main Div	178,910	165,056	150,263	3,764	0	8,090	1,845	1,094	13,854
12	Univ of Cal San Francisco	177,273	171,301	159,027	944	0	9,236	1,464	713	5,889
13	Howard University	175,594	14,608	12,291	0	0	712	1,525	80	160,986
14	Harvard University	171,316	161,251	141,760	1,614	0	15,010	2,406	461	10,065
15	Yale University	168,338	162,017	146,245	1,309	0	10,668	2,533	1,262	6,321
16	Pennsylvania State Univ	166,581	135,092	119,435	351	0	1,484	1,123	12,699	31,489
17	Univ of Cal Berkeley	164,358	147,478	131,070	0	0	11,222	1,205	3,981	16,880
18	Univ of Pennsylvania	158,337	145,478	132,805	477	0	9,809	2,218	169	12,859
19	Univ of Southern Cal	134,061	118,775	114,766	0	0	2,500	1,242	267	15,286
20	University of Colorado	130,430	110,494	101,345	210	27	4,729	1,766	2,417	19,936
	Total 1st 20 institutions	4,153,717	3,722,440	3,196,041	68,696	277	159,893	36,208	261,325	431,277
21	Duke University	122,679	117,850	108,611	1,090	0	6,271	693	1,185	4,829
22	Univ of Ill Urbana	120,910	120,659	100,062	998	0	2,173	915	16,511	251
23	Washington University	120,764	115,160	102,974	354	0	8,964	2,419	449	5,604
24	University of Pittsburgh	114,798	98,353	91,094	617	0	2,900	1,560	2,182	16,445
25	University of Rochester	111,435	106,183	98,550	921	0	3,964	884	1,864	5,252
26	Univ of NC at Chapel Hill	105,873	99,357	93,244	0	0	5,226	788	99	6,516
27	University of Chicago	105,402	100,914	90,611	0	0	8,589	836	878	4,488
28	Ohio State University	105,318	86,055	72,702	30	0	1,153	593	11,577	19,263
29	University of Arizona	104,241	92,224	82,913	123	0	2,285	1,999	4,904	12,017
30	New York University	96,278	82,947	77,761	0	0	3,350	702	1,134	13,331
	Total 1st 30 institutions	5,261,415	4,742,142	4,114,563	72,829	277	204,768	47,597	302,108	519,273
31	University of Iowa	94,237	81,838	76,059	0	0	3,818	1,717	244	12,399
32	Purdue University	92,160	75,869	62,751	0	0	1,719	1,599	9,800	16,291
33	University of Massachusetts	92,132	73,345	67,183	0	0	1,159	1,055	3,948	18,787
34	Michigan State University	87,914	69,762	54,382	1,465	0	1,614	1,224	11,077	18,152
35	Univ of Texas at Austin	87,717	87,432	84,619	0	0	1,520	1,027	266	285
36	University of Florida	85,812	70,706	58,696	582	0	2,006	1,488	7,934	15,106
37	Univ Alabama Birmingham	85,566	75,153	70,702	997	0	2,345	812	297	10,413
38	Louisiana State Univ	85,408	61,726	39,088	13,000	85	596	1,478	7,479	23,682
39	University of Utah	84,810	72,106	61,361	7,125	0	1,792	1,334	454	12,704
40	Indiana University	83,969	61,604	55,449	578	0	2,404	1,761	1,412	22,365
	Total 1st 40 institutions	6,141,140	5,471,683	4,744,853	96,576	362	223,741	61,092	345,059	669,457
41	Case Western Reserve Univ	79,997	74,430	69,589	0	0	4,205	636	0	5,567
42	Univ of MD College Park	78,765	70,824	60,252	300	0	1,249	771	8,252	7,941
43	Texas A & M University	77,655	65,052	44,928	1,852	0	1,302	426	16,544	12,603
44	Yeshiva University	77,490	75,132	68,553	844	0	4,358	1,374	3	2,358
45	California Inst of Tech	76,974	76,974	69,335	679	0	3,602	197	3,161	0
46	Univ of Cal Davis	76,787	64,271	60,100	938	0	1,945	831	457	12,516
47	Georgia Institute of Tech	76,724	72,639	60,949	0	63	717	239	10,671	4,085
48	Boston University	75,686	66,235	60,029	584	0	3,434	1,018	1,170	9,451
49	University of Miami	75,381	63,781	60,135	406	0	1,627	1,024	589	11,600
50	Baylor Col of Medicine	74,640	72,715	69,499	0	0	1,682	443	1,091	1,925
	Total 1st 50 institutions	6,911,239	6,173,736	5,368,222	102,179	425	247,862	58,051	386,997	737,503

(Continued)

Table C-7. -- Federal obligations to the 100 universities and colleges receiving the largest amounts by type of activity: fiscal year 1989

[Dollars in thousands]

(Page 2 of 2)

Rank	Institution (ranked by total federal obligations)	Total, all activities	Academic science/engineering						Non-science/engineering	
			Total academic science/engineering	Research and development	R&D plant	Facilities for instruction in science/eng.	Fellowships, traineeships, and training grants	General support science/engineering		Other science/engineering
51	Vanderbilt University	74,100	71,263	63,978	0	0	4,457	1,548	1,280	2,837
52	Northwestern University	72,694	64,214	57,494	902	0	2,497	1,234	2,087	8,480
53	Woods Hole Oceanographic Inst	69,486	69,486	67,289	1,796	0	39	12	350	0
54	University of Georgia	64,993	59,715	45,627	1,198	0	623	892	11,375	5,278
55	N C State Univ at Raleigh	64,808	58,935	43,466	0	0	992	268	14,209	5,873
56	Carnegie-Mellon Univ	64,642	60,277	57,605	285	0	1,028	199	1,160	4,365
57	Oregon State University	64,527	56,010	42,562	7,275	0	811	583	4,779	8,517
58	University of Virginia	63,319	57,292	51,990	63	0	3,806	1,217	216	6,027
59	Univ of Hawaii-Manoa	63,215	54,518	36,693	14,079	0	424	514	2,808	8,697
60	University of Kentucky	62,486	38,616	27,349	0	25	428	595	10,219	23,870
Total 1st 60 institutions		7,576,609	6,764,062	5,862,275	127,777	450	262,967	75,113	435,480	811,447
61	Utah State University	61,506	50,735	43,219	0	0	81	1,184	6,251	10,771
62	Univ of Ill Chicago	61,391	46,266	43,271	0	0	849	1,186	960	5,125
63	Rutgers the St Univ of NJ	61,238	44,705	36,241	243	79	1,952	636	5,554	16,533
64	New Mexico State Univ	58,424	50,372	44,210	0	0	349	683	5,130	8,052
65	Univ of Cal Irvine	57,791	50,199	47,303	105	0	1,443	1,304	44	7,592
66	University of Cincinnati	56,966	43,623	40,996	0	0	1,701	450	476	13,343
67	Oregon Hlth Sciences Univ	55,822	51,861	23,231	22,000	0	782	385	5,463	3,961
68	Emory University	55,671	48,030	25,840	888	0	531	771	0	7,641
69	U Tex Sw Med Ctr - Dallas	55,192	52,642	48,591	277	0	2,573	503	698	2,550
70	Princeton University	54,695	51,396	47,037	125	0	3,694	524	16	3,299
Total 1st 70 institutions		8,154,205	7,253,891	6,282,214	151,415	529	276,922	82,739	460,072	900,314
71	Iowa St U of Sci & Tech	54,627	38,947	26,987	1,930	102	261	321	10,346	15,680
72	Tulane University	54,516	48,420	46,873	603	0	282	388	274	6,096
73	Virginia Commonwealth Univ	53,290	45,692	42,684	0	0	1,571	1,023	414	7,598
74	University of Connecticut	52,304	46,395	39,761	1,245	0	1,337	1,112	2,940	5,909
75	Colorado State University	51,652	42,523	36,120	0	0	1,703	622	4,078	9,129
76	VA Polytech Inst & St U	51,457	46,491	34,586	146	0	374	299	11,087	4,966
77	Inter Am U Pr-San German	51,225	499	27	0	31	0	325	116	50,726
78	U P R - Regional Col Admn	50,162	284	280	0	0	0	0	4	49,878
79	Gallaudet University	49,667	2,138	1,362	0	0	92	425	259	47,529
80	Univ of Cal Santa Barbara	49,645	41,978	37,444	247	0	400	1,519	2,368	7,667
Total 1st 80 institutions		8,672,750	7,367,258	6,547,337	155,586	662	282,942	88,773	491,958	1,105,492
81	SUNY at Stony Brook	47,247	44,406	41,251	1,483	0	1,099	381	192	2,841
82	Mt Sinai Sch of Medicine	45,244	42,970	40,873	684	0	1,039	374	0	2,274
83	University of New Mexico	44,616	29,015	24,835	0	0	740	1,599	1,841	15,601
84	SUNY at Buffalo All Cmps	44,491	40,906	33,934	0	0	832	749	5,391	3,585
85	Arizona State University	44,389	29,062	17,719	10,000	0	479	324	540	15,327
86	Univ of Missouri Columbia	43,503	35,006	23,042	0	0	831	287	10,846	8,497
87	Tufts University	42,957	40,240	38,566	0	0	924	720	33	2,717
88	Univ of VT & St Agric Col	41,379	35,575	29,351	1,406	94	745	1,436	2,543	5,804
89	Univ of MD Balt Prof Sch	40,554	35,918	34,648	0	0	303	550	417	4,636
90	Rochester Inst Technology	40,318	2,038	1,635	0	388	15	0	0	38,280
Total 1st 90 institutions		9,107,448	7,902,394	6,833,191	169,159	1,144	289,949	95,193	513,758	1,205,054
91	Brown University	40,250	35,604	33,000	310	0	1,125	318	851	4,646
92	West Virginia University	39,885	30,520	13,166	10,831	200	412	680	5,231	9,365
93	Temple University	39,562	24,730	22,929	0	0	807	724	270	14,832
94	U Tennessee Knoxville	39,557	31,733	19,229	118	32	408	535	11,411	7,824
95	Wayne State University	39,107	28,953	26,945	0	0	951	1,053	4	10,154
96	Univ of Med & Dent of N J	38,932	34,417	32,369	989	0	499	506	54	4,515
97	University of Kansas	37,118	28,133	23,380	0	0	1,542	1,444	1,767	8,985
98	Washington State Univ	37,068	28,153	19,172	3,303	0	382	421	4,875	8,915
99	Oklahoma State University	37,014	25,179	13,264	0	0	275	602	11,038	11,835
100	Rockefeller University	37,014	37,014	35,586	0	0	1,170	258	0	0
Total 1st 100 institutions		9,492,955	8,206,830	7,072,231	184,710	1,376	297,520	101,734	549,259	1,286,125

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